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(U 338-E)

# *Testimony Supporting Southern California Edison Company's Energy Savings Assistance (ESA) Program and Budget for Program Years 2028-2033*

Before the

**Public Utilities Commission of the State of California**

Rosemead, California
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# Southern California Edison's Testimony in Support of Energy Savings Assistance (ESA) Program and Budget for Program Years 2028-2033 – SCE-02

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# I.

# EXECUTIVE SUMMARY

Southern California Edison Company (SCE) submits the following testimony to support its Energy Savings Assistance Program (ESA Program). The purpose of this testimony is to request approval of SCE's ESA Program proposals, goals, and budgets for the 2028-2033 program cycle which will support continued program optimization, enhance customer experience, and advance California's clean energy and equity goals. Below is a summary of SCE's proposals, goals, and budget.

**Summary of SCE Proposals**

As described in this Exhibit SCE-02, key aspects of SCE's ESA Program proposal include the following:

1. SCE proposes to close the Building Electrification (BE) Pilot in 2027, transition the installation of BE measures to the ESA Program, and integrate all such offerings to all eligible single-family homes, mobile homes, and multifamily buildings. See Section IV.C.2 for more information.
2. SCE proposes to close the regionally administered Southern Multifamily Whole Building (MFWB or Southern MFWB) Program and transition all aspects of the multifamily ESA delivery to SCE's ESA Program. See Section IV.B.4 for more information.
3. SCE proposes to provide Heating, Ventilation, and Air Conditioning (HVAC) offerings to customers in additional climate zones, while also providing cooling measures for more customers. See Section IV.C.3 for more information.
4. SCE proposes to enhance coordination with other agencies and programs (e.g., California Energy Commission, TECH Clean California, and local governments) to maximize program impact, efficiency, and customer satisfaction by more effectively addressing their needs. See Section IV.B.2.e for more information.

5. SCE proposes a supplemental solicitation approach that will allow SCE to pre-qualify additional vendors and expand access to contracting needs not initially identified at the beginning of the program cycle. See Section VI.A for more information.

**Goals**

SCE proposes a total cycle savings goal of 195.4 GWh (approximately 36.7 GWh per program year), compared to 131.5 GWh (approximately 26.3 GWh per program year).[1] This increase in program goals is primarily attributable to SCE's proposals as described above (i.e., increased installation and adoption of electrification measures, increased participation of multifamily properties, and the anticipated provision of HVAC measures to additional climate zones). See SCE-02 Section III.A for more information.

**Budget**

To support its proposals and goals (described above and in this testimony), SCE proposes an average annual budget of approximately $112.4 million. This represents an increase of approximately $8 million annually (not including escalation). SCE's 2028-2033 proposed program cycle budget is $674.5 million. See SCE-02 Section III.B for more information.

**Cost Effectiveness**

SCE projects an Energy Savings Assistance Cost Effectiveness Test (ESACET) of 0.49. SCE recognizes that its forecast cost effectiveness is lower than the Commission's ESACET target of 0.7. This lower cost effectiveness is the result of several factors including: expansion of health, comfort, and safety measures; expansion of electrification measures, and lower CET values for measures such as lighting, which traditionally increased cost-effectiveness in prior program cycles. See SCE-02 Section III.C for more information.

**Outline of Testimony**

This testimony is organized in seven chapters. Chapter I is this Executive Summary. Chapter II provides an introduction and includes lessons learned and strategic proposals. Chapter III discusses proposed goals, budgets, and cost effectiveness. Chapter IV discusses program designs, including SCE's proposed program changes and measure portfolio. Chapter V discusses marketing, education and

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[1] *See,* Decision (D). 21-06-015, Ordering Paragraph (OP) 75, p. 448.

outreach. Chapter VI discusses other topics, such as program solicitations and workforce education and training. Finally, Chapter VII provides SCE's forecast revenue requirements and cost recovery proposal.

## II.

## INTRODUCTION

### A. Program Overview and Background

SCE's Energy Savings Assistance Program (ESA Program or ESA) provides no-cost energy efficiency (EE) services to income-qualified customers across Southern California Edison's (SCE) service territory and is a critical component of California's broader strategy to reduce greenhouse gas (GHG) emissions, improve public health, and supports energy affordability for vulnerable populations. The ESA Program is particularly important for customers who often face high energy burdens, reside in disadvantaged communities (DACs), and may rely on outdated or inefficient appliances (and/or other measures). It is estimated that approximately 1.3 million income-qualified households across SCE's 50,000 square-mile service territory may be eligible for the ESA Program.[2] Furthermore, about 36 percent[3] of SCE's low-income customers reside in DACs, and many of these customers reside in the state's hottest climate zones, which further amplifies the need for targeted energy solutions.

For over two decades, the ESA Program, through its contractor network, installed appliances, including refrigerators and air conditioners, and provided home efficiency solutions, such as weatherization, to eligible customers, resulting in reduced energy consumption and improvements in health, comfort, and safety. In D.21-06-015, the Commission approved a new framework for the ESA Program, which emphasized deeper energy savings per home (rather than the number of homes treated).[4] This framework introduced new energy savings goals and program-wide changes implemented in 2023 and will continue to the end of the program cycle in 2026.[5] Key programmatic changes authorized by D.21-06-015 include the following:

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[2] This estimate is based on 2025 Athens Research data, with eligibility criteria at 250 percent of the Federal Poverty Level applied to the residential customer segment population.

[3] Calculated from SCE's 2024 ESA Annual Report (DAC households in Table 16 divided by CARE eligible population in Table 2).

[4] D.21-06-015, pp. 116-117.

[5] D.21-06-015 approved programmatic changes, goals, and budgets for program years 2021-2026.

1. Tiered Offering: The Decision distinguished between Basic and Basic Plus program offerings. Basic customers are eligible for LEDs, smart power strips, refrigerators, smart communicating thermostats, clothes washers, dishwashers, freezers, pool pumps, evaporative coolers, weatherization services, Heat Pump (HP) Water Heaters (HPWH), and Heat Pump HVAC systems. Customers qualifying for Basic Plus are high-energy-use customers (above 200 percent of baseline levels) and are eligible for all Basic offerings plus additional heating/cooling measures, such as portable and permanent room air conditioners.
2. Fuel Substitution Measures: The Decision authorized SCE to offer HP HVAC systems and HPWH to replace gas and propane systems where feasible. The ESA Program and SCE-approved contractors actively educate customers on the benefits of electrification through these offerings.
3. Southern Multifamily Whole Building. In addition to the ESA Main program (which serves customers living in single-family or mobile homes), the Commission authorized the Southern Multifamily Whole Building (MFWB or Southern MFWB) program. The MFWB program targets customers in multifamily (MF) dwellings and is administered by San Diego Gas and Electric (SDG&E), on behalf of SCE and the Southern California Gas Company (SoCalGas), in which in-unit and common area measures are offered to eligible properties.
4. Building Electrification and ESA Whole Home Pilots. The Decision authorized the ESA Whole Home pilot, which is administered by SCE and is a joint effort with Southern California Gas Company (SoCalGas), which was designed to focus on capturing deeper energy savings for higher energy users by providing a suite of gas and electric measures. The Decision also authorized the Building Electrification (BE) pilot, which was designed to provide an opportunity for high-usage, income qualified single family households in Disadvantaged Communities to participate in a building electrification pilot to receive electrification offerings.

SCE continues to advance ESA Program goals as established by the Commission for SCE's 2021–2026 program cycle. The following are key accomplishments from the 2021-2026 program cycle:

**Installed Efficient Electrification Measures.** SCE installed efficient HP HVAC systems and HPWH to replace natural gas and propane-fueled systems where feasible. From the start of the current cycle through August 2025, SCE installed over 2,600[6] HP systems through the ESA Main and Building Electrification (BE) pilot as compared to 1,003 from 2016 through 2020, demonstrating commitment to efficient electrification. Before this current cycle, HP systems were like-for-like replacements, meaning electric heat pumps were replaced with new electric heat pumps, maintaining the same fuel type and function where the current and future programs will continue to deliver conversion to electric.

**Launched Building Electrification Pilot.** SCE successfully launched and operationalized the BE Pilot for select income-qualified customers in single-family homes, converting space and water heating systems from natural gas to electric HPs to reduce energy costs and greenhouse gas emissions. Results of the BE pilot demonstrated its value as a scalable model that can deliver savings and electrification. Since its launch, the BE pilot has contributed over 3.1 million claimable kWh savings across more than 375 low-income homes,[7] generating on average 8,490 claimable kWh of savings per home[8] with an estimated $376 in annual bill savings.[9]

**Established Tribal Community Agreements.** SCE entered into agreements with tribal communities to facilitate outreach, awareness, and enrollment within this historically underserved segment of the population. In 2025, these efforts helped bring about the delivery of measures to Bridgeport Indian Colony tribal members, such as lighting, power strips, refrigerators, washing machines, and evaporative coolers. This achievement marked a milestone in SCE's commitment to serving homes in these hard-to-reach areas of its service territory. Currently, SCE has four Tribal Mini

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6 *See*, SCE's 2023 Annual Report, 2024 Annual Report, and August 2025 Monthly Report (filed in September 2025).

7 Includes all projects completed since the BE Pilot launch, including those approved for payment and those pending review as of August 2025.

8 Includes all projects completed since the BE Pilot launch, including those approved for payment and those pending review as of August 2025.

9 Based on preliminary BE Pilot analysis, this estimate reflects a $596 decrease in gas energy cost and a $220 increase in electric energy cost (not weather normalized), resulting in approximately $376 in overall annual bill savings.

grant agreements[10] from the thirteen federally recognized tribes in SCE's service area. Through these grants, SCE will continue to build upon momentum gained in 2025.

**Utilized Transferred Solar Program Funds.** As approved in AL 5106-E, SCE transferred unused administrative and incentive funds from the Single Family Affordable Solar Homes (SASH) and Multifamily Affordable Solar Housing (MASH) programs to the ESA Program Adjustment Mechanism (ESAPAM), in accordance with D.15-01-027.[11] All funds, totaling over $6.1 million, were used to deliver energy efficiency measures and services to qualifying low-income customers in program year (PY) 2024.[12]

**Strengthened Community-Based Organization Coordination.** SCE collaborated with its network of contractors, including Community-Based Organizations (CBOs), Faith-Based Organizations (FBOs), and private entities within low-income communities, and provided workforce training to individuals who expressed interest in careers in delivering energy efficiency to ESA customers. Additionally, SCE's CBO and FBO network raised awareness of ESA to over 5,000 customers and 2,000 households in 2024. SCE has utilized CBOs and FBOs as strategic channels to access ESA customers and will continue to leverage their strength as vocal proponents of the importance of energy efficiency to this segment.

**Formed ESA Statewide Working Group.** SCE supported the establishment of the ESA Statewide Working Group and is an active participant in enabling adjustments to program design and delivery, improving responsiveness and adaptability. Through this working group, SCE can more quickly add or remove measures from its portfolio and propose new ideas and approaches to enhancing its portfolio with deeper collaboration across stakeholders (Investor-Owned Utilities, Low Income

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10 A formal agreement between SCE and a tribal community under which financial assistance is provided to support local outreach activities. The tribal community is responsible for promoting programs like ESA, CARE and FERA programs to its members, facilitating enrollment.

11 *See,* Advice Letters PG&E 7028-E/SCE 5106-E was approved with an effective date of October 20, 2023.

12 *See,* SCE Annual Report 2025, Program Year 2024.

Oversight Board, contractors, CBOs, FBOs, public at large). SCE values diverse input from these stakeholders.

ESA Main. The following table summarizes the authorized and recorded expenditures and energy savings results from June 2021-August 2025.

***Table II-1***
***ESA Main***

| ESA Main | Authorized | Recorded | % of Goal/Target |
|---|---|---|---|
| Budget[(a)] | $ 332,726,561 | $ 229,612,048 | 69% |
| Homes Treated | 289,724 | 178,393 | 62% |
| kWh Saved | 131,525,719 | 55,011,322 | 42% |
| kW Demand Reduced | 51,954 | 9,204 | 18% |
| Therms Saved[(b)] | 1,475,801 | (93,641) | -6% |

(a) Authorized Budget for PY 2021-2026 includes Unspent funds per AL 4702-E, SASH/MASH funds and D.21-06-015, Attachment 1. See Appendix C for reconciliation of Authorized Budget for PY 2021-2026 to ESA Authorized Budget per D.21-06-015 (Attachment 1).
(b) A measure with negative (less than zero) Therms impact results in more Therms of natural gas being consumed by the dwelling.

ESA Multifamily Common Area Measure. Of note, SCE exceeded its authorized targets under the ESA Multifamily Common Area Measure initiative prior to its transition to MFWB (Table II-2). SCE recorded expenditures at 86 percent of the approved budget and achieved 2,125,668 kWh in energy savings (representing 393 percent of the original goal) demonstrating strong momentum leading into the launch of MFWB.

***Table II-2***
***ESA Multifamily Common Area Measure***[13]

| ESA MF CAM | Authorized | Recorded | % of Goal/Target |
|---|---|---|---|
| Budget[(a)] | $ 4,358,479 | $ 3,730,288 | 86% |
| Homes Treated | 133 | 82 | 62% |
| kWh Saved | 540,805 | 2,125,668 | 393% |
| kW Demand Reduced | - | 52 | 0% |

(a) PY 2021 and PY 2022 includes MFCAM budget approved in AL 4553-E-A, effective Sep 10, 2021.

ESA Multifamily Whole Building. The ESA Multifamily Whole Building (MFWB) program, on the other hand, has not achieved anticipated results in the current program cycle. Refer to Table II-3 below for MFWB authorized and recorded.[14] SCE addresses program complexity and market barriers contributing to these results in Section IV of this Exhibit SCE-02.

[13] Data is from July 2021 through December 2023, when MF CAM was closed and offerings were transitioned to MFWB (MFWB implemented in July 2023).

[14] Recorded expenditures represent only 15 percent of the authorized budget. Preliminary reports from SDG&E show 3 properties treated out of 267 (one percent) and 6,335 tenant units served compared to a target of 51,197 (12 percent). Similarly, energy savings remain significantly below expectations, with 601,162 kWh achieved, which is just two percent of the goal.

***Table II-3***
***ESA Multifamily Whole Building (MFWB)***[15, 16]

| MFWB (SCE) | Authorized | Recorded | % of Goal/Target |
|---|---|---|---|
| Budget | $ 48,739,978 | $ 6,450,419 | 13% |
| Multifamily Properties Treated | 267 | (a) | 0% |
| Multifamily Tenant Units with Properties Treated | 51,197 | (a) | 0% |
| kWh Saved | 35,172,926 | (a) | 0% |

(a) Recorded data represents activity from July 2023-December 2024 (due to MFWB start date in 2023 and data available through only 2024 from SG&E.)

## B. Challenges and Lessons Learned

The ESA Program encountered challenges delivering program goals during the 2021-2026 program cycle. These challenges are largely the result of competing performance goals, specifically to simultaneously achieve deep energy savings objectives, cost-effectiveness targets, and cumulative energy savings goals. These challenges were multifaceted, resulting from both external conditions such as COVID-19 pandemic effects and operational transition delays. The ESA Program delivered modest performance in specific program areas, including the MFWB program. Below are some of these challenges and how SCE plans to address them in the 2028-2033 program cycle.

### 1. Impacts of COVID-19

Residual effects of the COVID-19 pandemic, such as contractor workforce retention and customer hesitancy to allow in-home access, continued beyond the end of the pandemic and impeded service delivery. Resulting inflationary pressures affected program delivery with

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15 Recorded data represents activity from July 2023-December 2024 (due to MFWB start date in 2023 and data available through only 2024 from SDG&E).

