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PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ENERGY DIVISION

Agenda ID# 23023 RESOLUTION E-5327 December 5th, 2024

RESOLUTION

Resolution E-5327. Addresses proposals submitted by portfolio administrators detailing their intended multi-distributed energy resource integrated demand side management frameworks and programs pursuant to Decision (D.) 23-06-055.

PROPOSED OUTCOME:

- Approves with modifications and clarifications the proposed multi-distributed energy resource integrated demand side management (multi-DER IDSM) frameworks and programs pursuant of D.23-06-055 in Tier 3 Advice Letters.
- Requires PG&E, SCE, and SoCalGas to submit subsequent Advice Letters in accordance with applicable CPUC policies, including the program launch checklist and third-party Tier 2 Advice Letter requirement, prior to program commencement to provide further details of their plans. If the pilot program is a third-party program and falls below a \$5 million budget threshold or is less than three years in duration, the IOU must file a Tier 1 AL for each third-party contract.
- Requires BayREN, I-REN, MCE, SoCalREN, and 3C-REN to submit a Tier 2 Advice Letter in accordance with the program launch checklist should they wish to expand their programs beyond the scope described in their Advice Letter for portfolio years 2024-2027.

SAFETY CONSIDERATIONS:

• There are no safety considerations associated with this resolution.

ESTIMATED COST:

• Does not increase costs beyond the energy efficiency budgets adopted in D.23-06-055.

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By Advice Letters (AL):

- PG&E 4876-G/7209-E, Filed on March 15, 2024.
- SCE 5249-E, Filed on March 15, 2024.
- SoCalGas 6276-G, Filed on March 15, 2024.
- BayREN 25-E, Filed on March 15, 2024.
- I-REN 4-E/4-G, Filed on March 14, 2024.
- MCE 74-E, Filed on March 15, 2024.
- SoCalREN 18-E/18-G, Filed on March 15, 2024.
- 3C-REN 10-E/9-G, Filed on March 15, 2024.

1. SUMMARY

This Resolution approves, with modifications and clarifications, the intended multi-distributed energy resource (multi-DER) integrated demand side management (IDSM) frameworks and programs submitted via Tier 3 Advice Letter (AL) by Pacific Gas & Electric Company (PG&E), Southern California Edison Company (SCE), Southern California Gas Company (SoCalGas), San Francisco Bay Area Regional Energy Network (BayREN), Inland Regional Energy Network (I-REN), Marin Clean Energy (MCE), Southern California Regional Energy Network (SoCalREN), and Tri-County Regional Energy Network (3C-REN) pursuant of Decision (D.) 23-06-055.

2. BACKGROUND

Starting in 2007 with D.07-10-032, the CPUC challenged the utilities to integrate their customer demand side programs, such as energy efficiency (EE), self-generation, advanced metering, and demand response (DR). This early form of IDSM persisted until 2018, when the CPUC staff proposed to repurpose existing IDSM budget to specifically target limited integration of aspects of energy efficiency and DR. The goal was to gain additional demand response value for little incremental cost, as IDSM funds are primarily used for DR when EE investments are already being made. The proposal

¹ See D.07-10-032 at OP 5.

was adopted in D.18-05-041 and resulted in many energy efficiency-demand response (EE-DR) IDSM programs across the portfolio administrators (PAs).²

The proposed multi-DER IDSM programs pursuant to D.23-06-055 represent a progression from these previous approaches to IDSM. While the approach approved in D.18-05-041 focused on the integration of DR programs with EE programs, D.23-06-055 provides a multi-DER approach focused on ongoing or permanent load shifting or load reduction, rather than event-based DR.3 This new emphasis offers greater flexibility and opportunity to provide ratepayers with a more comprehensive range of technologies to fulfill their needs and to move toward the state's goal and statutory requirement for full decarbonization by 2045 or sooner.⁴

In D.23-06-055, the CPUC stated that portfolio administrators (PAs) may propose processes for customers to implement multi-DER projects and receive rebates or incentives for non-EE IDSM measures through their EE programs.⁵ To do this, PAs were given the option to submit Tier 3 advice letters no later than March 15, 2024, for programs to be launched during the portfolio period (2024-2027). The ALs were required to include details of the use of non-EE funding sources, measurement approaches including any methods that will be used to ensure that impacts on consumption are not double-counted, and references to applicable rules and approved budgets from non-EE CPUC approved funding sources that will govern the distribution of those funds.6

The Decision allowed PAs to set aside 2.5 percent, or \$4 million, whichever is greater, up to a maximum of \$15 million, from within their total budgets during 2024-2027 approved in the Decision.⁷ The Decision stated that this program funding is on a pilot basis and shall not be spent on event-based DR because such interventions do not necessarily result in ongoing or permanent load shifting or load reduction.

² See D.18-05-041 at OP 10.

³ See D.23-06-055 at OP 29.

⁴ CA SB 100 (DeLeon, 2018)

⁵ See D.23-06-055 at OP 28.

⁶ *Id*.

⁷ See D.23-06-055 at OP 29.

The goal of these IDSM programs would be to use an EE program delivery channel to integrate a comprehensive program strategy and allow a customer to install a multi-DER project using multiple funding streams from a range of IDSM sources, as long as there is an EE component. This means that the IDSM programs would be allowed to offer incentives from non-EE funding sources.

Further details on each PA's proposed multi-DER IDSM frameworks or programs can be found in the Appendix of this Resolution.

NOTICE

Notice of each PA advice letter was made by publication in the CPUC's Daily Calendar. A copy of each PA AL was served to interested parties and parties on the service list of R.13-11-005 either electronically or via the U.S. mail in accordance with Section 4 of General Order 96-B.

PROTESTS

Advice Letters PG&E 4876-G/7209-E, SCE 5249-E, SoCalGas 6276-G, BayREN 25-E, I-REN 4-E/4-G, MCE 74-E, SoCalREN 18-E/18-G, 3C-REN 10-E/9-G were not protested.

DISCUSSION

GENERAL:

BayREN stated in their AL, "... EE PAs are not prohibited from engaging in event-based or any other IDSM activities, with the exception of providing capital incentives to customers for non-EE investments."

In response to BayREN's statement, we clarify that EE multi-DER IDSM programs and frameworks proposed by PAs do not allow for event-based DR, however, PAs are not prohibited from accessing incentives or other financial compensations or financial credit for event-based DR through other proceedings. This Resolution pertains to the budget

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⁸ BayREN AL 25-E at 7-8.

authorized by this Resolution and D.23-06-055 and does not pertain to other funding sources for event-based DR.

Many PAs proposed to incorporate technical assistance (TA) components into proposed IDSM programs and frameworks. TA components of proposed IDSM programs and frameworks should be a collaborative and coordinated effort by the PAs to build a comprehensive customer first approach to IDSM multi-DER implementation. TA can include but should not be limited to: audits, education, project design specifications, procurement and funding support, assisting in drafting city ordinances, financial analyses, and project implementation.

In their AL, PG&E requested the following, "PG&E requests the Commission clarify that the pilot requirements from D.09-09-047 Ordering Paragraph (OP) 20 do not apply to the multi-DER program pilots governed by D.23-06-055, on the basis that the requirements from D.23-06-055 and the associated ED Guidance – and the framework proposed in this AL - sufficiently address the spirit and intent of the criteria identified in D.09-09-047 OP 20." We clarify that the D.09-09-047 OP 20 requirements do not apply to these pilots, and that the parameters laid out in D.23-06-055 and the associated ED Guidance sufficiently address the spirit and intent of the D.09-09-047 criteria. ¹⁰

FUTURE SUBMISSIONS:

Because PG&E, SCE, and SoCalGas submitted frameworks in their Tier 3 ALs and not specific programmatic details, we direct the IOUs to adhere to all applicable CPUC policies, including the third-party Tier 2 AL requirement and the program launch checklist for all non-third-party programs.^{11,12}

PG&E outlined two paths for CPUC approval of new IDSM pilot programs.¹³ For programs that trigger D.18-01-004 OP 2, PG&E will submit a Tier 2 AL. For programs that do not trigger D.18-01-004 OP 2, PG&E will submit a Tier 1 AL. We adopt PG&E's recommendation and require IOUs to submit a Tier 1 AL for each third-party

⁹ PG&E AL 4876-G/7209-E at 1.