16 2022-2026 authorized amounts per D.21-06-015. 2023 authorized budget represents 50 percent of MF budget authorized in per D.21-06-015 (see Attachment 1) less 10 percent which was transferred to the General Administration category per SDG&E Advice Letter AL 4115-E/3144-G.

increased labor and material costs. The cost of delivering measures and services per home has increased, requiring budgets to stretch to meet targets established in 2020 under different economic conditions. Concurrently, persistent supply chain disruptions hindered timely procurement of materials, further delaying implementation timelines. These factors underscore the importance of building program flexibility into planning and delivery frameworks, such as SCE's contracting structure, which was not designed to accommodate rapid cost escalations or supply chain volatility. See Section VI.A of this Exhibit SCE-02 for proposed solutions.

### 2. Programmatic and Operational Transitions

As stated previously, SCE's ESA Program underwent a substantial redesign resulting from D.21-06-015, which approved a new framework emphasizing deeper energy savings per household rather than the number of homes treated.[17] This shift required a departure from longstanding program models and necessitated the development of new systems, contractor training, solicitation processes, and enhanced data reporting protocols. The implementation of these foundational changes resulted in a slower-than-anticipated program ramp-up.

Additionally, the introduction of new measures such as heat pump water heaters also shifted the way contractors manage their operations. Aside from hiring and training crews to install these measures, these installations are more labor-intensive and require higher upfront costs. Expenses related to permitting, for instance, prolonged carrying costs and increased the financial burden on contractors, further complicating cash flow and project scheduling during the transition period.

To address the sharp decline in production and slow ramp-up following the ESA Program redesign, SCE actively leveraged the ESA Program Working Group and SCE's regular ESA Partner Forums to help drive program design changes. These collaborative platforms enabled faster feedback loops, iterative solution development, and more agile implementation of

[17] D.21-06-015, pp. 116-117.

workflow improvements. Leveraging these groups was instrumental in accelerating recovery and scaling delivery. For instance, in 2024, SCE achieved 73 percent of its home treatment target and 58 percent of its kWh savings goal by serving 47,587 customers (a 260 percent increase over 2023 volume), demonstrating significant progress in program delivery because of continuous improvement efforts. As of August 2025, SCE achieved 58 percent of its home treatment target and 37 percent of its kWh savings goal by serving 34,682 customers. The number of homes treated is a 32 percent increase from the same period in 2024.[18] SCE anticipates meeting its homes treated target by the end of PY 2025.

To mitigate similar risks that could arise in 2028-2033, SCE continues to stabilize systems, enhance workforce readiness, and improve processes. Additionally, SCE will remain actively engaged with the ESA Program Working Group and ESA Partner Forums to stay informed of current and future challenges.

### 3. Contractor Financial Constraints

In early 2023, SCE began transitioning its operations to adhere to D.21-06-015's mandate to drive deeper energy savings per home treated.[19] At that time, contractors continued to cast a wide net to generate as many leads as possible. This approach, while successful in driving homes treated volume, did not differentiate customers potentially eligible for higher energy (kWh) savings per home treated. To maximize the volume of leads with larger energy savings potential, SCE assumed responsibility for all customer lead generation and requested contractors to cease outreach activities. To support deeper energy savings per home, SCE transitioned to energy use models to identify and prioritize households with the highest potential for energy savings, allowing SCE to deliver high value leads to contractors to pursue. However, this approach revealed key limitations. SCE's customer database often contained outdated contact information,

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[18] *See,* ESA Table 2 of SCE's IQP Monthly Report – August 2024 (Household Treated = 26,319) and August 2025 (Household Treated = 34,682).

[19] D.21-06-015, pp. 116-117.

making it difficult to reach eligible households. Additionally, customers who stood to benefit most from program participation were not always the most willing to enroll. As a result, SCE experienced a decline in enrollments and overall program participation, highlighting the need for improved data quality and more effective engagement strategies.

To address these concerns, by mid-2023, SCE incorporated propensity models to better identify customers who would both benefit from and be most willing to participate in the program. This data-driven approach enabled more targeted outreach and improved the likelihood of successful enrollments. Recognizing the importance of contractor engagement, SCE also pivoted and allowed contractors to resume generating their own leads, supplementing SCE's targeted efforts and helping to restore program momentum. Unfortunately, by this time, some contractors had already downsized and reduced staff to a point where they experienced financial difficulty in ramping back up to prior operating levels. With insufficient working capital to rehire staff and acquire service equipment, contractors faced significant obstacles. To address this financial gap, SCE provided eligible ESA Program contractors with advance payments in 2024 which provided upfront capital to sustain operations and ramp up service delivery.[20] These advance payments proved pivotal in contractor viability and were the necessary stimulus that led to significant performance improvement in 2024 and 2025.

The disruption to contractor cash flow in 2023 could have been more severe had advance payments been delayed. To mitigate this cash flow risk and support contractor viability in the future, SCE is evaluating a milestone-based payment approach. For instance, the BE Pilot's use of project-level milestone payments, triggered by customer qualification, scope agreement, and permit acquisition, has proven effective in improving contractor cash flow and enabling the

[20] On April 17, 2024, SCE filed Advice Letter (AL) 5278-E to notify the Commission of its intent to record advanced payments in the ESA Program Adjustment Mechanism Balancing Account (ESAPAMBA) as program expenses. The Commission approved this approach effective February 11, 2025, including provisions to record unreimbursed payments as program costs.

implementation of more concurrent projects, offering a replicable model for future program designs.

### 4. Work Management System Transition Challenges

In late 2024, SCE's vendor that hosted ESA's work management system notified SCE of its intent to discontinue all support and hosting services nine months earlier than originally planned. This accelerated timeline introduced implementation challenges that SCE and its contractors had to navigate on short notice. The process of decommissioning the vendor's legacy system to a new platform required intensive contractor support and temporary workarounds to maintain operational continuity. For example, work orders in flight grew and forced contractors to revert to manual processes to service them, which impacted job tracking and invoicing. Additionally, the transition from the legacy system to the current vendor platform was based on new ESA Program design parameters; however, when the design evolved, system functionality no longer aligned with updated workflows, requiring temporary workarounds and contractor support. Ultimately, mis-matched timing across decommissioning of the legacy ESA system to requirements gathering for the new system led to a number of manual workarounds that delayed installations.

To mitigate these issues, SCE launched a series of contractor support initiatives, including weekly "office hour" sessions, in-person training, and one-on-one technical assistance. These efforts facilitated a smoother transition and enabled continuous system improvements based on contractor feedback. Training and support activities have continued into 2025 to provide sustained operational efficiency. Under the proposed contracting strategy for the 2028–2033 cycle, SCE will involve existing contractors earlier in the system requirements and user testing phases to support stronger alignment across system functionality, program design, and implementation readiness. See Section VI.A.2 of this Exhibit SCE-02 for more details.

## 5. Underperformance of the Southern Multifamily Whole Building Program

The MFWB program, designed to deliver energy efficiency upgrades to income-qualified MF properties, has experienced persistent implementation challenges resulting in continued underperformance. Despite coordinated ramp-up efforts by the MFWB Investor-Owned Utilities (IOUs)[21] and the third-party implementer, based on preliminary data, program performance fell significantly short of expectations (see Table II-3).[22] Key barriers, including contractor shortages, project delays, and system reliability issues, have hindered progress, leading to fewer completed treatments, lower-than-expected energy savings, and reduced engagement from subcontractors and trade allies.

In addition, operational complexities have further hindered program effectiveness. As depicted in Figure II-1 below, which highlights the inefficiencies of this operating model, dual contractor engagement (1, 3), limited integration with the ESA Main program (2), and a lack of clear MF identifiers (2) created confusion and slowed progress. Centralized regional delivery reduced local responsiveness (4), weakened community relationships, and introduced bureaucratic delays. Additionally, misalignment with electrification goals and inconsistent customer experiences across service territories contributed to diminished impact and equity.[23]

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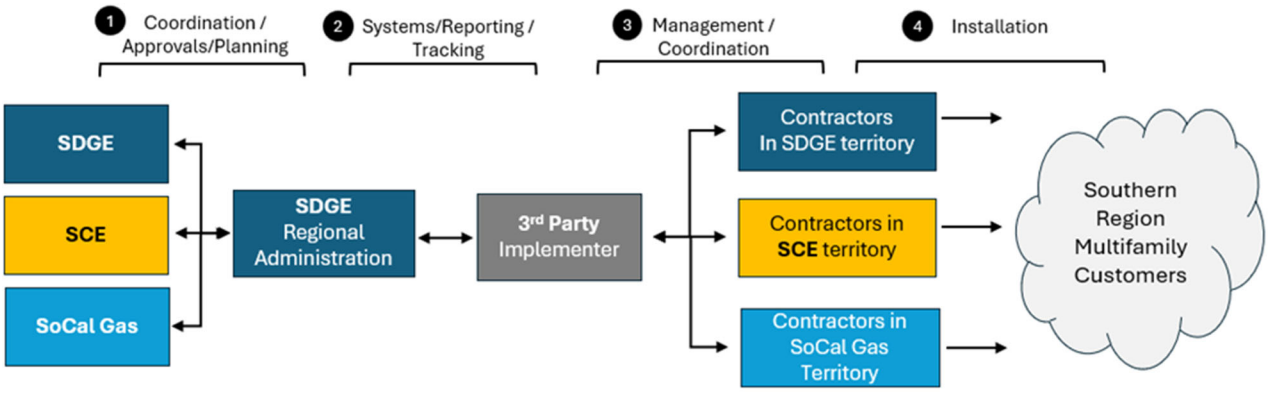
[21] San Diego Gas & Electric, Southern California Gas Company, and SCE.

[22] Based on the 2024 Annual Report Data provided by SDG&E. SCE has not yet received 2025 MFWB Program data from SDG&E.

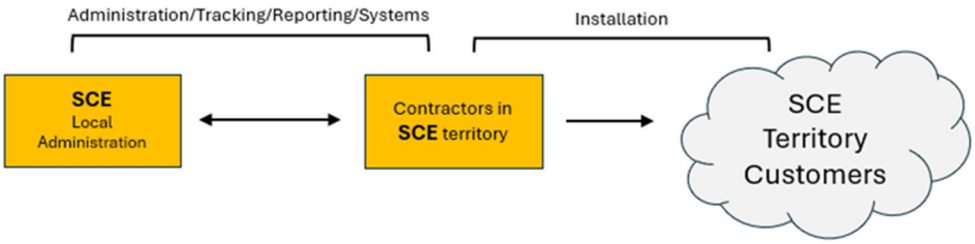
[23] *See*, 2023, 2024, and 2025 Annual Reports for more information (i.e., Annual Report Activity of Southern California Edison on Energy Savings Assistance).

***Figure II-1***
***Southern Multifamily Whole Building Administration***




To address these issues, SCE proposes transitioning to a local administration model in the 2028–2033 cycle (i.e., MFWB customers in SCE service territory would be administered and served by SCE and its contractors). Figure II-2 below highlights this approach. SCE's proposed shift to local administration is designed to improve responsiveness to community-specific needs, streamline implementation, and restore local engagement. Flexible enrollment pathways will be introduced to support equitable access, allowing both property owners and tenants to initiate participation, ultimately enhancing program reach and effectiveness. See Section IV.B of this Exhibit SCE-02 for more information on SCE's proposed changes.

***Figure II-2***
***Proposed Local Multifamily Whole Building Administration***



## C. 2028-2033 Vision and Strategic Proposals

As described earlier, despite challenges in the 2021-2026 program cycle, the ESA Program remains a critical instrument in advancing California and SCE's 2045 clean energy objectives.[24] With over one million SCE customers potentially eligible for no-cost direct install measures, the ESA Program is uniquely positioned to support equitable decarbonization. However, realizing this potential necessitates alignment across state policies and improved program integration to address existing barriers.

### 1. ESA Program Vision

SCE envisions the ESA Program as the central entry point for its low-income and equity-focused initiatives, including those initiatives that support California's clean energy transition. By 2045, SCE aims to have facilitated the adoption of targeted decarbonization measures among all willing and eligible income-qualified customers. The figure below depicts this approach.

***Figure II-3***
***ESA Program Vision***




[24] SCE has developed a comprehensive strategy called Pathway 2045 to help California achieve carbon neutrality by 2045. It outlines the steps needed to decarbonize the electric grid, electrify transportation and buildings, and reduce greenhouse gas emissions across all sectors. It reflects California's legal commitment to carbon neutrality under Assembly Bill (AB) 1279, *available at* https://www.edison.com/clean-energy/pathway-2045.

Consistent with these long-term goals, SCE's 2028-2033 ESA Program vision is designed to:

1. Align with California's environmental goals by promoting energy efficiency, building decarbonization, and environmental equity among income-qualified customers
2. Serve as the primary access point for income-qualified customers seeking energy efficiency, electrification, and bill savings support
3. Offer integrated solutions that bundle energy efficiency, rate optimization, Distributed Energy Resources (DERs), and climate adaptation
4. Equip customers with tools, education, and support to manage energy use and enhance quality of life, including safety and resiliency; and
5. Operate through a flexible, scalable delivery model that empowers local contractors, accelerates implementation, and promotes regional equity

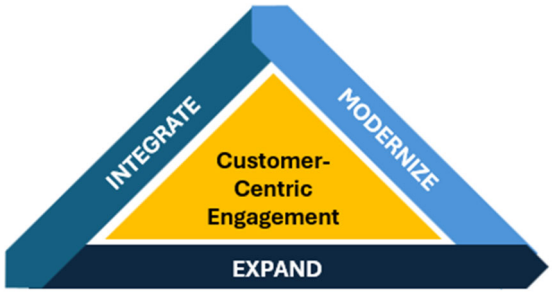
## 2. SCE's ESA Program Design Framework Focuses on Integration, Expansion, and Modernization

SCE seeks to advance its ESA Program by prioritizing equity through integrating expanded offerings including BE and resiliency. To support these advancements, SCE will also expand delivery efficiency by improving customer experience, program access, and affordability.[25] To achieve these objectives, SCE proposes a 2028–2033 strategic redesign of the ESA Program that reflects a deliberate shift from legacy energy efficiency models towards a comprehensive, customer-centric framework that integrates electrification, affordability, and health-related outcomes. Anchored in a clear program design framework (see Figure II-4 below) to integrate, expand, and modernize, SCE seeks to unify program delivery across low-income initiatives, broaden measure offerings to address climate adaptation and safety needs, and

[25] These principles align with the principles in the Energy Division Staff Guidance Document to: a) to improve customer experience and operational efficiencies, b) to reduce barriers to enrollment, and c) to address equity, affordability, safety, and the state's transition to a clean energy future for income-qualified customers.

modernize administrative and contracting processes to improve implementation efficiency and workforce development.

***Figure II-4***
***ESA Program Design Framework***




- **Integrate:** Unify enrollment processes by incorporating MF and electrification offerings as part of ESA Main and coordinate with other low-income initiatives to streamline service delivery and improve customer experience. See Section IV.B.2 of this Exhibit SCE-02 for SCE's proposals that support this principle.
- **Expand:** Broaden measure offerings to include climate adaptation and health, comfort, and safety benefits across all climate zones, so that vulnerable populations receive ample support. See Section IV of this Exhibit SCE-02 for SCE's proposals that support this principle.
- Modernize: Update contracting frameworks, streamline administrative processes, and enhance workforce development through localized training and apprenticeships to build capacity and improve implementation efficiency. See Sections VI.A.2 and VI.B of this Exhibit SCE-02 for SCE's proposals that support this principle.

Through its redesign, the ESA Program will evolve in alignment with CPUC policy objectives, supporting operational efficiency, and delivering measurable benefits to income-qualified households. ESA will be a future-ready program that meets the diverse needs of vulnerable communities while supporting the State's broader decarbonization and equity goals.

## 3. Strategic Proposals

The 2028–2033 program cycle is an opportunity to advance equity, affordability, and climate resilience for income-qualified customers. Building lessons learned from prior cycles and pilot programs, SCE proposes a set of strategic changes to improve program design, expand access to clean energy solutions, and align with California's decarbonization and climate adaptation goals.

### a) Support California's Decarbonization and Climate Goals by Integrating and Expanding ESA Electrification Offerings

During the 2021-2026 program cycle, the ESA BE Pilot demonstrated strong customer interest and measurable benefits, including reduced greenhouse gas emissions and improved comfort. Based on these successes, SCE proposes to fully integrate and transition its BE offerings, such as HP HVAC systems, HPWHs, induction cooking equipment, and efficient clothes dryers, into the ESA Main Program. This integration will streamline delivery and expand access to electrification measures for income-qualified customers.

SCE does not propose any new programs or pilots in the 2028 to 2033 program cycle. See Section IV of this Exhibit SCE-02 for more details.

### b) Improve Delivery, Coordination, and Responsiveness of Multifamily Offerings by Integrating Multifamily Services into SCE's ESA Program

During the 2021-2026 program cycle, SCE experienced a significant decline in MF customer participation under the MFWB program. MF Common Area Measures

(CAM) and in-unit treatments dropped by 98 percent[26] and 89 percent,[27] respectively. During this period, SCE had limited ability to address the loss of MF treatments, because it was not the program administrator overseeing MF ESA enrollments within its service territory. To address the change in performance, SCE proposes closing the current regional MFWB program and directly implementing the MF segment through SCE's ESA Program. This transition will allow for greater consistency in program delivery, improve coordination with ESA Main offerings, and enhance responsiveness to MF customer needs. Integrating MF services into the ESA Program will also support streamlined reporting and performance tracking. See Section IV.B.4 of this Exhibit SCE-02 for more details.

**c) Expand Climate Resilience and Adaptation Measures Across Climate Zones**

Historically, SCE has only provided climate measures for customers in certain climate zones (i.e., climate zones 13 through 15). To address the increasing risks of extreme heat and climate variability, SCE proposes to expand ESA Program measure offerings to include climate adaptation solutions across all climate zones in its service territory. This includes providing cooling measures such as HP HVAC systems and portable air conditioners to customers outside of traditionally targeted hot zones. Expanding access to these measures will improve health and safety outcomes and support climate resilience for vulnerable populations. See Section IV.C of this Exhibit SCE-02 for more details.

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[26] Percentage calculated by comparing 125 SCE MF CAM treatments from 2021 to July 2023 (as reported in the SCE Low Income Annual Reports: 2021, 2022, 2023) to 3 Southern MFWB CAM treatments from July 2023 through 2024 (as reported in the 2024 Annual Report Data provided by SDG&E). SCE has not received 2025 MFWB Program data from SDG&E.

[27] Percentage calculated by comparing 30,296 SCE MF In-Unit treatments from 2021 to July 2023 (as reported in the SCE Low Income Annual Reports: 2021, 2022, 2023) to 3,263 Southern MFWB In-Unit treatments from July 2023 through 2024 (as reported in the 2024 Annual Report Data provided by SDG&E). SCE has not received 2025 MFWB Program data from SDG&E.

### d) Modernize Program Delivery by Increasing Coordination with Other Programs and Agencies to Leverage Funding and Streamline Customer Experience

Aside from increasing internal coordination between existing Energy Efficiency and Demand Response (DR) programs, SCE will enhance coordination with other agencies and programs to maximize the impact of ESA Program investments. This includes leveraging partnerships with the California Energy Commission, TECH Clean California,[28] and local governments to support comprehensive retrofits, electrical panel upgrades, and solar installations. Improved coordination will also enable better customer targeting and reduce administrative burdens for contractors and implementers. See Sections IV.B and V of this Exhibit SCE-02 for more details, including SCE's exploration of AI to enable coordination and service delivery.

### e) Modernize the ESA Contracting Model to Increase Flexibility and Scalability

SCE's current contracting model utilized a traditional Request for Proposal (RFP) process that offered limited flexibility to adjust the contractor network as program needs evolved. To address these inherent constraints, SCE proposes a three-pillar contracting strategy for the 2028–2033 ESA Program cycle that emphasizes flexibility, scalability, and equity in contractor participation (i.e., initial RFP, Request for Information (RFIs), and Request for Quotations (RFQs)). See Figure II-5 below.

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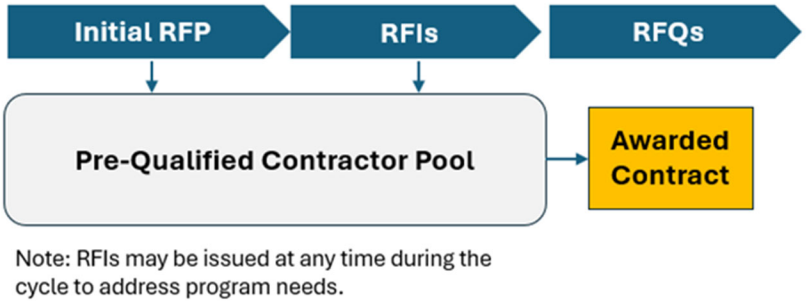
[28] Technology and Equipment for Clean Heating (TECH or TECH Clean California) was launched under Senate Bill 1477 and is managed by the CPUC. The program is designed to decarbonize buildings by replacing gas appliances with electric alternatives and help California meet its climate goals, including installing 6 million HPs by 2030 and achieving carbon-free homes by 2045, *available at* https://techcleanca.com/rting TECH Home Page.

***Figure II-5***
***Proposed Contracting Approach***




This approach replaces rigid, early-cycle solicitations with a framework designed to improve market competition and responsiveness by enabling real-time adjustments to contractor participation and pricing. Additionally, the strategy expands access to underserved areas by allowing targeted incentives and onboarding of local contractors, supporting equitable service delivery across SCE's service territory. See Section VI.A. of this Exhibit SCE-02 for more details.

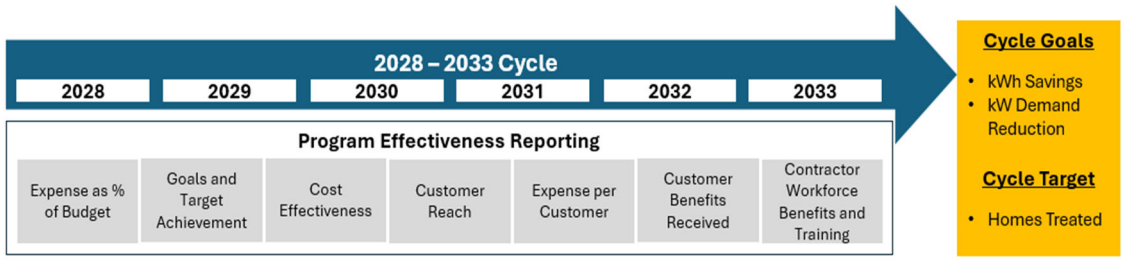
## III.

## GOALS, BUDGET, AND COST-EFFECTIVENESS

### A. Goals and Target

Like the current cycle, SCE proposes to retain kWh savings, kW demand reduction, and the number of homes treated as goals and targets for measuring ESA Program performance during the 2028–2033 cycle. SCE's proposal will distinguish between cycle-end goals (i.e., shifting from annual goals to cycle goals to be achieved by 2033), and targets (i.e., directional benchmarks to guide program pacing and iteration). This approach (Figure III-6) provides more accountability, supports program flexibility, and aligns with CPUC directives for equity, decarbonization, and customer enablement.

***Figure III-6***
***Cycle Goals and Target***




Additionally, as described throughout this Exhibit, SCE proposes that its 2028–2033 ESA Program undergo significant programmatic changes to better serve its broadening customer segment, including SCE's proposal that ESA should directly provide MF and BE measures and expand beyond its traditional single-family focus. As such, SCE proposes the following goals and targets which are aligned with its proposed programmatic changes.

#### 1. 2028-2033 ESA Goals and Targets Summary

To allow for the ESA Program to deliver meaningful and measurable benefits to income-qualified customers, SCE proposes two cycle-end goals and one cycle-end target for the 2028–

2033 period. As described below, both goals represent the thresholds to be achieved by the conclusion of the program cycle in 2033, while the target represents a directional guide for program flexibility.

**a) To Support Long-Term Objectives, SCE Proposes to Replace Its Annual Goals with Program Cycle Goals**

Establishing goals for the entire program cycle, rather than on an annual basis, provides a more stable and strategic framework for implementation. A cycle-based goal and target structure enables the program to better align its operational strategies with long-term objectives, allowing for smoother adjustments in response to changing market and economic conditions (e.g., COVID-19 pandemic, inflation, and tariffs). This approach helps mitigate operational disruptions that can strain the contractor network and their crews, leading to inefficiencies and workforce instability. By smoothing out these fluctuations, the program fosters a more predictable and sustainable workflow for implementation partners. Moreover, cycle goals and targets enhance project management by offering a broader planning horizon, which supports more effective resource allocation, scheduling, and performance tracking. This is particularly important as the program ramps up to meet California's clean energy transition goals.

The first proposed cycle goal is total claimable kWh savings, representing cumulative energy savings delivered to ESA Program participants through both electric and fuel substitution measures. This metric will serve as ESA Program's primary metric, accurately reflecting the benefits of electrification, and aligns with previous CPUC guidance on claimable savings.[29] The claimable kWh savings methodology provides a

[29] *See* Draft Fuel Substitution Technical Guide; V2, *available at* https://www.cpuc.ca.gov/about-cpuc/divisions/energy-division/building-decarbonization/fuel-substitution-in-energy-efficiency. Claimable kWh Savings was calculated using methodology in Fuel Substitution Technical Guidance Document in accordance to D.19-08-009; Claimable kWh = kWh + (Therm * 29.3). Without this calculation, the kWh Savings is 144,053,108.

streamlined, consistent approach for calculating savings from fuel substitution measures such as heat pumps and reduces administrative complexity while enabling accurate reporting. By incorporating both electric and fuel substitution measures, this approach delivers a comprehensive view of total energy savings, which is crucial for advancing electrification and supporting California's decarbonization goals.[30]

The second proposed cycle goal is aggregate demand reduction in kilowatts (kW), which measures the program's impact on peak load and grid reliability. As more homes adopt electric technologies and cooling measures are expanded to additional climate zones, demand reduction becomes increasingly critical for supporting California's clean energy transition. SCE's proposed 2028-2033 goals for *claimable* kWh savings and demand in kW can be found below in Table III-4.

***Table III-4***
***Proposed 2028-2033 ESA Savings Goal*s**

| Description | Total Cycle Goals |
|---|---|
| kWh Savings | 195,384,060 |
| kW Demand Reduction | 19,567 |

**b) SCE Proposes to Continue a Homes Treated Target**

In addition to the cycle-end goals, SCE will continue the homes treated target to guide program pacing and iterative improvement throughout the cycle. This cycle target is not a strict requirement but serves as a directional benchmark to support steady progress toward 2033 goals. This approach helps maintain consistent outreach and service delivery and supports contractor sustainability and equitable reach. The homes treated cycle target for 2028-2033 is higher than the current cycle target because of the

[30] California has set ambitious goals to achieve carbon neutrality by 2045. Senate Bill 32 set a target for 40 percent emissions reduction below 1990 levels and AB 1279 set a target for 85 percent emissions reduction below 1990 levels.

integration of BE and MF into the ESA Program. SCE's proposed 2028-2033 cycle target for number of homes treated can be found below in Table III-5.

***Table III-5***
***Proposed 2028-2033 ESA Cycle Target***

| Description | Total Cycle Target |
|---|---|
| Number of Homes Treated | 387,265 |

**2. Other ESA Program Metrics**

SCE considered other goals to measure deeper energy savings, such as energy savings per household or average customer bill savings and proposes to track average customer bill savings. Bill savings will be a cornerstone to customer program participation, and this program design element is described in Section III.B.2 of this Exhibit SCE-02.

SCE also proposes to track annual GHG reduction, which demonstrates the program's alignment with California's climate goals. Since there are various methodologies for calculating GHG, SCE plans to track and explore these options and may propose a target at the mid-cycle review. However, at this time, SCE does not propose to use Total System Benefit (TSB) as a cost-effectiveness metric.

SCE will continue to track annual therms savings, reflecting the program's impact on gas usage through fuel substitution and weatherization measures. However, SCE recommends that therms should not be established as a goal or target within SCE's ESA Program portfolio. As an electric utility, SCE's primary focus is on delivering electric savings through kilowatt-hour (kWh) and kilowatt (kW) reductions. While some ESA measures may result in incidental therm savings, these are considered secondary benefits and should not be used to define performance expectations for SCE. SCE supports tracking and reporting therms savings where applicable; however, these should be reported for informational purposes only, not as metrics tied to program goals or compliance.

SCE Will Continue to Evaluate Competing Metrics. The ESA Program faces competing performance metrics that challenge its ability to serve diverse customer segments while meeting regulatory goals. The current program cycle emphasizes customer participation, cost-effectiveness, and deeper energy savings per household. Deeper energy savings can limit the number of homes treated (customer participation) and reduce cumulative savings. This tension is particularly evident with the inclusion of BE measures, such as HP HVAC systems and HPWHs, which currently are counted as negative savings until a claimable savings model is used to capture gas therm savings.

These conflicting metrics have also affected the ESA contractor network, whose business models were traditionally built around serving a high volume of customers. The shift toward deeper energy savings has reduced the number of eligible homes and installations, thereby affecting the contractor business model and workforce stability. An ACEEE study explains the trade-off between deep energy savings and maximizing participation and cumulative savings. SCE's current deep energy savings design may impede traditional energy savings metrics.[31] Additionally, IOUs, including SCE, have been encouraged in public meetings to fully spend their program budgets. This dynamic creates further tension across meeting cost-effectiveness goals, spending allocated budgets, maintaining contractor engagement through sufficient customer volume, and optimizing measure offerings through a tiered system based on customer usage.

Balancing these priorities remains a priority for SCE. SCE proposes to evaluate current metrics and assess alternative metrics (e.g. track more BE and climate impact effects) that better align with the state's electrification goals and the hardship purpose of the ESA Program. SCE will continue to evaluate alternative metrics and may propose new metrics in the mid-cycle review advice letter.

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[31] *See*, Making a Difference: Strategies for Successful Low-Income Energy Efficiency Programs, p. 16, *available at* https://www.aceee.org/sites/default/files/publications/researchreports/u1713.pdf.

### 3. Other Methods to Evaluate Program Effectiveness

SCE is not proposing new methods to evaluate program effectiveness. Currently, the following evaluation methods are included in SCE's reports, providing insight into program performance and outcomes:

**Expenses as a Percentage of Budget:** This method tracks the proportion of authorized funds spent on program delivery to support fiscal discipline and transparency. This is readily available in ESA's annual report; more details can be found in Section III.B of this Exhibit SCE-02.

**Goals and Target Achievement:** This method measures the program's success in meeting established cycle-end goals and annual targets, demonstrating progress and regulatory compliance. This is readily available in ESA's annual report; more details can be found in Section III.A of this Exhibit SCE-02.

**Cost-Effectiveness:** This method evaluates whether the ESA Program delivers energy savings and customer benefits at a reasonable cost using tools like the ESA Cost-Effectiveness Test. This is readily available in ESA's annual report; more details can be found in Section III.C of this Exhibit SCE-02.

**Program Administration and Customer Reach:** This method assesses the effectiveness of outreach and enrollment of ESA reaching its target populations. This is readily available in ESA's annual report; more details can be found in Section IIV.A and V of this Exhibit SCE-02.

**Expenses per Customer:** This method calculates the average cost to serve each participating household, informing operational efficiency and budget planning. This method can be derived from ESA's annual report tables; more details can be found in Section III.A and III.B of this Exhibit SCE-02.

**Customer Benefits Received, Hardship Reduced, etc.:** This method quantifies the tangible benefits delivered to customers, such as bill and energy savings. This is readily available

in ESA's monthly report; more details can be found in Section III.A and III.B of this Exhibit SCE-02.

**Contractor Workforce Benefits and Training Received, etc.:** This method evaluates the impact of ESA on contractor workforce development, including training, job creation, and career advancement. This is readily available in ESA's monthly report; more details can be found in Section VI.B of this Exhibit SCE-02.