¹⁰ ED's Guidance on Integrated Demand Side Management (IDSM) Tier 3 Advice Letter Submissions from the Energy Efficiency Portfolio Administrators (PAs)

¹¹ See D.18-01-004 at OP 2.

¹² Energy Division Process Checklist to Energy Efficiency Program Administrators for Program Closures and Launches, per D.21-05-031, OP 12, dated 12/31/2021.

¹³ PG&E AL 4876-G/7209-E at 6-7.

contract valued under \$5M and/or with a term less than three years in duration. This Tier 1 AL requirement will sunset in 2027 and may be addressed in subsequent business cycle decisions.

BayREN, I-REN, MCE, SoCalREN, and MCE submitted program-level details on their multi-DER IDSM activities. Therefore, these PAs may begin their program activities upon the adoption of this Resolution. If these PAs wish to add additional programs or expand their programs beyond the scope described in their ALs for portfolio years 2024-2027, they shall follow the program launch checklist, which includes the submission of a Tier 2 AL.¹⁴

All PAs' IDSM pilot programs ALs shall describe the pilot's ex ante approach, tools and methodologies to ensure evaluability.

TOTAL RESOURCE COST & COST EFFECTIVENESS:

In their framework, PG&E proposed that the TRC cost treatment of layered incentives received by EE multi-DER program participants from other programs will be determined on a case-by-case basis for each program. Subsequently, PG&E must provide more details on cost-effectiveness and the TRC in their future AL(s).

SCE proposed that the cost effectiveness of their PLS proposals be calculated using estimated load shapes and energy impacts. These load shapes will be estimated by the implementer with the assistance of SCE. They will input these values into the EE Cost Effectiveness Tool (CET) to calculate the TRC and TSB of the proposal. ¹⁶ SCE must provide more details on cost-effectiveness and TRC in their future AL(s).

Finally, SoCalGas did not mention cost-effectiveness and TRC in their AL. SoCalGas must develop and provide detailed information on their program's plan for cost-effectiveness and TRC in their subsequent AL(s).

In cases where load shapes will be used for the CET, all PAs must use, if available, established load shapes. If there is not an existing load shape available for the measure,

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¹⁴ See D.21-05-031 at OP 12

¹⁵ PG&E AL 4876-G/7209-E at 21.

¹⁶ SCE AL 5249-E at 8.

the PA should have the CPUC Database of Energy Efficiency Resources (DEER) team review and provide feedback prior to use.

EX ANTE:

Because PG&E, SCE, and SoCalGas all proposed frameworks to inform future multi-DER IDSM programs instead of proposing tangible programs, their ex-ante methodologies were also proposed broadly as to allow them to fit future specific program needs. These three PAs must file more specific ex ante methodologies in the subsequent ALs when their program details are ready.

In PG&E's AL, they requested the ability for multi-DER programs that meet the requirements for use of Normalized Metered Energy Consumption (NMEC) to instead use engineering estimates when necessary to achieve better disaggregation of impacts by DER since disaggregation is a requirement.¹⁷ For these pilots, we find that this request is reasonable, since the use of NMEC may not be the most effective way to disaggregate the total savings into DER-specific contributions in these new multi-DER IDSM pilot programs.

REPORTING:

The California Energy Data and Reporting System (CEDARS) was not designed to capture the benefits and costs of these multi-DER IDSM programs. Therefore, at this time, we will allow the PAs to forgo reporting to CEDARS and instead report program benefits and costs in their EE Annual Reports, after discussing with the Reporting Project Coordination Group.

EX POST:

SCE and SoCalGas must further develop and provide details on their ex post plans in their subsequent ALs.

SCE states in their AL that they plan on implementing PLS interventions.¹⁸ It is unclear how the post-intervention load shape will be developed and verified. Clarity about data collection and analysis plans supporting the estimation of ex post load shapes are a critical step in developing claims. SCE is required to show their impact methodologies and describe in detail how they will estimate post-intervention load shape in their future AL(s).

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¹⁷ PG&E AL 4876-G/7209-E at 19.

¹⁸ SCE AL 5249-E at 3.

CONFLICT RESOLUTION:

In an effort to facilitate the integration of multi-DER IDSM programs between different proceedings, PG&E provided a Conflict Resolution framework in their AL that handles conflicts between the multi-DER IDSM program's intended design and implementation, non-EE DER proceeding rules, and PG&E's internal rules for program operations. ¹⁹ We find that this framework is helpful to understand how PG&E may need to resolve future discrepancies in rules, and we require that both SCE and SoCalGas expand on any conflict resolution protocols in their future ALs.

COMMENTS

Public Utilities Code section 311(g)(1) provides that this Resolution must be served on all parties and subject to at least 30 days public review. Any comments are due within 20 days of the date of its mailing and publication on the CPUC's website and in accordance with any instructions accompanying the notice. Section 311(g)(2) provides that this 30-day review period and 20-day comment period may be reduced or waived upon the stipulation of all parties in the proceeding.

The 30-day review and 20-day comment period for the draft of this resolution was neither waived nor reduced. Accordingly, this draft resolution was mailed to parties for comments, and will be placed on the CPUC's agenda no earlier than 30 days from today."

FINDINGS

- 1. Decision (D.) 23-06-055 allowed portfolio administrators (PAs) to submit a Tier 3 Advice Letter (AL) detailing their intended multi-distributed energy resource (multi-DER) integrated demand side management (IDSM) frameworks and programs for portfolio years 2024-2027.
- 2. Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), Southern California Gas Company (SoCalGas), San Francisco Bay Area Regional Energy Network (BayREN), Marin Clean Energy (MCE), Southern California Regional Energy Network (SoCalREN), and Tri-County Regional Energy Network (3C-REN) filed Tier 3 ALs on March 15, 2024 to establish their multi-DER IDSM frameworks or programs pursuant of D.23-06-055.

¹⁹ PG&E AL 4876-G/7209-E at 18.

- 3. Inland Regional Energy Network (I-REN) filed a Tier 3 AL on March 14, 2024 to establish their multi-DER IDSM framework or program pursuant of D.23-06-055.
- 4. EE multi-DER IDSM programs and frameworks proposed by PAs do not allow for event-based DR. However, PAs are not prohibited from accessing incentives or other financial compensations or financial credit for event-based DR through other proceedings. This Resolution does not pertain to other avenues where event-based DR may be done.
- 5. D.09-09-047 OP 20 requirements do not apply to these multi-DER IDSM pilots, and the parameters laid out in D.23-06-055 and the associated ED Guidance sufficiently address the spirit and intent of the D.09-09-047 criteria.
- 6. PG&E, SCE, and SoCalGas submitted frameworks in their Tier 3 ALs and not specific programmatic details.
- 7. It is reasonable for IOUs to file a Tier 1 AL for each third-party contract valued under \$5M and/or with a term less than three years in duration.
- 8. BayREN, I-REN, MCE, SoCalREN, and MCE submitted program-level details on their multi-DER IDSM activities.
- 9. PG&E proposed that the TRC cost treatment of layered incentives received by EE multi-DER program participants from other programs be determined on a case-by-case basis for each program.
- 10. SCE proposed that the cost effectiveness of their PLS proposals be calculated using estimated load shapes and energy impacts. These load shapes will be estimated by the implementer with the assistance of SCE. They will input these values into the EE CET to calculate the TRC and TSB of the proposal.
- 11. SoCalGas did not mention cost-effectiveness and TRC in their AL.
- 12. SCE and SoCalGas only provided high level details on their ex-post plans
- 13. Since PG&E, SCE, and SoCalGas all proposed frameworks to inform future multi-DER IDSM programs instead of proposing tangible programs, their ex-ante methodologies were also proposed broadly as to allow them to fit future specific program needs.
- 14. PG&E proposed to use engineering estimates instead of NMEC when it is necessary to achieve better disaggregation of impacts by DER.
- 15. CEDARS was not designed to calculate the benefits and costs of these multi-DER IDSM programs.
- 16. SCE stated in their AL that they plan on implementing PLS interventions.
- 17. PG&E and SoCalGas both expressed in their ALs that they do not anticipate any exceptions of deviations from existing policy at this time.