## B. Budgets

SCE proposes updates to its ESA Program budget for the 2028–2033 cycle to support continued program optimization, enhance customer experience, and advance California's clean energy and equity goals. As discussed earlier, SCE's proposed budget reflects lessons learned from the 2021–2026 program cycle and evolving operational needs.

SCE's authorized ESA budget for its 2021 to 2026 program cycle is presented below in Table III-6[32] SCE utilized the 2025 authorized funding of $96.4 million as a baseline as this best represents a full year of ESA operations. In contrast, 2026 Commission authorized budget assumed a program ramp-down, which is why it was not be used as a baseline for 2028-2033 planning.

***Table III-6***
***2021-2026 Authorized ESA Program Budget***
***($s in Thousands)***

| Description | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|---|---|---|---|---|---|---|
| Authorized Budget | $40,927 | $58,774 | $69,127 | $91,155 | $96,372 | $74,799 | $431,154 |

Note: Totals may not sum due to rounding.

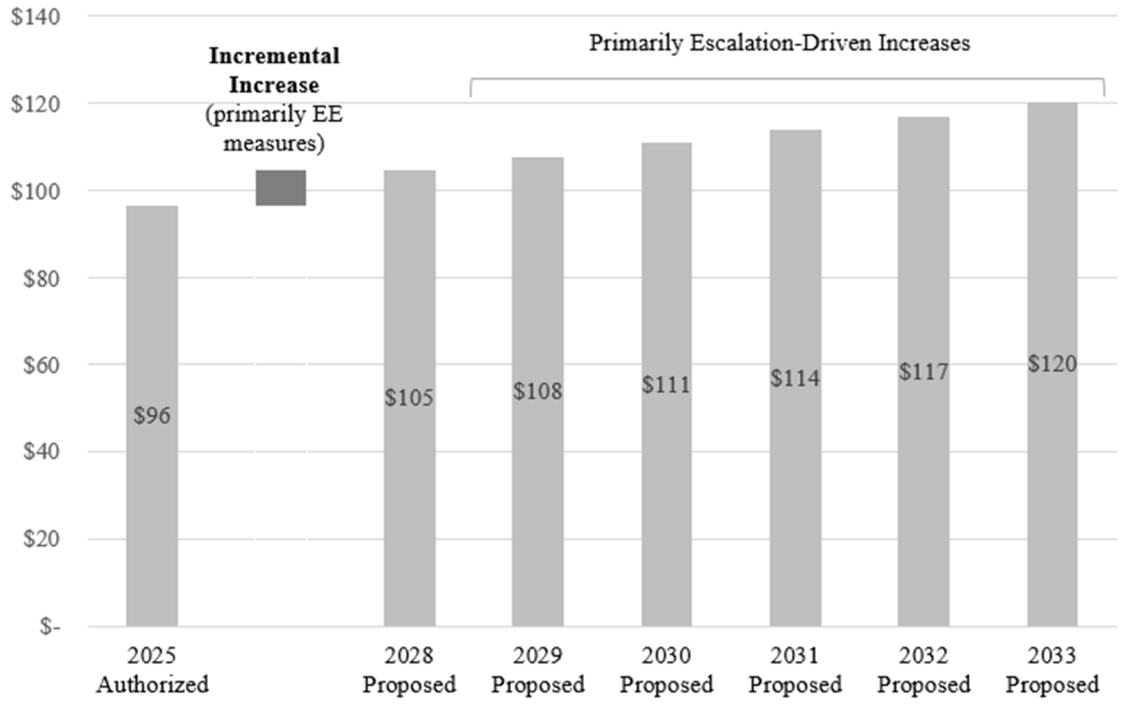
As shown in Figure III-7 below, SCE's 2028 proposed funding of $104.8 million reflects a 9 percent increase from the 2025 authorized budget, primarily to support expanded energy efficiency

[32] *See* D.21-06-015, Attachment 1, Table 9.

measure offerings, increased processing volumes and inspection activity due to the expansion of the MF segment, and system enhancements to better serve income-qualified customers. The $8.4 million increase from the 2025 authorized budget is primarily comprised of EE measures, which increased by $7.7 million.

SCE is not forecasting any significant ramp-up costs in its proposed budget, other than IT system enhancements (which are forecasted to require expenditures of $2.0 million annually in 2028 and 2029 to implement Commission-approved program changes from this Application and decrease in subsequent years). As such, the annual budget increases from 2029 to 2033 are largely due to cost escalation.

***Figure III-7***
***Comparison of Authorized and Proposed Budgets***
***($s in Millions)***



The proposed budget is not based on aggressive growth, but rather on what can be realistically accomplished. It reflects a steady state approach, informed by historical trends and current capacity. In summary, for the 2028 to 2033 program cycle, SCE is requesting $674.5 million over six years, including annual cost escalations.[33]

[33] SCE assumed three percent annual escalation rate applied across labor categories, and a two percent annual escalation rate applied across non-labor categories, except for marketing, education, and outreach costs, which are escalated at five percent per year given historically higher observed and expected cost inflation.

## *Table III-7*
## *2028-2033 Proposed ESA Program Budget*
## *($s in Thousands)*

| ESA Program Budget Categories | Proposed PY 2028 | Proposed PY 2029 | Proposed PY 2030 | Proposed PY 2031 | Proposed PY 2032 | Proposed PY 2033 | Total Proposed PY 2028-2033 |
|---|---|---|---|---|---|---|---|
| **EE**[1] | | | | | | | |
| ESA[2] | $90,812 | $93,227 | $96,062 | $98,987 | $102,004 | $105,116 | $586,208 |
| Pilots | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| Multifamily Whole Building | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| **EE Subtotal** | **$90,812** | **$93,227** | **$96,062** | **$98,987** | **$102,004** | **$105,116** | **$586,208** |
| | | | | | | | |
| **Administrative**[3] | | | | | | | |
| Regulatory Compliance | $1,157 | $1,188 | $1,221 | $1,254 | $1,289 | $1,324 | $7,433 |
| General Administration | $3,600 | $3,704 | $3,811 | $3,921 | $4,035 | $4,152 | $23,223 |
| **Administrative Subtotal** | **$4,757** | **$4,893** | **$5,032** | **$5,176** | **$5,323** | **$5,475** | **$30,656** |
| | | | | | | | |
| **Direct Implementation (DI)**[3] | | | | | | | |
| Training Center | $169 | $172 | $176 | $179 | $183 | $186 | $1,064 |
| Workforce Education and Training | $300 | $306 | $312 | $318 | $325 | $331 | $1,892 |
| Inspections | $3,813 | $3,819 | $3,829 | $3,944 | $4,077 | $4,177 | $23,659 |
| EE-MF - SPOC | $155 | $160 | $164 | $169 | $174 | $180 | $1,002 |
| Other DI Costs | $2,050 | $2,091 | $1,931 | $1,681 | $1,450 | $1,318 | $10,521 |
| | | | | | | | |
| **Marketing and Outreach**[3] | $2,685 | $2,820 | $2,961 | $3,109 | $3,264 | $3,427 | $18,265 |
| | | | | | | | |
| **Evaluation, Measurement & Verification (EM&V)**[3] | | | | | | | |
| Studies | $38 | $196 | $384 | $312 | $152 | $83 | $1,164 |
| CPUC Energy Division | $16 | $16 | $17 | $17 | $17 | $18 | $102 |
| | | | | | | | |
| **DI + Marketing & Outreach + EM&V Subtotal** | **$9,225** | **$9,580** | **$9,773** | **$9,730** | **$9,641** | **$9,720** | **$57,668** |
| | | | | | | | |
| **Staff Proposal Pilot (PPPD)** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** |
| | | | | | | | |
| **Portfolio Total** | **$104,794** | **$107,699** | **$110,868** | **$113,892** | **$116,968** | **$120,311** | **$674,532** |

[1] EE includes measure equipment cost and installation cost.
[2] ESA includes Single Family, Mobile Home and Multifamily.
[3] These cost categories conform to the definition of costs as used by Energy Efficiency programs and defined in Appendix C of the EE Policy Manual V2, April 2020. See D.21-06-015 OP 112.

Note: Totals may not sum due to rounding.

SCE's service area includes about 1.3 million eligible customers,[34] and with the proposed budget outlined above, SCE plans to serve over 380,000 households. The ESA portfolio is structured to support steady-state implementation across key segments. Beginning in 2028, SCE proposes an enrollment and installation budget for single family, mobile home, and MF that averages $97.7 million annually, of which $12.6 million per year is forecasted for the MF segment. SCE also allocates approximately $31.7 million of the $97.7 million to electrification measures across all building types. See Sections IV and V of this Exhibit SCE-02 for more information on measure offerings and delivery.

### 1. SCE Proposes Administrative Cap Should be Calculated as 10 Percent of Program Budget

SCE's 2028 to 2033 budget proposal adheres to the Commission's mandated Administrative Cost Cap, defined in D.21-06-015 as 10 percent of total program *costs*.[35] However, SCE proposes redefining this cap as 10 percent of the authorized annual program *budget*. As shown in Table III-8, administrative costs as a percentage of total program costs have significantly fluctuated year over year from 4 percent in 2021 to 19 percent in 2023 due to variations in program expenditures.

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[34] Source: Athen's Research Eligibility Estimates.

[35] *See,* D. 21-06-015, OP 112, Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company and San Diego Gas & Electric Company's Energy Savings Assistance (ESA) program administrative expenses are capped at either 10 percent of total program costs, or the Utility's historical five-year average spend on administrative expenses, whichever is lower."

*Id.*, p. 316, which states "We approve a cap on administrative expenses for the ESA Program at either 10 percent of total program costs, or the IOU's historical five-year average spend on administrative costs as a percentage of total program costs, whichever is greater. We phase out the use of the historical five-year average spend such that the IOUs must propose to spend no more than 10 percent of total program costs on administrative costs starting in program year 2024."

***Table III-8***
***ESA Program Administrative Expenses for 2021-2025***
***($s in Thousands)***

| Description | 2021 | 2022 | 2023 | 2024 | Aug YTD 2025 | Total 2021-Aug 2025 YTD |
|---|---|---|---|---|---|---|
| Administrative Expenses | $1,854 | $3,740 | $4,094 | $4,338 | $3,673 | $17,699 |
| Total Program Costs | $52,289 | $54,476 | $21,708 | $59,611 | $41,528 | $229,612 |
| % of Administrative Spend | 4% | 7% | 19% | 7% | 9% | 8% |

Note: Totals may not sum due to rounding.

As shown in Table III-8 above, SCE averaged 8 percent administrative spend relative to total program costs. However, administrative expenses accounted for 19 percent of total program costs in 2023. This variance was primarily driven by limited expenditures on customer enrollments and installations during that year, which reduced overall program costs and increased the proportional share of administrative expenses. Administrative costs included here are in alignment with rules for EE programs.[36] Using total program costs as the basis introduces volatility, while annual budgets remain static and predictable. For 2028-2033, SCE proposes calculating the 10 percent administrative expense cap using the authorized annual program *budgets* rather than recorded program *costs*. This will standardize cost cap calculations and provide better transparency and planning certainty. Please refer to Table 7 in Exhibit SCE-05, Appendix B for more details.

**2. SCE Proposes Flexible Budget Management to Maximize ESA Program Delivery and Minimize Unspent Funds**

To support agile and responsive program management, SCE proposes to continue existing fund shifting rules adopted by D.21-06-015 with slight modifications. Currently, unspent or uncommitted funds from the ESA Main Program cannot be shifted between program years.

[36] Energy Efficiency Policy Manual, Version 6, Appendix C, *available at* https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/energy-efficiency/eepolicymanualrevised-march-20-2020-b.pdf.

Unspent or uncommitted funds at the end of a program year must be used to offset the following year's revenue collection. This rule does not currently apply to certain programs like MFWB, and ESA Whole Home (Pilot Plus/Deep), and Studies (Evaluation, Measurement, and Verification).[37]

For the 2028-2033 ESA Portfolio, SCE proposes to allow for flexible reallocation of funds across program years and line items without requiring prior approval through an Advice Letter filing, as required today, provided that such shifts are documented through the annual report and reported at Low Income Oversight Board (LIOB) meetings.[38] Additionally, rather than requiring the unspent or uncommitted funds at the end of *each program year* be used to offset the following year's revenue collection, SCE proposes to allow for the option to use any remaining uncommitted and unspent funds at the *end of the program cycle* to offset the next program cycle revenue collection.

In previous program cycles, a significant contributor of unspent funds was the allocation of annual budgets to activities that ultimately did not materialize as forecasted. Furthermore, essential program operations such as customer enrollment, measure installation, inspection, and permit closure often extend across several months and may span multiple program years. This temporal overlap complicates strict year-by-year budget tracking and creates administrative inefficiencies.

Flexibility in fund management, without the restriction of spending within the confines of each individual year's forecast budget, is essential to support responsive program delivery in a dynamic evolving economic environment. Market conditions, customer needs, and implementation timelines are increasingly variable, so allowing for this flexibility helps SCE's ability to quickly adapt. This request supports stakeholder feedback from ESA Program

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[37] D.21-06-015, OP 181.

[38] *Id.*

contractors and members of the LIOB who expressed concerns about the inability to readily access unspent ESA Program, MFWB, and pilot funds.[39]

Currently, SCE is not making recommendations for pilot funding, because SCE is not proposing any pilots during the upcoming cycle. Additionally, SCE proposes to continue to maintain the current flexibility to move funds between different budget categories (e.g., outreach, administration, direct implementation) within the same program year. This flexibility allows SCE to respond to changing needs and priorities without being constrained by rigid budget allocations. These shifts will continue to be documented in Annual Reports.

## C. Cost-Effectiveness

### 1. 2028-2033 ESACET Forecast

D.21-06-015 established an ESACET (Energy Savings Assistance Cost Effectiveness Test) target of 0.7.[40, 41, 42] In 2024, SCE's ESACET was 0.29. For program cycle 2028-2033, SCE projects an ESACET of 0.49. As illustrated in Table III-9 below, SCE's ESACET remains relatively steady. This cost-effectiveness projection is largely due to the program's plan to serve approximately the same number of customers each year throughout the 2028-2033 cycle. By maintaining a consistent annual count for customers treated and measures installed, SCE anticipates a stable flow of program activity, which supports predictable budget management and resource allocation.

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39 A.25-06-022 et al., Assigned Commissioner Scoping Memo and Ruling, Attachment 2 TAC Recommendations, dated September 17, 2025.

40 *See,* D.21-06-015 p. 248 "require all the IOUs to use an average 0.7 ESACET target for the portfolio level as a guideline when developing their ESA portfolio measure mix each program year."

41 *Id.,* OP 83; p. 491.

42 SCE's ESACET includes claimable kWh savings, which converts therm savings to kWh in fuel substitution measures.

***Table III-9***
***2028-2033 ESACET***

| Description | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | Total |
|---|---|---|---|---|---|---|---|
| Portfolio Target | 0.47 | 0.49 | 0.49 | 0.49 | 0.49 | 0.48 | 0.49 |

Although SCE's ESACET projections are lower than the 0.7 target due to the recommended measure mix which emphasizes electrification and meaningful energy savings,[43],[44] SCE proposes to maintain the program's cost-effectiveness portfolio target of 0.7, given that it is directional. Although SCE understands the background and reasons for the Commission's ESACET target of 0.7, SCE's 2028-2033 cost-effectiveness proposal is reasonable given the issues discussed below. Like the 2021-2026 program cycle, 2028-2033 will continue to track ESACET as a performance metric and incorporate lessons learned to improve cost-effectiveness over time.[45]

## 2. Rationalization

### a) Certain Lighting Measures No Longer Increase Cost-effectiveness

In past program cycles, SCE's ESA program has met the 0.7 ESACET target by installing high volumes of cost-effective lighting and power strip measures.[46] In this cycle, certain traditionally cost-effective (high-volume) lighting measures have decreased

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43 "Meaningful energy savings" – defined as measures that deliver benefits such as lower energy bills, improved comfort, and safety, or enhanced long-term energy resilience.