18. PG&E's proposed Conflict Resolution framework handles conflicts between the multi-DER IDSM program's intended design and implementation, non-EE DER proceeding rules, and PG&E's internal rules for program operations.

THEREFORE IT IS ORDERED THAT:

- 1. PG&E Advice Letter 4876-G/7209-E, SCE Advice Letter 5249-E, and SoCalGas Advice Letter 6276-G are approved with the modifications set forth below:
 - The IOUs shall follow all applicable CPUC policies, including the program launch checklist and third-party Tier 2 AL requirement. If the pilot program is a third-party program and falls below a \$5 million budget threshold or is less than three years in duration, the IOU must file a Tier 1 AL for each third-party contract.
 - The resulting ALs for the pilot programs must provide insight into the pilot's ex-ante approach, tools and methodologies to ensure evaluability.
- 2. BayREN Advice Letter 25-E, I-REN Advice Letter 4-E/4-G, MCE Advice Letter 74-E, SoCal REN Advice Letter 18-E/18-G 3C-REN Advice Letter 10-E/9-G are approved with the modifications set forth below:
 - The PAs shall follow all applicable CPUC policies, including the program launch checklist.
- 3. In their future AL(s), PG&E must complete the following:
 - Provide additional details on cost-effectiveness and TRC.
- 4. The request by PG&E to use engineering estimates for these pilots instead of NMEC to achieve better disaggregation of impacts by DER is approved.
- 5. In their future AL(s), SCE must complete the following:
 - Provide additional details on cost-effectiveness and TRC.
 - Further develop and provide details on their ex post plans, show impact methodologies, and describe in detail how SCE will estimate post-intervention load shape.
 - Show their impact methodologies and describe in detail how they will estimate post-intervention load shape.
 - Expand on any conflict resolution protocols.
- 6. In their future AL(s), SoCalGas must complete the following:
 - Develop and provide detailed information on their program's plan for costeffectiveness and TRC.
 - Further develop and provide details on their ex post plans.
 - Expand on any conflict resolution protocols.

- 7. In cases where load shapes will be used for the CET, if available, PAs shall use an established load shape. If there is not an existing load shape available for the measure, the PA should have the CPUC Database of Energy Efficiency Resources (DEER) team review and provide feedback prior to use.
- 8. For these pilots, the PAs may forgo reporting to CEDARS and instead report program benefits and costs in their EE Annual Reports.

This Resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed, and adopted at a conference of the Public Utilities Commission of the State of California held on December 5, 2024, the following Commissioners voting favorably thereon:

Rachel Peterson
Executive Director

APPENDIX

1. **PG&E**

Table 1. PG&E IDSM Program Details

Scope	Proposal
Program or	Framework
framework	
proposed	
Technologies	Many technologies being considered; more details in future CPUC AL(s) ²⁰
Program type	Pilots in Market Support segment
Relevant	A.22-05-002 et al. (Demand Response)
proceedings	R.20-05-012 (SGIP)
	R.18.12-006 (Transportation Electrification) Please Note: R.23-12-008 is the successor proceeding
	and the appropriate reference
	Low Carbon Fuel Standard Portfolio (LCFS): LCFS Regulation, 17 CCR § 95480 (R.18-12-006
	reopened)
	Senate Bill 350 Standard Review Project - EV Fleet Program (EV Fleet): (A. 17-01-022)
Rules for	PG&E does not plan to seek any exemptions or deviations from CPUC rules in non-EE
exceptions or	proceedings. ²¹
deviations from	
established	Each program's Implementation Plan will describe conflicts that may impact the implementation of
CPUC policy	PG&E's EE multi-DER program, and their associated resolution pathway.
	PG&E's proposed conflict resolution pathway ²² :

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²⁰ PG&E AL 4876-G/7209-E at 9.

²¹ PG&E AL 4876-G/7209-E at 18.

²² Id.

- For conflicts between (a) the EE multi-DER program design for non-EE DER incentives and			
(b) the non-EE DER proceeding rules governing the non-EE DER funding, PG&E may resolve			
the conflicts by modifying or ceasing to offer the non-EE DER intervention in its EE multi-			
DER program			
- For conflicts between the EE multi-DER program's intended implementation of non-EE DER			
incentives and PG&E's rules for programs operating within the applicable non-EE DER			
proceeding, and PG&E determines that its non-EE DER program rules cannot reasonably be			
modified to accommodate the EE multi-DER program's planned implementation of non-EE			
DER incentives, then the non-EE DER program rules will override PG&E's EE multi-DER			
program design for the applicable non-EE DER incentive. If PG&E's non EE-DER program			
rules can be reasonably modified at PG&E's discretion, without the need for AL approval,			
then PG&E may proceed with the EE multi-DER program's intended implementation of the			
non-EE DER incentive.			
Any EE multi-DER IDSM programs that leverage incentive funds outside of EE for non-EE DER			
equipment will source these funds from budgets that are authorized in their own relevant			
proceeding. ²³			
PG&E proposes that equipment rebates/incentives for non-EE DER technologies (to be funded			
through non-EE funding sources) follow the same definitions for rebates/incentives used in the EE			
proceeding and adopted in the California Standard Practice Manual for Economic Analysis of			
Demand-Side Programs and Projects (SPM) where rebates or incentives are payments made directly			
to the customer (or offset costs that would otherwise be incurred by the customer, such as in the case			
of Direct Install (DI) (programs). ²⁴			
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²³ PG&E AL 4876-G/7209-E at 11.

²⁴ PG&E AL 4876-G/7209-E at 12.

	PG&E proposes that EE funding be allowed for any program costs that meet the EE Policy Manual Version 6.0, Appendix C cost category definitions of utility administrative costs, direct implementation non-incentive (DINI) costs, incentives (for EE equipment), marketing and outreach (M&O) costs, and Evaluation, Measurement, and Verification (EM&V) costs. Any of these listed program costs would be paid for by EE funds. ²⁵
Approach to draw from each funding source	PG&E recommends that the appropriate cost tracking/recovery mechanism be tailored to each proposed multi-DER project based on the unique circumstances of the proposal. These details will be included in a subsequent AL.
	For cost tracking, PG&E proposes to leverage existing balancing accounts (BAs) for EE and non-EE DER complement (e.g., DR, battery, EV, etc.) if available. The establishment of sub-accounts would most likely be within these existing EE BAs and the BAs for the non-EE DER complement. If there are no existing BAs for the non-EE complement, then new BAs could be set up. ²⁶
	For recovery of costs, PG&E proposes to use the existing and approved rate components and related BAs.
	To read about PG&E's proposed reimbursement mechanism, please see section 2.1.2 below this table.

²⁵ PG&E AL 4876-G/7209-E at 13.

²⁶ PG&E AL 4876-G/7209-E at 17.

PG&E AL 4876-G/7209-E, SCE AL 5249-E, SoCalGas AL 6276-G, BayREN AL 25-E, I-REN AL 4-E/4-G, MCE AL 74-E, SoCalREN AL 18-E/18-G, 3C-REN AL 10-E/9-G/EPL

Reporting requirements (including timing)	PG&E proposes to report estimated ex ante benefits and costs of these ISDM programs in its EE annual report. PG&E proposes to exclude these programs and the associated "claims" from the CEDARS platform until two criteria are met. The criteria are ²⁷ : (a) CEDARS and the Cost Effectiveness Tool (CET) are equipped with the functionality to properly calculate the benefits and costs for EE multi-DER programs. (b) PG&E can provide compelling evidence or rationale that its EE multi-DER programs ex ante benefits do not overlap or conflict with ex ante benefits reported to the CPUC for other
	PG&E seeks to report all program ex ante benefits where possible – inclusive of non-EE DER interventions offered by the EE multi-DER program – in its annual report to demonstrate the potential of these comprehensive, integrated DER pilot programs for informational purposes. PG&E provided no sample metrics or indicators.
Procedural path	PG&E outlined their procedural path for access to funding in a regulatory mechanism table in their
for access to funding	AL. A re-creation of this table's relevant parts can be found below, titled "Table 2. PG&E Procedural path for access to funding".
Ex ante assumptions for EE reporting	Ex ante will be based on the specific program details. Table 3 below provides a framework for the methods they will follow.
1 0	NMEC will be used when it is feasible and appropriate, but PG&E wishes to forgo using NMEC methodologies, and instead apply another ex ante methodology as noted in Table 3 below, cases

²⁷ PG&E AL 4876-G/7209-E at 26.

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	where there may be a conflict in DER benefits reporting, and engineering estimates of disaggregated DER benefits are warranted ²⁸ .
	A net-to-gross (NTG) ratio of 1.0 applicable to all multi-DER program pilot measures until EE PA multi-DER program ex post evaluation results are available to potentially inform alternative NTG assumptions. ²⁹
Total Resource Cost (TRC) and cost effectiveness	PG&E proposes that the TRC cost treatment of layered incentives received by EE multi-DER program participants from other programs will be determined on a case-by-case basis for each program in accordance with the SPM. The TRC cost treatment adopted will be explained in the EE annual report for the EE multi-DER program. These inputs will not be reported in CEDARS. ³⁰
	PG&E's EE multi-DER programs will attempt to collect data on incentives received by participants for overlapping DER measures from other programs.
Ex Post process	PG&E plans to conduct EM&V studies of the program pilot offerings to inform in-flight and future multi-DER programs.
	PG&E plans to examine program design, load impact assessment for savings assumptions validation and savings claims, coordination and impact of program and non-program incentives, and improvements to methods for making future ex ante estimates. ³¹

²⁸ PG&E AL 4876-G/7209-E at 19.

³⁰ PG&E AL 4876-G/7209-E at 21.

²⁹ Id.

³¹ PG&E AL 4876-G/7209-E at 27.

PG&E will consider running embedded M&V studies (process and/or Early M&V) concurrent with program operations to (a) estimate savings and apportion them across DERS; (b) improve program design and efficiency; and (c) inform performance-based compensation, within a shorter timeframe than is possible through typical ex post evaluations.

Draft M&V plans would be developed as part of the program Implementation Plans.

Further Details of PG&E's Proposal:

Reimbursement Mechanism:

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In relation to a potential reimbursement mechanism in the balancing accounts, PG&E states:

"The Decision's language assumes that "the balancing accounts would be reimbursed based on rebates and incentives from other programs and proceedings, based on the rules for those other resources." However, PG&E points out that it may be possible to leverage order numbers to properly charge the EE and non-EE DER complement without the need to reimburse the EE side of the ledger. Requiring a reimbursement mechanism would be in many cases more complex, require additional tracking and create additional risk for mistakes. Although, in certain cases a reimbursement mechanism could be appropriate if the financial outlay is fully handled by the EE side of the project.³²

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³² PG&E AL 4876-G/7209-E at 17.

Table 2. PG&E Procedural path for access to funding³³

			•	egulatory Mechan ram Operational (
Multi-DER Pilot Program Operational Component		EE Proceeding				Applicable Non-EE DER Proceeding
		Multi-DER Program Framework Tier 3 AL	New Program Contract Tier 2 AL if required by D.18-01-004 OP 2 (b) -OR Tier 1 AL if program does not trigger D.18- 01-004 OP 2 criteria	Multi-DER Program Implementation Plan	Multi-DER Program Evaluation Plan	Service List Notice
Program Funding	Description of general funding					
(from EE and non- EE Sources)	sources available as of March 2024 for 2024–2027 timeframe	X				
,	(no program-specific budgets)					

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³³ Id.

Notification to CPUC and appropriate proceeding service list(s) of intent to use specific existing, authorized non-EE incentive funding amounts in EE Multi-DER Program during 2024–2027 period	X		X
Program-specific budget, budget limitations, and source of existing authorized funds (for EE and non-EE funds, including legacy IDSM funds)	X		

Table 3. PG&E Ex Ante Methods³⁴

		Ex Ante l	Methods by EE Multi-DER Program Type		
Ex Ante	NMEC-Eligible Programs		Programs Not Eligible for NMEC		
Component	EE Measures	Non-EE DER Measures	EE Measures	Non-EE DER Measures	
Load Modifying Impact Methodology	NMEC		Existing CPUC approved engineering methods through the EE ex ante process (i.e., custom and deemed)	Where possible, engineering methods will be used to estimate temporal load impacts to pair with temporal avoided cost profiles. Otherwise, future ex ante estimates may be informed by multi-DER program evaluation results.	
TSB	Program-level impact (aggregated		DER measure-level impact (where ex ante estimates are possible)		
Reporting	TSB impacts for	all DER measures)			
Granularity					
TSB	PG&E-vetted tool developed for		Existing CPUC-approved	PG&E-vetted tool developed for	
Estimating	multi-DER pilot. Any tools		engineering methods	multi-DER pilot(s). Any tools	
Tool	developed for m may be proposed and	nulti-DER pilots d for future review	through the EE ex ante process (custom, deemed)	developed for multi-DER pilots may be proposed in the future for review	

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³⁴ PG&E AL 4876-G/7209-E at 23-24.

	standardization	by the CEDARS/	will be used to estimate	and standardization by the	
	Cost-Effectivene	•	annual load	CEDARS/CET governance	
	governance committee for use in		impacts, which will be	committee for use in CEDARS/CET.	
	CEDARS/CET.	arrittee for use in	paired with CPUC-approved	committee for use in CED1110/CE11.	
	CLD/11to/CL1.		EE		
			temporal load shapes to pair		
			with temporal ACC profiles		
			through the CET for TSB		
			estimation.		
Baseline	Existing conditions baseline (pre-		CPUC-approved baseline	Engineering estimates of	
	intervention me	tered load)	depending on the measure	preintervention existing conditions	
	·		application type, in	load profiles.	
			accordance with Resolution		
			E-4818.		
Effective	CPUC-	Engineering	CPUC-approved EUL	Engineering estimates based on the	
Useful Life	approved	Estimates based	depending on the measure.	nature of the DER intervention.	
(EUL)	EUL	on the nature of			
	depending on	the DER			
	the measure.	intervention.			
TRC	TRC Cost Benefits:				
Calculation	TRC benefits will include all multi-DER program avoided cost benefits based on ex ante estimates.				
	TRC Cost Inputs:				
	All non-incent	ive EE multi-DER p	program costs		
	All program-implemented DER measure (project) costs				

- All EE multi-DER program incentives (for both EE and non-EE measures)
- Layered incentives from other programs outside of the EE proceeding, including o Incentives from PG&E DER programs within a non-EE CPUC proceeding, if applicable o Incentives from non-PG&E programs, if applicable
- Increased supply costs resulting from any load shifting from peak to off-peak hours

PG&E acknowledges the need to consider layered incentive costs in the TRC test but does not propose a specific layered incentive cost treatment in this advice letter. Instead, PG&E proposes the TRC cost treatment of layered incentives received from other programs by EE multi-DER program participants be determined on a case-by-case basis for each multi-DER program in accordance with the SPM.

PG&E AL Overview

PG&E proposed a framework for multi-DER IDSM pilots in the Market Support segment of EE. While many technologies are being considered, PG&E notes that more details are to come in future AL(s).

Future Submissions

PG&E proposes that they will follow two potential paths in outlining their multi-DER IDSM program-specific details prior to program implementation, depending on the size of the program³⁵:

- 1) For programs that trigger D.18-01-004 OP 2, PG&E will submit a New Program Contract Tier 2 AL.
- 2) For programs that do not trigger D.18-01-004 OP 2, PG&E will submit a Tier 1 AL.

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³⁵ PG&E AL 4876-G/7209-E at 6-7.