44 *See*, Exhibit SCE-05 Appendix D on SCE measure mix approach.

45 Once customers convert to electric HPs, SCE plans to increase weatherization and domestic water measures, which may support increased cost-effectiveness. Additionally, the new non-energy impact (NEI) group methods have not yet been used in a forecast, and SCE has opted to forecast NEIs based on 2023 installations versus 2028 projections, which could turn out to be a conservative understatement of NEI impacts which improve based on higher 2028-2033 actual values.

46 This cycle, smart power strips continue to be relatively cost-effective, so SCE forecasts an average of one per household in the 2028-2033 cycle. SCE qualifies customers for smart power strips when there are at least 2 devices to plug in, with televisions typically being the main plug-load. Secondary plug loads can, for example, include a cable box or a game console.

in ESACET value. Cost-effectiveness of measures can decline over time as the market matures and measures reach saturation.[47] In this cycle, most lighting measures have decreased in cost-effectiveness.

**b) Domestic Water Measures Are Cost-Effective; However, SCE Does Not Forecast Heavy Installation of these Measures Because Most Water Heating Today is Natural Gas**

When studying the ESACET calculator, SCE found that if the program were to provide each customer with a few domestic water measures, such as faucet aerators and showerheads, then an ESACET of 0.7 is achievable in the 2028-2033 cycle (see Appendix D). However, in the case of gas water heating, domestic water measures do not directly save electricity for customers, and SCE concludes that it would not be appropriate to use SCE public purpose dollars to fund these measures.

Given California's climate goals, and the proposed design of SCE's ESA Program with 30 percent budget allocation to BE, SCE anticipates more customers may adopt clean electric water heating in this cycle and next. Where and when SCE can expand heat pump water heater adoption, SCE will install domestic water measures. However, when customers elect to keep their natural gas water heaters, SCE will continue to leverage SoCalGas' delivery of domestic water measures to joint customers, and SCE will reserve its funding for more progressive BE measures.

**c) Expansion of Health, Comfort and Safety Measures Results in Lower Cost-effectiveness**

ESA provides EE measures that both save energy and support health, comfort, and safety (HCS). These measures are provided at no cost to support equity. Section IV

[47] Building codes and federal minimum efficiency requirements for products have advanced, and the remaining opportunities for installing cost effective residential EE measures have decreased.

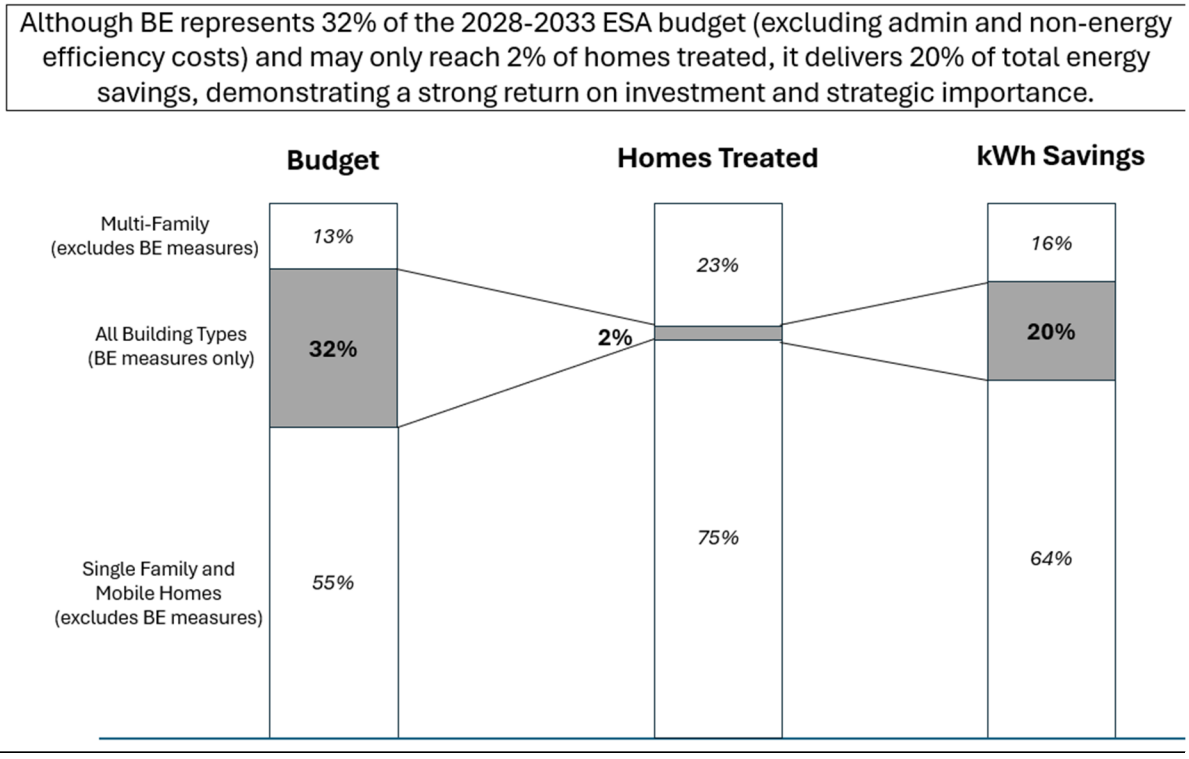
in this Exhibit SCE-02 outlines SCE's proposal to serve more climate zones with cooling measures in response to research and public policy related to the dangers of global warming and hotter indoor climates. Although SCE will continue to prioritize hotter climate zones, due to overall warming across climate zones, SCE will also expand cooling measures to more climate zones when savings are feasible. Expanding cooling measures to more climate zones may also have a negative impact on ESACET given the higher relative cost of HVAC units compared to other measures; however, in the 2028-2033 cycle SCE proposes to prioritize the benefits of reducing customer hardship over maximizing cost-effectiveness given the potentially serious health and safety impacts associated with over-heating. This is an example where designing ESA for cost-effectiveness is at odds with program effectiveness. Appendix D illustrates that to achieve a 0.7 ESACET, the program would need to invest in simple measures (e.g., select light bulbs, power strips).

**d) Expansion of Electrification Measures Lowers Cost-effectiveness**

For the 2028-2033 program cycle, the lower ESACET projections partly result from increasing BE measures for ESA customers to support an equitable transition to clean energy. BE measures and their installation require higher investments in individual customer homes. BE has significant benefits that supplement energy savings, including reducing GHG emissions. However, the decline in ESACET is a natural trade-off to deeper investments in individual households to enable decarbonization with long-term bill savings. Therefore, as described in Section II above, SCE proposes tracking GHG reductions as a program metric to supplement and round out cost-effectiveness metrics. Furthermore, SCE seeks to advance customer enablement, in support of expanding clean energy and decarbonization in vulnerable communities. SCE defines customer enablement as measures that have zero energy savings but are necessary to unlock

customer participation in certain EE and BE measures.[48] For the 2028-2033 cycle, SCE proposes to expand equitable decarbonization to align with California's climate goal. SCE submits Appendix D to show that to achieve a 0.7 ESACET, less BE measures would be installed in the 2028-2033 cycle. The figure below illustrates the higher investment required to actualize decarbonization for ESA customers through BE, as well as the eventual energy savings potential.

***Figure III-8***
***Strategic Value of BE: High Savings Impact, Low Volume***




[48] Customer enablement activities are defined in the California Statewide Energy Savings Assistance Program Policy and Procedures Manual, Attachment G – *Electrification Policy for Main ESA Program*. These activities include auxiliary measures and home remediations necessary to enable participation in electrification measures, such as panel and circuit upgrades, wiring, and other non-energy saving interventions required for safe and effective installation of BE measures.

# IV.

# ESA PROGRAM DESIGN

This section presents SCE's proposed ESA Program design for 2028–2033, informed by lessons learned, stakeholder input, and recent studies. It includes the following:

- Challenges and participation barriers identified during prior cycles and strategies to overcome them
- Insights from evaluations, pilots, and LIOB recommendations integrated into program improvements
- A customer-centric implementation framework featuring streamlined enrollment, comprehensive home assessments, and personalized scopes of work
- Modernization through an AI-powered digital platform and bill analysis tools to enhance transparency and affordability
- Integrated delivery and partnerships to optimize resources and expand access across single-family, mobile, and multifamily segments

## A. Program Design Inputs

SCE incorporated input from past program performance and recent studies to inform its proposed program design. This section discusses those inputs and how SCE has designed its portfolio to address various challenges for the 2028-2033 program cycle.

### 1. Challenges and Lessons Learned

As discussed earlier, during the current program cycle, SCE's ESA Program faced multiple challenges and gained lessons learned in the following areas: market and economic conditions, programmatic and operational transitions, contractor financial constraints, system transition challenges, and underperformance of the MFWB program (see Section IV.B of this Exhibit SCE-02). Lessons learned from these areas have been incorporated in the proposed ESA Program designs described later in this Exhibit.

## 2. Participation Barriers

SCE's ESA Program serves a diverse population of income-qualified customers across single-family, manufactured/mobile, and MF housing segments. Through ongoing program delivery and stakeholder engagement, SCE has identified several participation and enrollment barriers that can affect access and impact these customers. By addressing barriers listed below, SCE aims to inform program design improvements that enhance accessibility, streamline processes, and promote equitable outcomes.

In addition, increasing ESA Program participation involves not only reaching the remaining eligible customers, but also addressing infeasibility, barriers to participation, and contacting customers previously unwilling to participate. For example, customers previously unwilling to participate may become willing to participate in the program if new measures are introduced or identified barriers are removed. The following section presents these barriers as foundational context for SCE's proposed program designs to expand ESA's reach and effectiveness in the 2028–2033 cycle.

Complex and Fragmented Enrollment Processes. Customers may be confronted with the need to navigate multiple applications, eligibility requirements, and program channels (ESA, CARE/FERA, DR, etc.), leading to confusion and lower participation rates, especially for MF tenants and property owners. This issue is addressed in SCE's customer-centric program implementation described in Section IV.B.2 of this Exhibit SCE-02.

Administrative and Documentation Burdens. Traditional income verification and documentation requirements are cumbersome for MF properties (especially naturally occurring affordable housing),[49] resulting in under-enrollment and missed opportunities for eligible households. This issue is addressed in Section IV.B of this Exhibit SCE-02.

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[49] Naturally occurring affordable housing (NOAH) is also known as non-deed-restricted or unregulated affordable housing. NOAH refers to rental properties that are affordable to low- and moderate-income households without the use of government subsidies or formal affordability restrictions. These properties are (*Continued*)

Limited Awareness and Outreach in Underserved Communities. Language barriers, cultural differences, and lack of targeted outreach reduce program effectiveness among immigrant, tribal, rural, and linguistically isolated populations. This issue is addressed in SCE marketing, education, and outreach testimony in Section V of this Exhibit SCE-02.

Financial and Infrastructure Constraints. High upfront costs for electrification measures (e.g., panel upgrades, HPs), limited contractor availability, and outdated building infrastructure (especially in mobile/manufactured homes and older MF buildings) impede participation and measure installation. This issue is addressed in Section IV.B of this Exhibit SCE-02.

Split Incentive Problem in Rental Housing. Landlords bear the cost of upgrades while tenants receive the benefits, discouraging property owners from participating and limiting comprehensive energy savings in rental and MF housing. This issue is addressed in Section IV.B.4 of this Exhibit SCE-02.

### 3. Study Results

During the current and previous program cycles, various evaluators performed the studies below, and SCE incorporated results of these studies into SCE's proposed ESA program design. See Exhibit SCE-04 for more information about the approach, methodologies, and results of such studies.

- 2022 and 2025 Low Income Needs Assessments
- 2023 and 2025 Income-Qualified Potential and Goals Studies
- SCE Clean Energy Homes New Construction Pilot
- 2019-2021 and 2025 CHANGES Evaluations

typically older, Class B or C buildings that offer lower rents due to age, condition, or location rather than regulatory requirements. For SCE's purposes, NOAH is defined as multifamily residential buildings with 20 or fewer units that maintain market-driven affordability.

In addition, SCE incorporated results from the following studies in previous years in the development of 2028-2033 ESA program designs.[50]

- ESA Impact Evaluation for Program Years 2015 to 2017
- 2019 Non-Energy Benefits (NEB) Study
- 2019 Low Income Needs Assessment

## 4. ESA Pilots

As described below, lessons learned from SCE's BE Pilot and Whole Home Pilot Plus/Deep have also been incorporated in SCE's 2028-2033 ESA Program designs.

### a) ESA Building Electrification Pilot

The ESA BE Pilot is an SCE-only initiative designed to serve income-qualified customers residing in single-family homes. While it primarily targets customers in DACs, it is available to all eligible customers within SCE's service area. The pilot focuses on converting space and water heating systems from natural gas to electric HPs, with the goal of reducing energy costs and GHG emissions. A limited number of homes also received additional electrification measures, such as induction cooking equipment and energy-efficient clothes dryers.

SCE's focus for the BE Pilot has been on customer engagement, streamlining processes, and enhancing overall customer experience. Since inception in the first quarter of 2023 through August 2025, SCE has engaged over 80,000 customers through targeted campaigns, cross-promotions, and comprehensive training sessions by providing outreach materials and speaking to customers regarding the ESA program. These efforts introduced customers to the benefits of BE and potential enrollment opportunities. The

[50] *See,* A.19-11-003, Exhibit SCE-02, Testimony Supporting Southern California Edison Company's Energy Savings Assistance (ESA) Program and Budget for Program Years 2021-2026, p. 19-25.

pilot continues to maintain a stable customer pipeline, ranging from early enrollment to installations pending final documentation.

Key implementation strategies included addressing initial participation barriers through targeted education and training, and mitigating customer concerns regarding operating costs by emphasizing health, comfort, and safety benefits. Customer apprehension regarding perceived operating costs of BE adoption is addressed using a bill and rate analysis tool to demonstrate potential bill savings and help customers make informed decisions. In addition, the BE Pilot collaborated with multiple stakeholders during planning, development and implementation stages.[51] Despite these successes, the pilot experienced a slower-than-expected ramp-up due to logistical challenges, including contract delays, development of analytic tools, refinement of contractor engagement strategies, and extended installation timelines for project delivery. Additionally, the pilot's ramp-up phase from 2021 to 2023 resulted in perceived low performance due to straight-line forecasting across the program cycle. However, SCE accelerated its efforts in 2024 and 2025, demonstrating strong customer interest and measurable bill savings.

SCE's evaluation of the BE Pilot will provide valuable insights into effective targeting strategies, customer engagement, and process improvements.[52] These lessons will inform future clean energy initiatives and support the expansion of electrification

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[51] Strategic partnerships and innovative analytics enabled comprehensive retrofits and outreach. Collaboration with the TECH Clean California's Customer Targeting Pilot facilitated the use of smart meter data analysis to identify ideal candidates for HP adoption, maximizing bill savings and grid value. The BE Pilot also optimized pilot funds by leveraging funding from TECH's Low Income Heat Pump Adoption Pilot to fund electric panel upgrades, remediation, and minor home repairs necessary for space and water HP retrofits. Additional partnerships include coordination with BAAEC project to perform solar/battery installations along with home electrification retrofits. The BE Pilot is also engaged in discussions with CEC staff and program administrators to explore partnership opportunities with the EBDDI program to support low-income customer targeting, recruitment, and potential co-funding of HPs and other measures.

[52] SCE's evaluation of the BE Pilot is underway. An interim report is anticipated by February 2026. Customer data collection, including surveys, post-installation usage, and bill data, is expected to conclude by Q3 2026, with analysis in Q4 2026. The final evaluation report is scheduled for Q1 2027.

measures within ESA Main so that they provide a continued impact for low-income and disadvantaged communities.