Total Resource Cost (TRC) & Cost Effectiveness

PG&E proposes that the TRC cost treatment of layered incentives received by EE multi-DER program participants from other programs will be determined on a case-by-case basis for each program. They also propose that the TRC cost treatment adopted will be explained in the EE annual report for the EE multi-DER program and not be reported to CEDARS.³⁶

Ex Ante

PG&E states that their ex ante values will be based on specific program details but provides a framework for the methods that they will follow in their AL. PG&E notes that Normalized Metered Energy Consumption (NMEC) will be used when it is feasible and appropriate. In cases where there may be a conflict in DER benefits reporting, and engineering estimates of disaggregated DER benefits are warranted, PGE proposes to apply another ex ante methodology .³⁷

Reporting

In discussion of reporting requirements for the future programs, PG&E proposes to report estimated ex ante benefits and costs in its EE annual report. They hope to exclude these programs and the associated "claims" from the California Energy Data and Reporting System (CEDARS) platform until two criteria are met. The criteria are³⁸:

- (1) CEDARS and the Cost Effectiveness Tool (CET) are equipped with the functionality to properly calculate the benefits and costs for EE multi-DER programs.
- (2) PG&E can provide compelling evidence or rationale that its EE multi-DER programs ex ante benefits do not overlap or conflict with ex ante benefits reported to the CPUC for other non-EE DER programs.

³⁶ PG&E AL 4876-G/7209-E at 21.

³⁷ PG&E AL 4876-G/7209-E at 19.

³⁸ PG&E AL 4876-G/7209-E at 26.

PG&E also states that they seek to report all program ex ante benefits where possible - inclusive of non-EE DER interventions offered by the EE multi-DER program - in its annual report to demonstrate the potential of these comprehensive, integrated DER pilot programs for informational purposes.

Ex Post

PG&E notes that they plan to conduct Evaluation, Measurement and Verification (EM&V) studies of the program pilot offerings to inform in-flight and future multi-DER programs, with draft M&V plans developed as part of the program Implementation Plan.³⁹

Conflict Resolution

To facilitate the integrative nature of multi-DER IDSM programs between different proceedings, PG&E provided a proposed conflict resolution pathway that handles conflicts between the multi-DER IDSM program's intended design and implementation, non-EE DER proceeding rules, and PG&E's internal rules for program operations. More details on the proposed conflict resolution pathway can be found in PG&E's AL and in the Appendix of this Resolution.⁴⁰

³⁹ PG&E AL 4876-G/7209-E at 27.

⁴⁰ PG&E AL 4876-G/7209-E at 9.

2. SCE Table 4. SCE IDSM Program Details

Scope	Proposal			
Program or	Framework			
framework proposed				
Technologies	Samples of technologies that will be pursued ⁴¹ :			
	 Programmable Heat Pump Water Heaters (Unitary and Commercial) 			
	Programmable Battery Storage			
Program type	EE: All sectors, downstream; market support; On-Bill Financing for eligible sectors ⁴²			
	SGIP: All eligible sectors, downstream			
Relevant Proceedings	R.13-11-005 (EE)			
	R.20-05-012 (SGIP)			
	R.20-08-022 (Clean Energy Financing)			
	A.20-03-004 (Energy Storage & Procurement Incentive Plan)			
	R.18.12-006 (Transportation Electrification) - Please Note: R.23-12-008 is the successor			
	proceeding and the appropriate reference			
	R. A-19-11-003 et al. (Energy Savings Assistance)			
	R.19-01-011 (Building Decarbonization)			
	A.22-05-002 et al. (Demand Response)			
Rules for Exceptions	For the purposes of this AL, SCE did not develop details for this illustrative offering.			
or Deviations from				

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⁴¹ SCE AL 5249-E at 20.

⁴² Id.

established CPUC policy	
CPUC authorized funding sources and guidelines	SCE requests shifting \$12M authorized for the 2024-2027 EE business cycle to "PLS (Permanent Load Shifting) Reserve" in the Market Support segment from solicitation placeholders. As PLS measure proposals are approved, funding will shift to approved programs. Each program will be limited to \$2M for the 2024-2027 EE business cycle, allowing six proposals to be developed. SCE reserves the option to reallocate PLS funds to any degree to achieve EE portfolio goals. SCE may also shift up to an additional \$3M from the 2024-2027 programs to supplement high product PLS offers up to the total cap of \$15M. ⁴³
Approach to draw from each funding source	SCE plans to ensure the projects are developed to meet both EE and SGIP reporting requirements. Heat pumps and PLS incentives will be paid for through EE R.13-11-005, while battery and PLS incentives will be paid for through SGIP R.20-05-012. Financing will be leveraged through R.20-08-022. SCE also states that heat pump incentives may also be received through R.20-05-012 when eligible. ⁴⁴ Promoting battery storage will be paid for through the IDSM component of our EE Program. Direct incentives will be captured through SGIP not EE. All rules and standards from both programs apply.

⁴³ SCE AL 5249-E at 10.

⁴⁴ SCE AL 5249-E at 21.

	Balancing Accounts: - SCE will utilize existing Procurement Energy Efficiency Balancing Account (PEEBA) to tract new PLS activity by creating a sub-account within PEEBA to record the revenue, related expenditures, and applicable accrued interest. ⁴⁵
New methods to show stacking of costs	HPWH project costs where PLS occurs will account for additive costs for controllers within the submitted invoice. Storage and associated costs will be itemized separately to the EE technology. ⁴⁶
	Program costs will be managed between EE delivery and multi-DER delivery in EE Market Support. Multi-DER delivery costs will be excluded from TRC weighted program costs. Multi-DER delivery costs will be accounted for through hourly timecard reporting and accrued costs to separate contract line items.
Reporting requirements (including timing)	Programs will follow EE reporting requirements with monthly savings and expenditure reporting and quarterly claims reporting via CEDARS and annual program activities, expenditures, costs effectiveness and savings will be reported in EE Annual Report. ⁴⁷

⁴⁵ SCE AL 5249-E at 10.

⁴⁶ SCE AL 5249-E at 21.

⁴⁷ SCE AL 5249-E at 21-22.

	Programs/Projects will also follow reporting requirements from SGIP proceedings.
	Framework Sample Metrics:
	kW permanent load shift
	 HPWH - number of units scheduled to deliver PLS
	 Evidence of scheduling
	o kW load shift value
	kW permanent load reduction
	o kW in storage installed
	 Evidence of smart inverter/controller
	o Evidence of permanent load reduction: resources reports, images, interconnection
	agreements
Procedural path for	For purposes of this AL, SCE did not develop details for this illustrative offering.
access to funding	
Ex ante assumptions	Custom Methodology based on proposed program details.
for EE reporting	
	Since all PLS offerings will be new EE measures, baselines and assumptions will follow existing
	EE measure rules.
	All massurement approaches for all EE Programs will be available for greating PLS Massures
	All measurement approaches for all EE Programs will be available for creating PLS Measures and/or multi-DER projects/ programs, including Deemed, Custom, NMEC, SEM, etc.
Total Resource Cost	The cost-effectiveness of PLS proposals will be calculated using estimated load shapes and
(TRC) and cost	energy impacts. These will input in the EE CET to calculate the TRC and Total System Benefits
effectiveness	

	(TSB) of the proposal. The results will inform the prioritization of PLS measures with or without multi-DER budget towards the highest value projects. ⁴⁸
	As a PA, SCE proposes to support program implementers in developing PLS CET load shapes for measures so the EE portfolio can claim the appropriate benefits.
Ex Post process	Custom Methodology based on proposed program details
	Evaluation criteria may include customer participation, percentage of budget spend, TSB and market readiness. ⁴⁹

SCE AL Overview

SCE proposed a framework for multi-DER IDSM in all sectors of EE, noting specifically Downstream and Market Support, with On-Bill Financing available for eligible sectors, as well as all eligible sectors in the Self-Generation Incentive Program (SGIP), including downstream.

The IDSM framework was proposed with two objectives⁵⁰:

- (1) Develop PLS (Permanent Load Shifting) measures for non-EE technologies, with multi-DER integration as an additional but optional path, and integrate complementary programs such as EE, distributed generation, load management technologies, and
- (2) Manage electric vehicle charging to address growing energy and system demands as multiple end-uses electrify. PLS measures will have forecast targets like any other EE measure.

⁴⁹ SCE AL 5249-E at 5.

⁴⁸ SCE AL 5249-E at 8.

⁵⁰ SCE AL 5249-E at 3.

SCE noted that many technologies are being considered and highlighted samples of technologies that will be pursued such as Programmable Heat Pump Water Heaters (Unitary and Commercial) and Programmable Battery Storage.

Future submissions

SCE states that specific measurement, evaluation, and reporting criteria will be proposed in SCE's multi-DER program and implementation plans in a subsequent Tier 2 AL.

TRC & Cost Effectiveness

The cost-effectiveness of PLS proposals will be calculated using estimated load shapes and energy impacts. These will input in the EE CET to calculate the TRC and Total System Benefits (TSB) of the proposal. The results will inform the prioritization of PLS measures with or without multi-DER budget towards the highest value projects.⁵¹

SCE proposes to support program implementers in developing PLS CET load shapes for measures so the EE portfolio can claim the appropriate benefits.

Reporting

SCE plans to ensure the projects are developed to meet both EE and SGIP reporting requirements. Programs will follow EE reporting requirements with monthly savings and expenditure reporting and quarterly claims reporting via CEDARS and annual program activities, expenditures, costs effectiveness and savings will be reported in EE Annual Report.⁵² Programs and Projects will also follow reporting requirements from the SGIP proceeding.

⁵¹ SCE AL 5249-E at 8.

⁵² SCE AL 5249-E at 21-22.

3. SoCalGas

Table 5. SoCalGas IDSM Program Details

Scope	Proposal
Program or framework proposed?	Framework
Technologies	Hybrid Heating Clean Generation with DERs Energy Storage Carbon Capture Clean Energy Vehicle Technologies ⁵³
Program type Relevant Proceedings	Pilot in Market Support Segment R.13-11-005 (EE) R.12-11-005 (SGIP) Please Note: R.20-05-012 is the successor proceeding and the appropriate reference
Rules for exceptions or deviations from established CPUC policy	SoCalGas did not propose any exemptions or deviations from established policy.
CPUC authorized funding sources and guidelines	SoCalGas is not currently aware of any limits on the amount of non-EE funding sources for the proposed IDSM framework. As non-EE opportunities are identified and included within the framework, SoCalGas will research potential limits and address through the pilot offerings.
Approach to draw from each funding source	EE and SGIP will equally split the cost of non-incentive program activities (marketing, education, and outreach). ⁵⁴
	Program incentives will be funded by SGIP and EE From their own individual budgets. These incentives will be stacked by SoCalGas to reduce the customer's cost. The integration of the EE and non-EE program operations will be managed using a single source clearinghouse that will be led from within the EE program operations. This single source clearinghouse team will be called the Customer Clean Energy Integrator. ⁵⁵
	Once approved, SoCalGas will establish the accounting framework to track and report costs of CEIP along with its other EE program activities. SoCalGas will continue to monitor and report on its third-party and total portfolio EE expenditures through current EE program reporting activities to support compliance with the attendant financial requirements. ⁵⁶
	Balancing Accounts: SoCalGas plans to use EE funds for these projects and will record costs incurred for the program in the Demand Side Management Balancing Account (DSMBA). Additionally, any SGIP funds leveraged will be recorded to the Self-Generation Program Memorandum

⁵³ SoCalGas AL 6274-G at 4.

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⁵⁴ SoCalGas AL 6274-G at 6.

⁵⁵ SoCalGas AL 6274-G at 8.

⁵⁶ SoCalGas AL 6274-G at 9.

	Account (SGPMA). SoCalGas will utilize its current accounting mechanisms to track costs to be able to identify any
	SGIP, or other potential non-EE program funds, which will support the CEIP Effort. ⁵⁷
Reporting requirements (including timing)	SoCalGas will report on the EE/DER program activities, including sharing of program costs and stacked incentives through its existing EE procedures.
	Reporting of program costs and accomplishments shall follow SoCasGas' Annual Report and True-up Annual Report process that are established for both the EE and non-EE funded portfolio and programs, respectively. Each funding resource will continue to report parameters in accordance with their respective regulatory requirements. ⁵⁸
Procedural path for access to funding	SoCalGas plans to use its EE funds from the Market Support portfolio category and the SGIP to advance technology improvements. As future programs are developed, other funding sources will be detailed in their respective Tier 2 ALs. ⁵⁹
Ex ante assumptions for EE reporting	Custom Methodology based on proposed program details. ⁶⁰ SoCalGas intends to use all rebates and incentives available within the given IDSM project and unless instructed otherwise will default to applying net-to-gross (NTG) ratio of 1.0. ⁶¹
Total Resource Cost (TRC) and cost effectiveness	Not addressed in this AL.
Ex Post process	Post analysis will be used to identify project success or lack thereof, helping to identify incentive structure or other market barriers that may be available to qualify it for increased funding for future portfolios. ⁶²

SoCalGas AL Overview

SoCalGas proposed a framework for multi-DER IDSM pilots in the Market Support segment of EE. In SoCalGas' AL, they propose SoCalGas's IDSM Pilot Program, which will be referred to as the SoCalGas Clean Energy Integration Program (CEIP). The goal of the CEIP program is to integrate complementary programs like EE, DR, and load management to address growing energy and systems demands as electrification increases. SoCalGas intends to achieve an increase in customer

⁵⁸ SoCalGas AL 6274-G at 7.

⁵⁷ Id

⁵⁹ SoCalGas AL 6274-G at 6.

⁶⁰ SoCalGas AL 6274-G at 7.

⁶¹ SoCalGas AL 6274-G at 7.

⁶² SoCalGas AL 6274-G at 6.

awareness and participation in all available demand-side management program offerings through the securing of rebates and incentives coordinated by this multi-DER IDSM program. SoCalGas noted potential target technologies such as Hybrid eating, Clean Generation with DERs, Energy Storage, Carbon Capture, and Clean Energy Vehicle Technologies⁶³.

Future submissions

SoCalGas plans to use its EE funds from the Market Support portfolio category and the SGIP to advance technology improvements. As future programs are developed, other funding sources will be detailed in their respective Tier 2 ALs.⁶⁴

Reporting

SoCalGas will report on the EE/DER program activities, including sharing of program costs and stacked incentives through its existing EE procedures.

Reporting of program costs and accomplishments shall follow SoCalGas' Annual Report and True-up Annual Report process that are established for both the EE and non-EE funded portfolio and programs, respectively. Each funding resource will continue to report parameters in accordance with their respective regulatory requirements.⁶⁵

Ex Post

Post analysis will be used to identify project success or lack thereof, helping to identify incentive structure or other market barriers that may be available to qualify it for increased funding for future portfolios.⁶⁶

4. BayREN Table 6. BayREN IDSM Program Details

Scope	Proposal
Program or	Expansion of existing programs while engaging in the creation of a
framework proposed	framework.
Technologies	To be determined depending on market engagement. ⁶⁷ Examples
	include:
	Solar PV and thermal
63 SoCalGas AL 6274-G at 4.	EV Charging
⁶⁴ SoCalGas AL 6274-G at 6.	Battery storge technologies
65 13rogalGas Ast p6274-G at 7.	Technical assistance including application support, IDSM audits,
66 SoCalGas AL 6274-G at 6.	marketing, education and outreach, workforce development across
⁶⁷ BayREN AL 25-E at 11.	

	residential and public sectors and all applicable program
	offerings. ⁶⁸
Relevant Proceedings	R.13-11-005 (EE)
	R.20-05-012 (SGIP)
	General familiarization and monitoring of proceedings related to:
	R.19-01-011(Building Decarbonization)
	R.19-09-009 (Microgrids and Resiliency)
	R.21-06-017 (High DER Future/Grid Modernization)
	R.22-07-005 (Electric Demand Flexibility Rulemaking)
	R.23-12-008 (Transportation Electrification Policy and
	Infrastructure)
	R.22-11-013 (DER Cost Effectiveness and Data)
Reporting	Metrics related to non-resource IDSM activities will be reported via
requirements	Unique Value Metrics and Market Support/Equity Metrics and
(including timing)	Indicators as applicable and reported via BayREN's Annual
	Report. ⁶⁹

BayREN AL Overview

The AL submitted by BayREN proposed a framework that 70:

- Identifies the steps needed to scale new approaches to existing programs towards a wider portfolio strategy;
- Outlines a decision-making process for directing IDSM funds to existing sectors, market segments, and delivery methods; and
- Develops an understanding of PLS opportunities within the authorized portfolio.