- Lesson Learned 1: Customers adoption of BE measure offerings has been a success, demonstrating strong customer interest and engagement in pilot offerings. Adoption rates in 2024 and 2025, as shown in Figure IV-12 below, confirm that customers value the benefits of integrated BE solutions, including improved comfort, energy efficiency, and long-term cost savings. This positive response validates the program design and highlights the importance of continuing to expand BE offerings to meet growing demand. For more details, see Section IV.C of this Exhibit SCE-02.
- Lesson Learned 2: The use of bill and rate analysis has proven to be instrumental in addressing customer concerns about operating costs associated with building electrification. By providing data-driven insights into potential bill impacts and savings, this approach enables customers to make informed decisions with confidence. This transparency not only reduced initial apprehension but also reinforced the financial viability of electrification measures, making it a critical component of the pilot's success. Refer to Section IV.C.2 of this Exhibit SCE-02 for additional information.
- Lesson Learned 3: High-efficiency heat pump HVAC systems are the primary driver of energy savings, replacing outdated equipment and providing opportunities for electrification. These upgrades have enabled broad customer participation across all climate zones within the SCE service area and paved the way for deeper retrofits, including induction cooking appliances and electric clothes dryers. See Section IV.C.2 of this Exhibit SCE-02 for more insights.

- Lesson Learned 4: Milestone payments streamline project delivery for contractors. The pilot's adoption of milestone-based payments has proven effective in accelerating project delivery and supporting financial stability for participating contractors. Once customers are income-qualified, the scope of work is approved, and all permits are secured, milestone payments are issued, aligning with standard market practices and enabling timely procurement of equipment to initiate work. This approach supports cash flow management, reduces delays, and enhances overall program efficiency.

Based on recent experience and customer benefits, SCE proposed extending the BE Pilot through 2027[53] and concluding the BE Pilot at the end of 2027 and integrating its measure offerings into the ESA Main Program in the 2028-2033 program cycle. This integration will allow for broader reach and streamlined implementation of electrification measures within the existing ESA framework. See Section IV.C of this Exhibit SCE-02 for more information.

**b) ESA Whole Home (Pilot Plus/Deep)**

The ESA Whole Home (Pilot Plus/Deep) program[54] was designed to target high-usage CARE customers in Los Angeles, Riverside, and San Bernardino counties. Customers exceeding 300 percent of baseline usage for SCE and 200 percent for SoCalGas were invited to opt into this deeper energy savings pilot. The pilot was a collaborative effort between SCE and SoCalGas and aimed to deliver energy efficiency solutions.

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[53] SCE, A. 25-06-025, Application of SCE for Proposed 2027 Income Qualified Bridge Funding Request, filed June 30, 2025, p. 29.

[54] Approved in D.21-06-015.

One key lesson from the pilot came from measures not traditionally offered in ESA Main. For example, whole house fans emerged as a particularly effective solution during energy audits, contributing energy savings and enabling more homes to qualify for the pilot. This measure will be introduced as part of the broader ESA offering. Attic insulation also proved beneficial, delivering both gas and electric savings.

The pilot also highlighted challenges with measure savings and audit requirements. While air sealing measures provided savings under the pilot, they were deemed non-savings under SoCalGas's ESA Main program. The blower door test, required for enrollment, was found to be costly and time-consuming. A more efficient approach would involve prioritizing air sealing measures and restructuring installation protocols to maximize savings without excessive testing.

Another challenge was the complexity of the audit model used to determine eligibility and measure packages. The current model was too time intensive. A simplified tool integrated with existing home assessments could streamline the process and allow for customized measure packages based on achievable savings thresholds. Flexibility in enrollment criteria also emerged as a valuable lesson. SDG&E's approach allowed customers outside the initial target list to enroll if they were within proximity and expressed interest. This flexibility increased accessibility and responsiveness to community needs, suggesting that future programs should consider additional eligibility models.

Data tracking presented another area for improvement. The pilot did not capture information on referral-based interest or inquiries from ineligible customers. Future pilots should include mechanisms to track this data to better understand outreach effectiveness and demand. Finally, ground-level feedback from field staff and implementers proved essential. Their insights into practical challenges and successes should be incorporated into future program design and evaluation to help address operations.

For these reasons, SCE did not request continuation of the ESA Whole Home (Pilot Plus/Deep) program in its bridge funding proposal.[55] Low enrollment rates and costly audit requirements limited the pilot's scalability; however, SCE is incorporating lessons learned into its 2028-2033 program design. For example, whole house fans, identified as an effective measure during the pilot, will be added to the ESA measure offering in the 2028-2033 program cycle. SCE will also continue collaboration with SoCalGas on joint enrollments to improve customer experience and program reach. Given SCE's focus on electrification and alignment with California's long-term decarbonization goals, the proposed strategy reflects a more efficient and targeted approach that builds on pilot insights while supporting statewide policy objectives.

### 5. Low Income Oversight Board Recommendations

During its 2025 meetings, the LIOB developed a set of recommendations[56] aimed at improving the administration, accountability, and impact of the ESA Program. SCE considered these recommendations for the 2028-2033 program cycle.

**Timely Payment of ESA Contractor Invoices**. To reduce financial strain and service delivery risks caused by delays in reimbursing ESA contractors, LIOB recommended that Investor-Owned Utilities (IOUs) establish and clearly communicate a defined timeframe for issuing reimbursement payments upon receipt of an acceptable invoice. The definition of an "acceptable invoice" should be standardized and shared with ESA contractors. Additionally, IOUs should enhance data tracking of completed jobs and pending activities, such as inspections and permits, to support contractor decisions regarding loans or working capital advances. IOUs may require immediate repayment of loan portions once reimbursement is received.

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[55] SCE, Application of SCE for Proposed 2027 Income Qualified Bridge Funding Request, Application (A.) 25-06-025, filed June 30, 2025, p. 25.

[56] A.25-06-022 et. al. Assigned Commissioner's Scoping Memo and Ruling, Attachment 2 Technical Advisory Committee (TAC) recommendations, issued on November 10, 2026.

SCE Response: SCE has already initiated improvements in data tracking during the current program cycle to better monitor completed work and pending activities, with the goal of improving program operations and reducing payment delays. These efforts will continue to support timely reimbursements and greater transparency for contractors. Notably, SCE experienced billing challenges this cycle when transitioning to a new program design and system but has made significant progress in streamlining this process. For instance, SCE met with contractors at their offices to conduct training and troubleshoot issues they had on the platform. To further support ESA contractors, SCE plans to implement enhanced operating procedures in the 2028-2033 program cycle. These improvements include milestone payment processing to accelerate reimbursements and reduce financial strain, as well as performance-based incentives on timely completion and verified savings outcomes. Additionally, flexible payment scheduling will be incorporated to better align with contractor cash flow needs, promoting prompt invoicing and efficient administrative processes. These operational enhancements are designed to strengthen program delivery, improve contractor stability, and support Commission objectives for timely and effective service.

**Treatment of CPUC-Ordered Pilot Programs**. To preserve the policy-informing value of ESA-related pilot programs and prevent premature termination, LIOB recommended that IOUs complete pilot programs in alignment with approved budgets, workplans, and objectives. IOUs should not unilaterally terminate pilot programs unless objectives are met ahead of schedule or budget. Furthermore, the Commission should establish a policy pathway to incorporate pilot evaluation results into future ESA cycles without requiring a formal petition for modification.

SCE Response: SCE will incorporate such recommendations into its pilots in future program cycles. SCE is not proposing any new pilot programs in the upcoming 2028-2033 program cycle.

**ESA Funds Flexibility**. To optimize program impact and reduce the risk of underutilized funds, LIOB recommended granting the CPUC Energy Division authority to reallocate ESA

funds between program categories, such as ESA Main and pilot programs. This flexibility should apply to all unspent funds within the current program cycle.

SCE Response: Consistent with this recommendation, SCE has requested similar budget flexibility in Section III.B of this Exhibit SCE-02 so that funds can be reallocated between program categories to support program effectiveness and respond to changing needs throughout the program cycle.

**Public Purpose Program Surcharge**. To maintain program integrity and ensure consistent funding levels for ESA, LIOB recommended that IOUs maintain ESA funding levels and avoid reducing the Public Purpose Program Surcharge due to challenges with pilot programs. Funds from discontinued or underutilized pilots should be redirected to ESA Main or other high-demand program categories.

SCE Response: To address the LIOB's budget stability concern, SCE's budget proposal for the 2028-2033 cycle reflects a modest increase in spending, which is designed to support continued service to customers in the face of rising operational costs. This increase includes inflation, higher material and labor expenses, and the need to maintain program services across SCE's territory.

## B. SCE's Proposed ESA Program Will Be Customer-Centric and Deliver Value to SCE Customers through Full Service, Coordination, and Optimization Across Housing Sectors

### 1. Overview

SCE's 2028–2033 ESA Program proposal demonstrates how SCE delivers equitable, customer-centric energy solutions to income-qualified households. SCE's proposed program builds on prior successes and lessons learned,[57] introducing enhancements that improve customer

[57] The current 2021–2026 ESA Program is fragmented, with multiple overlapping pilots—including Pilot Plus, Pilot Deep, and SCE's BE Pilot—as well as a separate regional program serving multifamily stakeholders. Program coordination is limited to sharing customer leads or referring customers between programs, often (*Continued*)

experience and expand program reach. Building on decades of energy efficiency leadership, the program aims to expand its impact and assist in meeting California's climate, equity, and affordability goals by integrating BE, health and safety improvements, and resiliency measures into its core offerings. SCE's proposal positions ESA as an entry point to SCE's low-income and equity-focused initiatives, aligning with California's broader decarbonization roadmap and the CPUC's direction for inclusive program design. The funding for SCE's proposed customer-centric model is included in SCE's overall budget proposal request as described in Section III.B of this Exhibit SCE-02 above.

### 2. Customer-Centric Program Implementation Framework

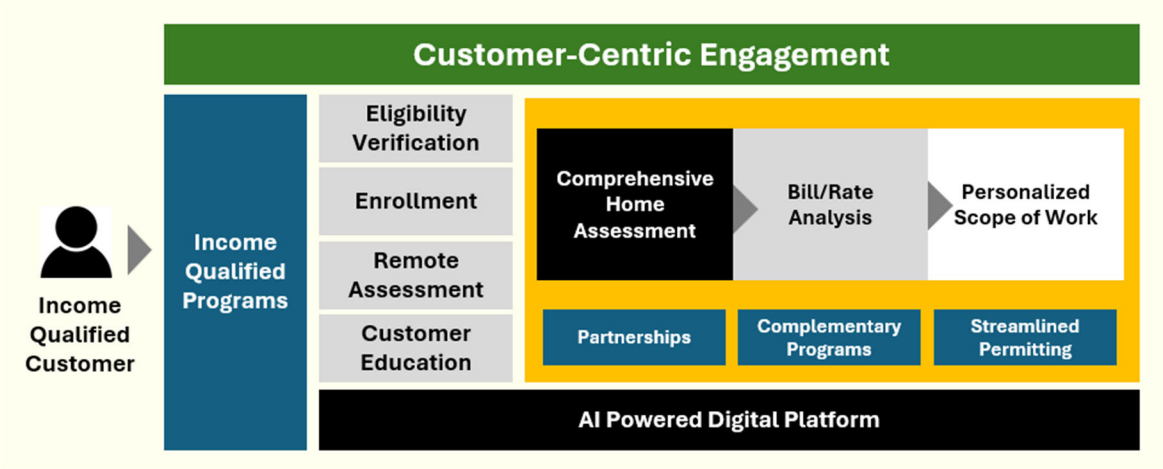
This section describes SCE's customer-centric ESA Program framework for 2028–2033, designed to replace fragmented processes with a unified, streamlined approach. It includes the following:

- A single, coordinated offering serving all housing segments: single-family, mobile/manufactured, and multifamily
- Comprehensive home assessments with bill analysis and rate optimization to deliver tailored, cost-effective solutions
- Personalized scopes of work bundling energy efficiency, electrification, and resiliency measures
- An AI-powered digital platform to modernize enrollment, improve accessibility, and accelerate service delivery
- Integrated partnerships and permitting strategies to enhance efficiency and expand program reach

requiring multiple engagements for participants to access the full range of benefits. This approach is inefficient, increases implementation costs, and creates a poor customer experience.

For its ESA customers, SCE plans to replace fragmented program interactions[58] with one coordinated effort, which will reduce administrative complexity, eliminate redundant steps, and support equitable access for all customer segments, including single-family, manufactured/mobile, and MF properties. This approach is described in Figure IV-9 below.

***Figure IV-9***
***SCE's ESA Program Framework***




ESA's Single Offering Will Serve Multiple Segments. SCE presents ESA as a unified, cohesive, and streamlined offering that delivers equitable energy solutions across its service territory. SCE will implement tailored delivery strategies for three distinct residential segments: single-family homes, manufactured/mobile homes, and MF properties. This approach will provide a consistent customer experience while enabling customized solutions that reflect the unique infrastructure, needs, and challenges of each housing type.

Comprehensive Assessments Will Provide Holistic Recommendations. Within each customer segment, the ESA Program's strategy utilizes a framework to deliver a coordinated, customer-centric approach to home upgrades by offering comprehensive assessments to identify

[58] Fragmented or siloed approaches create unnecessary complexity for customers, who must navigate multiple applications and service providers to access programs for which they are often jointly eligible. These inefficiencies disproportionately affect vulnerable populations, including seniors, medically sensitive individuals, and linguistically isolated households.

opportunities for energy savings, health, and safety improvements. At the core of this framework is a holistic home assessment that evaluates energy usage, electrification readiness, and health and safety needs in a single visit. Each assessment includes bill analysis and rate optimization to provide customers with clear, data-driven insights into projected energy costs and prevent unintended bill increases. These assessments will evaluate existing equipment, electrical infrastructure, and customer needs to develop tailored scopes of work.

Personalized Scopes of Work Will Provide Bundled Solutions. Based on these findings, SCE plans to develop personalized scopes of work that bundle energy efficiency measures, electrification upgrades, weatherization, and resiliency solutions, which would facilitate improvements that are both technically appropriate and financially beneficial. ESA will also deliver bundled solutions that include energy efficiency measures, electrification upgrades, and resiliency, solutions that improve comfort, lower utility bills, and enhance overall home performance. This approach, as shown in the figure above and described in Section IV.B.2.d of this Exhibit SCE-02, aims to provide customers with meaningful and cost-efficient improvements that align with their specific needs.

AI-Powered Digital Platform. To modernize engagement and enhance efficiency, SCE will seek to deploy an AI-powered digital platform to further streamline enrollment, enable real-time education and performance tracking. Supported by digital tools for remote pre-assessments, this process accelerates service delivery and minimizes disruption. This platform will serve as a virtual front door for customers, reducing barriers for underserved communities and improving overall program responsiveness.

This integrated framework represents a shift from siloed program delivery to a holistic, customer-first model. It improves customer outcomes, enhances operational efficiency, and advances California's climate, equity, and affordability goals. By aligning program design with customer needs and leveraging technology and partnerships, income-qualified households would receive meaningful, cost-efficient improvements that enhance comfort, safety, and long-term affordability. Additionally, SCE will seek to expand partnerships with complementary initiatives,

such as building decarbonization programs, demand response offerings, and EV readiness efforts, to deliver bundled benefits and optimize resource use. More information about key aspects of the proposed Customer Centric Engagement Model is provided below.

**a) Comprehensive Home Assessments**

As part of its strategic shift toward equitable and customer-centric service delivery, SCE plans to implement a comprehensive home assessment which replaces the tiered approach from the 2021–2026 cycle. Home assessments involve collecting detailed information about the physical aspects of a home. These activities include evaluating equipment, appliances, and energy usage and performing feasibility checks to identify areas for improvement. The goal is to streamline program access, enhance customer satisfaction, and improve operational efficiency through a more holistic and integrated process. Trained assessors then document existing equipment, home conditions, and energy usage, supported by photographic evidence for accuracy and completeness. The process is designed to be inclusive, responsive, and efficient. Key elements of the Home Assessment are provided below.