The goal of the outlined framework is to foster multi-DER approaches that focus on ongoing or permanent load shifting or load reduction. The two proposed outcomes from BayREN include: the creation of a long-term framework for IDSM integration into BayREN's portfolio and to start integrating IDSM strategies into existing BayREN programs to test them and inform that long-term framework. BayREN plans to expand its existing residential programs (BayREN02: Multi-Family, BayREN08: Single Family) and newly approved programs (BayREN11: Public Sector

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⁶⁸ BayREN AL 25-E at 8.

⁶⁹ BayREN AL 25-E at 10.

⁷⁰ BayREN AL 25-E at 5.

Integrated Energy Services, BayREN12: Public Sector Targets Decarbonization Services) to include IDSM technical assistance.⁷¹

Metrics and Indicators

BayREN plans on tracking the number of local governments properties and residential properties leveraging technical assistance services to identify potential IDSM projects, the number of IDSM audits completed, and the number of referrals and project applications to other programs that support the installation of IDSM technologies.⁷² BayREN will determine which DERs to prioritize based on where success is found to meet demand and improve customer satisfaction.

BayREN Concerns

In the AL, BayREN raised a concern regarding the ED Guidance. While the ED Guidance states that only non-event-based DR shall be pursued in this AL, BayREN notes that EE PAs are not prohibited from engaging in event-based or any other IDSM activities with the exception of providing capital incentives to customers for non-EE investments.⁷³

5. I-REN

Table 7. I-REN Program Details

Scope	Proposal
Program or	I-REN Technical Assistance and Strategic Energy Planning
framework	Program
proposed	
Technologies	Technologies including but not limited to ⁷⁴ :
	• Solar
	Battery
	EV Charging
	Water Efficiency
	Permanent Load Shifting
	Demand Response
Program type	Expanding service offerings to already existing programs to
	include DER technical assistance, IDSM audits, education, and
	outreach activities

⁷¹ BayREN AL 25-E at 10.

⁷² BayREN AL 25-E at 5-6.

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⁷³ BayREN AL 25-E at 7-8.

⁷⁴ I-REN AL 4-E/4-G at 13.

Relevant	R.19-01-011 (Building Decarbonization)
Proceedings	R.19-09-009 (Microgrids and Resiliency)
	R.20-05-012 (SGIP)
	R.19-09-009 (Microgrids and Resiliency)
	R.21-06-017 (High DER Future/Grid Modernization)
	R.22-07-005 (Electric Demand Flexibility Rulemaking)
	R.23-12-008 (Transportation Electrification Policy and
	Infrastructure)
	R.22-11-013 (DER Cost Effectiveness and Data)

I-REN AL Overview

In I-REN's AL, they envision an IDSM program providing technical assistance support to local jurisdictions in its region through climate resiliency projects. The goal of

I-REN's IDSM program will be to expand its technical assistance offerings to include non-EE DER measures. I-REN's approach to IDSM integration is based on energy audits, providing technical assistance that may indirectly facilitate DR installations or other IDSM measures. The expanded technical assistance services include comprehensive project support offerings such as, integrated DER audits, performance and design specifications, procurement support, funding and financing analyses and application support, and construction support for DER measures.⁷⁵

I-REN does not plan on disaggregating impacts between EE and IDSM and they intend to couple EE education with other IDSM educational activities.⁷⁶

Metrics and Indicators

I-REN will review indicator trends and growth to determine which services offered, and which specific measures installed, yield the most significant community impacts and should continue to receive budget resources in future portfolios. I-REN plans on tracking the number of agencies participating in engagement and outreach activities (such as webinars and workshops), the number of agencies leveraging technical assistance services to identify DER projects, the number of audits completed, DER procurement support delivered, DER construction activities supported, number of agency DER projects implemented, and number of agency projects that receive DER

⁷⁵ I-REN AL 4-E/4-G at 6.

⁷⁶ I-REN AL 4-E/4-G at 7.

financing and external funding support.⁷⁷ All IDSM DER services will be tracked separately from the provisions of EE services and will be reported in its Annual Report.⁷⁸

⁷⁷ I-REN AL 4-E/4-G at 7-8.

⁷⁸ I-REN AL 4-E/4-G at 8.

6. MCE Table 6. MCE Program Details

Scope	Proposal
Program or	Peak Flex Market – IDSM Program is an expansion of an existing program while engaging in the
framework	creation of a framework
proposed	
Technologies	Includes but is not limited to ⁷⁹ :
	Battery Energy Storage Systems (BESS)
	Thermal Storage
	• EVSE
	Building Automation
	Behavioral, Retro-commissioning, Operational EE (BRO's)
Program type	Expansion of Peak Flex Market
Relevant	R.13-11-055 (EE)
Proceedings	
Ex ante	Population-level NMEC control groups and approved documented NTG ratios tailored
assumptions for	by sector. ⁸⁰
energy efficiency	EUL/RULs of at least one year of load reduction potential.
reporting	A weighted EULs/RULs will be reported based on the technology mix of enrolled
	projects.
	baseline will be established utilizing historical energy consumption data, weather
	normalization, and temporal patterns to predict energy usage in the absence of the
	program's intervention. ⁸¹

⁷⁹ MCE AL 74-E at 5-6.

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⁸⁰ MCE AL 74-E at 9.

⁸¹ MCE AL 74-E at 5.

	MCE will tie incentives to the TSB after accounting for administrative costs which will
	result in a cost-effective program deployment. ⁸²
	MCE proposes the tracking and reporting of the following program metrics and indicators for
	enrolled projects in its EE Annual Report ⁸³ :
	 Number of enrolled residential and non-residential projects;
	 Forecasted annual load reduction out of peak hours (4pm-9pm) (kWh);
	 Forecasted program TSB (\$);
	 Forecasted payments to aggregator (\$);
	 Total measured load reduction out of peak hours (4pm-9pm) (kWh);
	○ Summer Months (June 1 – Oct 31)
	 Non-Summer Months (all months excluding June 1 – October 31);
	Program TSB to date (\$);
	Payments to aggregator to date (\$);
	• Incentives to customers (\$);
	Total budget reserved (\$);
	Total budget remaining (\$)
Ex Post process	MCE will measure load reduction using sub-meter data, device level telemetry, or AMI
	data with population level NMEC and CalTRACK methods where applicable. ⁸⁴
	 Achieved TSB will be a function of electricity consumption shifted out of peak hours,
	climate zone, metered load shape, EUL and the ACC.
	Measure cost will not be included in cost effectiveness calculations per IDSM guidelines.

⁸² MCE AL 74-E at 2.

⁸³ MCE AL 74-E at 3.

⁸⁴ MCE AL 74-E at 9.

MCE AL Overview

In MCE's AL, they propose adapting their existing Peak FLEXmarket program to implement a year-round IDSM program designed as a comprehensive strategy that offers demand response and load shifting for both residential and commercial customers. This evolving will incentivize aggregators with demand and load management capabilities for delivered daily load reduction during hours with high avoided cost value.85 MCE anticipates using device level data, meter data and sub-meter data to evaluate program performance in combination with the Avoided Cost Calculator (ACC) to align payments with grid benefits and TSB value delivered. MCE states that they will be using a pay-for-performance ("P4P") structure tied to the ACC sends a price signal that prioritize DERs that achieve the greatest daily load reduction during the most valuable peak hours throughout the year.⁸⁶

MCE plans on offering two distinct participation options for aggregators – daily load reduction or demand response. By offering two distinct participation options with no overlapping enrollment, MCE will not need to disaggregate impacts between load reduction and DR events.⁸⁷ This design maintains a separation between the program's load shifting and load reduction pathway funded through IDSM funding and the event-based DR funded through MCE's Operational Funds.

Ex Post

MCE states in their AL that they will measure load reduction using sub-meter data, device level telemetry, or AMI data with population level NMEC and CalTRACK methods where applicable.⁸⁸ They state that the achieved TSB will be a function of electricity consumption shifted out of peak hours, climate zone, metered load shape, EUL and the ACC.

⁸⁶ MCE AL 74-E at 3.

⁸⁵ MCE AL 74-E at 2.

⁸⁷ MCE AL 74-E at 6.

⁸⁸ MCE AL 74-E at 9.