***Table IV-10***
***Key Home Assessment Elements***[59]

| Assessment Component | Data/Information Collected | Purpose & Use | Electrification & Program Integration |
|---|---|---|---|
| **Customer Profile** | Name, address, contact info, occupancy status, housing type, language, demographics | Establishes customer eligibility, communication needs, and equity indicators | Supports multilingual outreach and prioritization of vulnerable populations |
| **Eligibility Screening** | Income, household size and income, public assistance, disability status, medical equipment use. | Determines qualification for ESA and other programs | Enables cross-program enrollment (CARE, FERA, MBL, etc.) |
| **HVAC Inventory** | Type, fuel source, age, SEER rating, thermostat type, electrical service | Assesses upgrade feasibility and safety | Identifies candidates for heat pump HVAC and smart thermostat installation |
| **Water Heating** | Fuel type, tank size, location, heat pump status, electrical readiness | Evaluates replacement potential and safety | Enables transition to heat pump water heaters and enables load-flexibility |
| **Appliances** | Refrigerator, freezer, dishwasher, clothes washer: ownership, condition, dimensions, outlet safety | Determines eligibility for replacements | Supports energy efficiency, electrification and indoor air quality improvements |
| **Feasibility Checks** | Electrical panel service, outlet grounding, structural support, accessibility | Evaluates service upgrade alternatives, and ensures safe, code-compliant installations | Required for electrification upgrades |
| **Photographic Documentation** | Images of equipment, installation sites, and home conditions | Verifies accuracy and supports audit readiness | Facilitates cross-program coordination |

The comprehensive home assessment model serves as the cornerstone of ESA's transformation, prioritizing customer outcomes over isolated energy savings. Each assessment begins with a personalized consultation to understand individual household

[59] Overview of key home assessment components; illustrative, not exhaustive.

and customer priorities. During these consultations, specific goals and preferences will be discussed so that solutions offered meet customer needs. Additionally, information gathered from these comprehensive home assessments, along with Bill Analysis and Rate Optimization activities detailed in Section IV.B.2.c of this Exhibit SCE-02 below, will be utilized during personalized consultations. This integrated approach allows SCE to make informed home-upgrade recommendations, helping customers make well-informed decisions that ultimately result in the customer's deliverable, a personalized scope of work, as detailed in Section IV.B.2.d of this Exhibit SCE-02 below.

Further, SCE will seek to consolidate eligibility screening across multiple programs at the outset of engagement to reduce administrative burden, eliminate multiple visits, and accelerate service delivery. Enrollments will be streamlined across programs, enabling customers to access ESA and other offerings through a single customer-facing process. Like the BE Pilot, when measures fall outside ESA's allowable funding parameters, SCE will coordinate with other programs (e.g. leveraging cross-program funding and partnerships) to help customers receive comprehensive support regardless of funding source. This tailored approach not only improves the relevance of upgrades but also increases program uptake and conversion rates with consistent quality. Additionally, coordination of installations, permitting, and inspections, where possible, will minimize customer disruption and improve customer satisfaction. This approach enhances the relevance of proposed measures, improves program uptake, and consistent quality across all customer segments.

**b) <u>SCE Proposes a Scalable AI-Powered ESA Digital Platform to Modernize Customer Engagement</u>**

Currently, ESA Program enrollment is fragmented and resource-intensive, creating barriers for underserved communities, including renters, tribal, and rural populations, due to manual processes and overlapping program requirements. To address

this shortcoming, SCE plans to deploy a scalable, AI-powered, digital platform to modernize customer engagement and streamline comprehensive home assessments for income-qualified households. This platform will serve as a virtual front-end interface, enabling efficient enrollment, remote pre-assessments, eligibility verification, data intake, and accessible customer education. These capabilities will support the creation of personalized scopes of work tailored to individual household needs.

SCE's proposed platform will integrate AI and analytics to simplify decision-making, reduce administrative burden, and expedite the transition from enrollment to installation. Key features will include virtual pre-assessments, multilingual and ADA-compliant support, real-time energy education, and savings recommendations. This data-driven approach will enhance customer engagement and support equitable resource allocation. Success metrics will include equity benchmarks, enrollment conversion rates, customer satisfaction, time-to-installation, and platform engagement. Lessons learned will inform future ESA enhancements and broader applications across SCE's equity-focused offerings.[60]

**c) Bill Analysis and Rate Optimization**

Building on the success of the BE Pilot's bill analysis and rate optimization tool, SCE plans to integrate a bill analysis and rate optimization tool as a core component of the 2028–2033 ESA Program. The BE Pilot has demonstrated the value of a digital rate

[60] This initiative builds on the foundational work of the New Program Design Pilot (NPDP) within SCE's Energy Efficiency portfolio, which explores innovative program designs and AI-supported tools to help customers navigate available programs and stack benefits across offerings. Insights from NPDP will inform platform design, mitigate implementation risks, and accelerate deployment. To support this initiative, SCE will coordinate funding and service delivery across programs to enable cost-sharing, as appropriate. Established in SCE's 2024 - 2031 Energy Efficiency Business Plan (U 338-E) Section III.C.5, the New Program Design Pilot aims to gather, implement, and evaluate implementation-ready third-party pilot proposals over a 1-year implementation window with the goal of testing pilots and then scaling successful pilots into full third-party led EE programs.

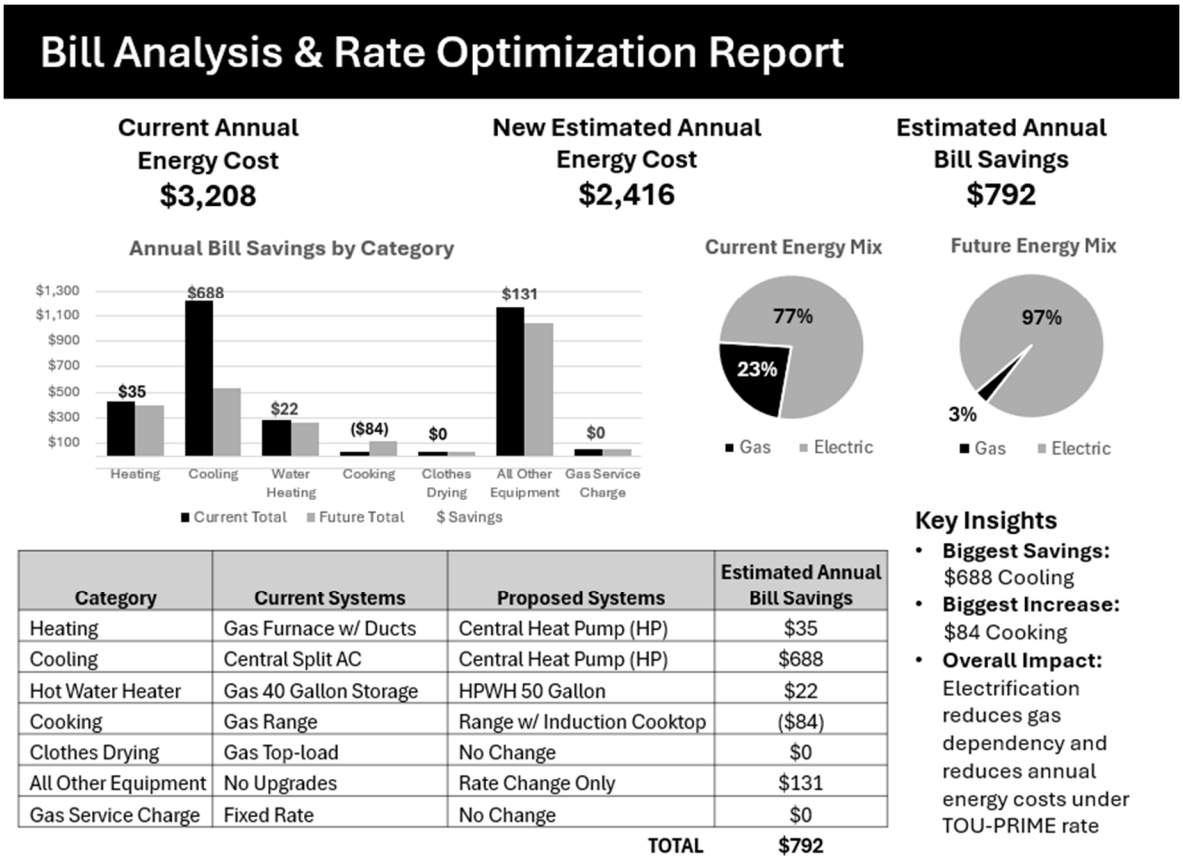
analysis tool to enable contractors to assess historical usage and forecast bill impacts based on proposed electrification measures.

The BE Pilot tool supports informed decision-making by comparing current utility rates with alternative options and estimating annual savings. Based on feedback collected through SCE's 2025 internal customer satisfaction survey, participants reported that the tool improved transparency, increased confidence in switching to electric appliances, and helped mitigate the risk of unintended bill increases, particularly for households transitioning from gas to electric appliances.[61]

In the 2028-2033 program cycle, SCE will integrate bill and rate analysis into the standard home assessment, creating an ESA bill analysis and rate optimization tool. The tool will analyze both electric and gas usage to identify opportunities to reduce energy costs and match customers with optimal rate plans. It will simulate projected bills under various retrofit scenarios, including energy efficiency upgrades, electrification, and distributed energy resources (DERs). By comparing the customer's current rate with available options (e.g., TOU 4–9PM, TOU 5–8PM, TOU PRIME) and baseline allowances (i.e., all-electric, and HPWH) to provide an annualized bill impact estimate. This analysis will be reviewed with the customer prior to installation and incorporated into the personalized scope of work (see Figure IV-10). Customers will approve the final scope based on the estimated bill impact.

[61] SCE conducted an internal customer satisfaction survey in 2025 for the BE Pilot. All survey participants had installations completed between January and July 2025 and were invited to respond via email. The survey assessed program awareness, ease of enrollment, satisfaction with equipment and installation, changes in utility bills and comfort, and overall likelihood to recommend the program.

***Figure IV-10***
***Example of Bill Analysis & Rate Optimization Report***




| Category | Current Systems | Proposed Systems | Estimated Annual Bill Savings |
|---|---|---|---|
| Heating | Gas Furnace w/ Ducts | Central Heat Pump (HP) | $35 |
| Cooling | Central Split AC | Central Heat Pump (HP) | $688 |
| Hot Water Heater | Gas 40 Gallon Storage | HPWH 50 Gallon | $22 |
| Cooking | Gas Range | Range w/ Induction Cooktop | ($84) |
| Clothes Drying | Gas Top-load | No Change | $0 |
| All Other Equipment | No Upgrades | Rate Change Only | $131 |
| Gas Service Charge | Fixed Rate | No Change | $0 |
| | | **TOTAL** | **$792** |

Implementation Considerations. To provide for cost-efficient and strategically aligned implementation, SCE will maintain flexibility in selecting the most appropriate tool to support the ESA Program. While three primary options are under consideration, each requires careful evaluation:

1. Integration of the CPUC's Customer Electrification Estimator, if aligned with ESA objectives and engagement needs
2. Licensing the existing ESA BE Pilot tool from the vendor,[62] incorporating lessons learned to enhance and expand functionality

[62] E-Switch, the rate and bill analysis tool utilized in the ESA BE Pilot, is a proprietary solution developed by MAROMA Energy Services in collaboration with CADMUS.

3. Development or licensing of a new ESA-specific tool, designed to support evolving rate structures, DER scenarios, and regulatory requirements

While the CPUC's estimator is expected to be free, its lack of customer-specific estimates may limit its applicability for ESA's personalized scope development. SCE has included budget estimates to support selection of the most appropriate tool while focusing on responsible use of ratepayer funds.

Regardless of the selected option, the tool will leverage digital technologies to forecast bill outcomes pre-installation, help customers understand financial impacts and increase confidence in participation. It will be designed for long-term scalability and relevance. This bill analysis will replace the current load disaggregation letters shared with ESA customers, as it provides actionable steps customers can take through the ESA Program. By implementing this approach, SCE seeks to eliminate the existing compliance requirement for load disaggregation letters while improving customer engagement and education.

Access to gas usage data from other IOUs is essential for accurate analysis and robust evaluation of ESA measures. SCE proposes that future ESA customers provide their consent for data sharing authorizing gas usage data sharing with other IOUs, for this purpose, through their ESA application, and SCE will comply with applicable privacy and data protection regulations related to these exchanges. For these reasons, SCE requests the Commission require IOUs to share gas usage data covered by ESA customers' consent. SCE also commits to reciprocate data sharing with gas utilities, when authorized, to support similar program goals.

SCE aims to adopt a flexible, data-driven strategy. Formal integration of the tool will enhance affordability, support rate equity, and align with California's decarbonization and electrification goals, allowing for income-qualified customers to receive the full benefits of a modernized, responsive ESA Program.

### d) Personalized Scopes of Work

Building on insights from the comprehensive home assessment and bill analysis, the next phase of ESA Program delivery focuses on developing a personalized scope of work for each participating household. The personalized scope not only enhances customer experience by delivering relevant and impactful solutions but also improves program efficiency by reducing unnecessary installations and increasing measure adoption rates. It serves as a roadmap for coordinated service delivery, guiding scheduling, permitting, and inspection activities to minimize disruption and support quality outcomes.

Each scope will be designed to reflect the household's unique equipment inventory, structural characteristics, and energy usage history, verifying that recommended measures are technically appropriate and aligned with customer priorities such as comfort, safety, affordability, and indoor air quality.

Contractors will follow a standardized framework to develop scopes that incorporate eligible energy efficiency upgrades, electrification opportunities, and DERs, with an emphasis on balancing energy savings with customer affordability and minimizing bill impacts. The integration of bill analysis supports the determination that selected measures are not only feasible but financially beneficial, helping customers make informed decisions and avoid unintended cost increases.

This tailored model builds on the successful approach refined through the ESA BE Pilot, which has demonstrated improved customer satisfaction, greater relevance of installed measures, and reduced post-installation bill impacts.[63] Expanding this model

[63] Preliminary analysis of ESA BE Pilot participants shows an average monthly gas bill reduction of $19.70 and a therm usage decrease of 87 percent. Participants installing only base measures (HP space and water heating) saw an average 80 percent reductions in therms, while those with additional electrification measures achieved a 92 percent reduction. Survey responses further reflect strong customer satisfaction, with 80 percent "very likely" to recommend the program, and reported improvements in home comfort (80 percent), gas usage (100 percent), and energy bills (50 percent).

ESA Program-wide supports SCE's objective to enhance service delivery efficiency, increase measure adoption, and advance California's broader climate, equity, and affordability goals.

Each scope of work will be presented during a customer consultation, where the contractor outlines proposed measures, anticipated benefits, and implementation timelines. Materials will be provided in the customer's preferred language and format for clarity and accessibility. Customers will have the opportunity to ask questions, request modifications, and confirm their understanding before approving the final plan. In cases where recommended upgrades fall outside ESA Program funding parameters, SCE will pursue cross-program coordination and budget allocations to support a more comprehensive solution. This approach helps customers to receive holistic support, even when their needs span multiple program offerings. See Section IV.B.2.e in this Exhibit SCE-02 for more details.

**e) <u>Program Delivery Integration and Partnership Collaboration</u>**

SCE will scale the ESA Program's integrated delivery model by formalizing cross-program partnerships, expanding coordination with complementary initiatives, and enhancing operational systems to support seamless service delivery. This strategy aligns with the ESA 2028–2033 framework, which introduces a unified intake and comprehensive assessment process to streamline access to multiple energy programs and deliver bundled services tailored to household needs.