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7. SoCalREN

Table 7. SoCalREN Program Details

Scope	Proposal
Program or	Framework to apply to previously authorized programs
framework	
proposed?	
Technologies	Aiming to be as inclusive as possible in terms of eligible
	technologies. Some DER Strategies that may be considered ⁸⁹ :
	Demand Response
	Electric Vehicle Charging Stations
	Solar Water Heating
	Heat Pump Technologies
	Energy Storage
	Solar Photo-Voltaic
Program type	Expanding service offerings to already existing programs to
	include DER technical assistance, IDSM audits, education, and
	outreach activities targeting public, residential, commercial, and
	agricultural sectors. ⁹⁰
Relevant	Will provide these details as relevant if proposing specific new
Proceedings	programs in future Tier 2 ALs.
Approach to draw	SoCalREN intends to work with customers on accessing
from each funding	multiple funding sources to achieve customers desired goals and
source	has established an internal tracking database and invoices that
	separate/breakdown multiple funding sources. ⁹¹
Reporting	SoCalREN will work to align any metrics with its Unique Value
requirements	Metrics as appropriate ⁹² . These may include but are not limited
(including timing)	to:
	Channeled Energy
	Peak Demand Savings
	GHG Reductions
	SoCalREN will also track Community Impacts metrics,
	including but not limited to ⁹³ :

⁸⁹ SoCalREN AL 18-E/18-G at 9.

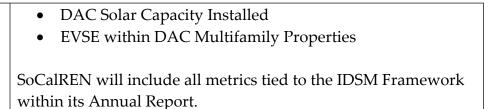
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⁹⁰ SoCalREN AL 18-E/18-G at 12.

⁹¹ SoCalREN AL 18-E/18-G at 13.

⁹² SoCalREN AL 18-E/18-G at 7.

⁹³ Id.



SoCalREN AL Overview

In the AL submitted by SoCalREN, they outline IDSM activities that they hope to add to existing programs, including⁹⁴:

- DER audits in conjunction with EE audits
- Identification of applicable DER measures
- Development of a custom project proposal including measure mix, estimated impacts and benefits, ROI, and available incentives from other programs, and
- Providing ongoing technical support and coordination with complementary programs.

The goal of SoCalREN's IDSM activities are to equip customers with relevant information so that they can make informed decisions on implementing load shifting and/or reducing DER projects. SoCalREN intends to provide holistic and comprehensive solutions to customers that typically do not have sufficient access to energy efficiency and DER information and financial incentives. The strategy of the IDSM activities is to identify and deliver EE and DER projects that yield electricity and gas savings, overcome common barriers to implementation, and provide other benefits such as resiliency services. SoCalREN intends to offer technical assistance that will be responsive to changing customer needs. This technical assistance may include tailored EE and DER project recommendations based on collected facility information and support to leverage multiple programs for the customer's benefit in conjunction with education on these EE/DER technologies chosen. Once this proposed framework is approved SoCalREN will establish IDSM program targets as appropriate for existing programs utilizing IDSM strategies.

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⁹⁴ SoCalREN AL 18-E/18-G at 12.

⁹⁵ SoCalREN AL 18-E/18-G at 13.

Metrics and Indicators

Currently, SoCalREN does not intend to prioritize specific DERs over others. They will perform DER audits on a customer premise to provide specific recommendations that are relevant to each customer. SoCalREN will continue to use deemed values and technical engineering analysis to determine energy savings and impacts between EE and other resources. A comparison method for energy savings or other characteristics of different DERs has not been developed at this time but will seek to leverage existing DER tools adopted by state agencies. SoCalREN states that metrics pertaining to the public sector will utilize historical program data, and any other sectors where the proposed framework strategies have not yet been deployed will be required to utilize any public market data that may be available.

8. 3C-REN

Table 8. 3C-REN Program Details

Scope	Proposal	
Program or	Framework	
framework		
proposed?		
Technologies	3-CREN's does not plan to directly implement projects. Instead, 3-	
	CREN will engage in education and technical assistance support.	
	Technologies covered by technical assistance and education activities	
	could include but are not limited to ⁹⁸ :	
	Electric Vehicle Charging Infrastructure	
	Energy Storage	
	Smart Controls	
	• Solar	
	Vehicle-to-grid technologies	
Program	Expanding existing programs; WE&T, C&S, Residential, Agriculture,	
type	and Commercial	
Relevant	R.19-01-011 (Building Decarbonization)	
Proceedings	R.19-09-009 (Microgrids and Resiliency)	
	R.20-05-012 (SGIP)	

⁹⁶ SoCalREN AL 18-E/18-G at 7.

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⁹⁷ SoCalREN AL 18-E/18-G at 8.

⁹⁸ 3C-REN AL 10-E/9-G at 4.

PG&E AL 4876-G/7209-E, SCE AL 5249-E, SoCalGas AL 6276-G, BayREN AL 25-E, I-REN AL 4-E/4-G, MCE AL 74-E, SoCalREN AL 18-E/18-G, 3C-REN AL 10-E/9-G/EPL

	R.21-06-017 (High DER Future/Grid Modernization)
	R.22-07-005 (Electric Demand Flexibility Rulemaking)
	R.23-12-008 (Transportation Electrification Policy and Infrastructure)
	R.22-11-013 (DER Cost Effectiveness and Data)
Funding	3C-REN intends to allocate IDSM funds across all its new and existing
requirements	programs within the DI non-incentive cost category.99 3C-REN will
	include a list of external funding sources beyond the energy efficiency
	portfolio funding, if any, in its EE annual reports. ¹⁰⁰
Reporting	3C-REN plans to include IDSM-related educational trainings,
requirements	referrals, and audits on the technologies listed above in EE annual
(including	reports starting in 2025. 3-CREN also plans to include customer
timing)	engagement and implementation of IDSM recommendations in
	annual reports starting in 2026. ¹⁰¹

3C-REN AL Overview

In 3C-REN's AL, they propose to include IDSM within its existing programs, largely focuses on technical assistance and education to achieve outcomes such as increased awareness of IDSM as well as increased capacity to explore and pursue opportunities related to DER and load shifting in combination with energy efficiency and electrification. Through its existing Residential Multifamily Program and new Energy Assurance and Agriculture Programs, 3C-REN proposes to expand upon the no-cost technical assistance (TA) already offered through those programs to provide education and technical support related to DERs. 3C-REN elaborates that technical assistance could include benchmarking, energy assessments, and referrals to complementary programs wherever possible, and project management assistance to shepherd customers through the participation process. For its existing single family residential program and newly approved commercial marketplace program, 3C-REN proposes to incorporate education on DER technologies. For all its technical assistance and incentive programs (multifamily, single family and commercial incentive programs, as well as agriculture and Energy Assurance Services TA programs), 3C-REN also proposes to

99 3C-REN AL 10-E/9-G at 3.

¹⁰⁰ 3C-REN AL 10-E/9-G at 5.

¹⁰¹ 3C-REN AL 10-E/9-G at 11.

¹⁰² 3C-REN AL 10-E/9-G at 5.

provide referrals to programs that offer support or incentives for adoption of IDSM technologies and support in applying for funding to implement upgrades related to IDSM technologies.¹⁰³ Finally, 3C-REN will allocate IDSM funds to offer trainings to public and private sector building professionals on IDSM technologies through their established WE&T and C&S programs.¹⁰⁴

Metrics and Indicators

3C-REN will use program performance data and qualitative feedback from implementers, partners, and customers to determine if increased budget should go towards priority DERs that achieve portfolio equity and market support. 3C-REN may also use metrics such as but not limited to, the number of local government agencies, multifamily properties and agricultural customers leveraging technical assistant services to identify IDSM projects, the number of IDSM audits completed, the number of trainings and educational opportunities related to IDSM technologies, and the number of referrals to the program. 3C-REN will invest two years of data collection to establish a baseline to best reflect the above-mentioned metrics. 3C-REN may establish potential targets related to public awareness, workforce development, and customer education.

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¹⁰³ 3C-REN AL 10-E/9-G at 6.

¹⁰⁴ 3C-REN AL 10-E/9-G at 4.

¹⁰⁵ T.A

¹⁰⁶ 3C-REN AL 10-E/9-G at 5.