SCE has effectively leveraged strategic partnerships to enhance program delivery and customer outcomes. For example, the San Joaquin Valley (SJV) Pilot, ESA Program, and BE Pilot collaborated with the TECH Clean California's Low Income Heat Pump Adoption Pilot to fund critical electrification-enabling measures, such as panel upgrades

and remediation, supporting the installation of HPWHs in over 480 homes.[64] Similarly, SCE partnered with the Bassett Avocado Heights Advanced Energy Community (BAAEC) project to integrate solar and battery installations with electrification retrofits.

SCE will strengthen coordination with EE, particularly equity programs that serve low-income residential customers. In 2021, the Commission adopted equity[65] as part of the market rate EE portfolio.[66] Today, both SCE and various regional energy networks (RENs) administer equity programs across customer market segments. Given that ESA is a residential equity program that provides valuable home upgrades to low-income customers, SCE recognizes the customer benefit of residential equity program coordination, especially from an affordability and operational efficiency lens. One example of coordination with EE Equity programs is SCE's proposal to offer program layering (when feasible) with ESA and SoCal REN's MF program, which targets hard-to-reach equity customers; see Section IV.B.4 of this Exhibit SCE-02 for more information.

LA County is both the administrator of SoCal REN (including the SoCal REN MF Program) and the California Energy Commission's Equitable Building Decarbonization Direct Install (EBDDI) Southern Region program. SCE has been in early conversations with LA County to explore alignment with EBDDI to improve customer targeting and recruitment. Additionally, SCE is open to co-funding measures to maximize resources. While future coordination would depend on program compatibility,

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64 From 2022 to 2024, SCE leveraged TECH Clean California to enhance SCE program electrification offerings by funding approximately $2.4 million in critical electrical infrastructure upgrades—including panel replacements and rewiring—and provided additional measures such as attic insulation and remediation, which ESA could not support due to cost constraints. This partnership enabled the installation of space and water HPs in homes that otherwise would not have qualified.

65 Equity is defined as: "Programs with a primary purpose of providing energy efficiency to hard-to-reach or underserved customers and disadvantaged communities in advancement of the Commission's Environmental and Social Justice (ESJ) Action Plan; Improving access to energy efficiency for ESJ communities, as defined in the ESJ Action Plan, may provide corollary benefits such as increased comfort and safety, improved indoor air quality, and more affordable utility bills, consistent with Goals 1, 2, and 5 in the ESJ Action Plan. D-21-05-031.

66 *See,* D.21-05-031.

such alignment could help streamline service delivery and broaden access to decarbonization measures for low-income households. Although SCE is a proponent of co-funding for affordability and customer experience, SCE maintains the need for ESA funding to support program stability.

Looking ahead to the 2028–2033 cycle, SCE will expand and formalize these collaborations to enhance service delivery which may improve cost-effectiveness and improve benefits for low-income customers, particularly those in mobile homes and MF dwellings.

**(1) Complementary Programs**

Building on this integrated delivery model, SCE envisions the ESA Program as the central platform through which income-qualified customers can access a comprehensive suite of energy-related services, including CARE/FERA, DR, DER, and health and safety upgrades, through a single engagement process. This approach reduces administrative complexity, improves participation, and supports coordinated, impactful solutions.

Eligibility will be streamlined through a centralized intake system that evaluates income, housing characteristics, and geographic indicators. Standardized income tables and public assistance participation (e.g., Medi-Cal, CalFresh) will facilitate qualification across programs with varying thresholds, reinforcing SCE's commitment to equitable service delivery.

Customers will receive bundled services that address energy affordability, indoor air quality, climate resilience, and electrification readiness. For instance, planned integration with the Charge Ready Home Program will support electrical panel upgrades for EV charger installations, reducing costs and enhancing the feasibility of home electrification. Similarly, installation of ESA measures such as HP HVAC systems, HPWHs, will be deployed, when possible, in coordination

with DR programs to enable load-shifting capabilities to optimize energy usage and enhance efficiency by adjusting power consumption during peak demand periods. By integrating these advanced technologies with DR programs, SCE aims to provide sustainable and cost-effective solutions for customers.

The benefits of this integrated approach include: (1) Streamlined Customer Experience: A unified intake and assessment model simplifies access and reduces confusion so that customers receive all eligible services through a single point of contact (SPOC), (2) Cost Efficiency and Resource Optimization: Shared infrastructure and coordinated installations reduce labor duplication, permitting costs, and administrative overhead, (3) Holistic Household Solutions: Bundled services address multiple needs simultaneously (e.g. energy affordability, indoor air quality, and climate resilience) tailored to each home's characteristics and customer priorities, (4) Increased Program Uptake and Impact: Coordinated delivery improves conversion rates so that households receive the full spectrum of available benefits, and (5) Enhanced Data and Performance Tracking: Integrated systems support better tracking of customer outcomes, program performance, and equity metrics.

**(2) Collaboration on Permitting Process**

Contractors frequently encounter fragmented permitting processes, such as separate mechanical, electrical, and plumbing (MEP) permits, varying documentation requirements, and inconsistent code interpretations that can lead to extended timelines, increased costs, and reduced program participation. For example, some jurisdictions require site plans or single-line diagrams for mechanical or plumbing permits, while others impose unique requirements such as drywells for condensate drainage or structural engineering plans for rooftop

HVAC replacements. These variations complicate installations and affect contractor's ability to maintain permit compliance across service territories.

SCE recognizes that permitting-related challenges continue to impact the efficient and equitable delivery of electrification and resilience measures. These challenges, ranging from inconsistent requirements across jurisdictions to administrative delays, can impact both contractor efficiency and customer experience. In alignment with the ESA Program's broader goals of equitable access, streamlined delivery, and improved program uptake, SCE will explore opportunities to support greater consistency in permitting practices. These efforts reflect SCE's commitment to delivering scalable, collaborative solutions that enhance service coordination without imposing mandates, while remaining responsive to the diverse regulatory environments across its service territory.

To address SCE's contractors' major concerns, as part of its ongoing efforts to improve service delivery under the ESA Program's customer-centric service model, SCE will explore opportunities with local building departments or Authorities Having Jurisdiction (AHJs) to encourage more consistent requirements and timely permit close-out for common electrification upgrades (e.g., HP HVAC, HPWHs, and electrical panel upgrades) and will utilize Energy Code Ace resources for guidance and training feedback loops.

In addition, to address permitting challenges, SCE may explore opportunities to collaborate with local building departments and leverage existing relationships through its Account Management and Codes and Standards (C&S) teams. These efforts could support greater consistency in permitting processes and fee structures for common electrification upgrades, such as HP HVAC systems, HPWHs, and electric panel replacements.

Potential areas of exploration include: (1) Encouraging Alignment: Identifying scalable processes that promote more consistent permitting

requirements and fee structures across jurisdictions, (2) Supporting Timely Close-Outs: Assessing ways to reduce administrative delays and improve permit finalization timelines with AHJs, and (3) Promoting Digital Tools: Considering the use of online permitting portals and standardized templates to streamline applications and improve project tracking.

SCE acknowledges that jurisdictions may face resource constraints or operate under unique regulatory frameworks. Any engagement would be collaborative and tailored to local needs, with the goal of identifying voluntary, scalable solutions that support program success without imposing mandates.

To further support contractors and improve program tracking, SCE is evaluating technology solutions that could enable more efficient verification of permitted projects and alignment with ESA participation data. This update may include leveraging platforms such as the Energy Code Ace "Q&Ace" portal[67] to provide timely guidance on energy code requirements. Feedback from contractors could inform future updates to Title 24 and support the development of training materials that enhance understanding and compliance across AHJs and installation teams.

While these efforts are exploratory and subject to feasibility, they reflect SCE's continued commitment to identifying operational improvements that enhance customer experience, support contractor efficiency, and advance the ESA Program's mission in a manner that is equitable, scalable, and responsive to local conditions.

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[67] Q&Ace (Questions & Ace) is Energy Code Ace's online knowledge base of frequently asked questions and examples related to California's Title 24 energy standards. Developed by the California Energy Commission, Q&Ace provides answers and information for building professionals to help them understand and comply with energy efficiency standards for buildings and appliances. Users can search the Q&Ace library for specific topics, or they can submit a new question to the experts on the website; *available at* https://energycodeace.com/QAndAce.

### 3. Mobile / Manufactured Homes Segment

This section outlines SCE's targeted strategy for mobile or manufactured homes in the 2028-2033 ESA Program, addressing unique structural and affordability challenges. It includes the following:

- A dedicated approach to serve over 122,000 low-income mobile homes with tailored solutions
- Addition of electrification upgrades including space and water heat pumps, induction cooking appliances, and weatherization improvements
- Coordination with the Mobile Home Park Conversion Program to streamline installations and reduce costs

#### a) SCE Proposes to Introduce Models that are More Adept for Mobile Homes

SCE proposes a targeted, strategic, and impactful approach for mobile homes (also referred to as manufactured homes). This residential sub-segment requires a specific and dedicated programmatic approach due to its unique structural characteristics and socioeconomic vulnerabilities of its occupants. Mobile homes are disproportionately occupied by low-income, elderly, and marginalized populations who face some of the highest energy burdens in California. SCE estimates that there are over 122,000 mobile or manufactured homes occupied by low-income customers within its service area.[68]

##### (1) Background

Mobile homes often rely on outdated, inefficient appliances and combustion-based fuels, which contribute to elevated energy costs, poor indoor air quality, and increased health risks. These homes often lack insulation, have outdated wiring, and are limited to 30–100A electrical service, making

[68] This estimate is based on 2025 Athens Research data, with eligibility criteria at 250 percent of the Federal Poverty Level applied to the residential customer segment population.

electrification difficult.[69] Mobile homes are also disproportionately energy inefficient. Over 40 percent of California's manufactured housing residents qualify as low-income, and many live in homes built before 1980, predating federal Department of Housing and Urban Development (HUD) construction standards. These structural and electrical limitations, combined with socioeconomic barriers, make retrofits costly and complex, requiring targeted efforts that address both technical upgrades and affordability challenges.

The SCE Mobile Home Park (MHP) Utility Conversion Program authorized under D.20-04-004[70] is designed to convert mobile home parks and manufactured housing communities from master-meter and master-meter/submeter natural gas and/or electric service to direct service, as many mobile home parks within California rely on a single master meter for their entire property. The MHP Conversion Program provides separate meters and up to 100-amp ready service for each unit (also known as "space") to measure individual usage. The Commission also adopted D.24-12-037[71] implementing 200-amp ready service for all MHP's that start the planning and design process after September 19, 2025. As of 2024, SCE has converted 327 MHPs within its service territory, which included 22,077 MHP spaces out of the 72,120 SCE-eligible permitted spaces from the CPUC's Safety and Enforcement Division's (SED) Priority List. This conversion represents approximately 31 percent of eligible and applicable MHP spaces in SCE's service territory. The CPUC released a new

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69 *See,* CalNEXT Market Characterization Study; *available at* https://calnext.com/wp-content/uploads/2023/12/ET23SWE0017_Mobile-and-Manufactured-Housing-Market-Characterization-Study_Final-Report.pdf.

70 D.20-04-004, OP 1.

71 D.24-12-037, OP 1.

priority list in July 2025 outlining all participating MHP's for the remainder of the program. SCE is currently on track to convert an additional 3,555 spaces in 2025.

On August 21, 2025, the CPUC approved SCE's AL 5568-E, authorizing the expansion of eligible building types to include mobile homes in its ESA BE Pilot. This approval enables SCE to apply proven implementation strategies from single-family homes to mobile homes and to gain additional insights into implementation strategies, customer engagement, and technology performance that can be directly applied to the mobile home segment. This includes streamlined contractor training, targeted outreach, and bundling of electrification measures to maximize customer satisfaction. By leveraging these learnings, SCE can minimize implementation risk while maximizing program impact by developing energy solutions tailored to this underserved residential segment while driving innovation.

**(2) <u>Mobile Home Proposal</u>**

SCE proposes to introduce retrofit measures and delivery models specifically adapted to the mobile home segment. These include:

- Electrification of space and water heating using ducted and ductless Air Source Heat Pumps (ASHPs) and HPWHs, including 110V models suitable for constrained panel capacities
- Efficient cooking solutions, such as induction cooktops, to replace combustion-based appliances
- Weatherization upgrades, duct sealing, and air sealing, tailored to the structural limitations of mobile homes

These measures are informed by energy modeling which demonstrates that electrification retrofits, especially when paired with weatherization, can reduce

energy consumption by up to 66 percent and utility bills by up to 67 percent for single-section homes built to 1976 HUD standards in hot-dry climates.[72]

SCE also plans to engage MHPs that have participated in the SCE MHP Conversion Program for electrification retrofits, such as replacing gas appliances with electric HPs and induction cooktops, upgrading insulation and weatherization, and improving ventilation. These interventions can significantly reduce energy consumption, lower utility bills, and enhance indoor environmental quality. These measures are particularly impactful in mobile homes, where space constraints and aging infrastructure exacerbate energy inefficiency and health vulnerabilities. The ESA Program will then seek to coordinate with the MHP Conversion Program to jointly participate in residential forums at the onset of recruitment to provide information about the ESA Program, streamline enrollments, and coordinate installations of necessary sub-panels, circuits and wiring for customers who opt-in for electrification retrofits. This collaboration intends to improve cost efficiencies for both programs and improve customer affordability.

By deploying retrofit solutions tailored to the mobile home segment, SCE can transform this underserved housing stock to support affordable, efficient, and electrified living. This initiative directly supports California's climate and equity goals, as outlined in the CPUC's Building Decarbonization Rulemaking (R.19-01-011),[73] and delivers measurable environmental, health, and economic benefits to

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[72] *See,* CalNEXT Market Characterization Study; *available at* https://calnext.com/wp-content/uploads/2023/12/ET23SWE0017_Mobile-and-Manufactured-Housing-Market-Characterization-Study_Final-Report.pdf.

[73] California Public Utilities Commission (CPUC). Order Instituting Rulemaking Regarding Building Decarbonization (Rulemaking 19-01-011). This proceeding, initiated in January 2019, aims to reduce greenhouse gas emissions from buildings by promoting electrification and clean energy solutions. Additional information *available at* https://www.cpuc.ca.gov/about-cpuc/divisions/energy-division/building-decarbonization.

some of the state's most vulnerable residents. SCE's mobile home proposals as describe above are included in SCE's proposed budget and measures.

### 4. Multifamily Building Segment

This section outlines SCE's redesigned approach for serving multifamily (MF) properties in the 2028–2033 ESA Program, replacing the underperforming regional model with a locally administered, utility-led strategy. It includes the following:

- Transition to SCE-led administration for streamlined, equitable delivery of in-unit and common-area measures
- Flexible enrollment pathways for property owners and tenants
- SPOCs engagement with property owners for customized solutions
- Data-driven geographic targeting and dedicated strategies for Naturally Occurring Affordable Housing (NOAH)
- Policy and operational enhancements, including copay elimination, updated MF definitions, and improved contractor onboarding

### a) Strategy Overview

SCE proposes to replace the current regional third-party administration of the MFWB[74] program with a locally administered, utility-led model for the MF segment for the 2028-2033 ESA Program cycle. This proposal directly addresses persistent challenges in participation, equity, and operational efficiency under the current regional MFWB model. By leveraging SCE's infrastructure, contractor networks, and community relationships, the new model will deliver streamlined and equitable solutions to income-qualified MF households. In addition, SCE's MF proposal integrates flexible enrollment pathways, targeted outreach, and complementary program coordination into SCE's overall ESA offerings to support service delivery to SCE's customers.

### b) Market Overview

SCE estimates that there are approximately 39,000 MF properties consisting of five or more dwelling units in its service area, representing over 880,000 MF units. Of these, over 320,000 units are low-income family units.[75] In the 2028-2033 program cycle, SCE aims to serve approximately 91,000 low-income MF units, which is over 20 percent of SCE's total ESA homes treated target as proposed in Section III above. While low-income MF programs can serve both deed restricted and non-deed restricted properties, third-party implementers may prefer to serve large deed restricted properties, due to lower enrollment hurdles and greater financial potential. Under its local administration of ESA MF, SCE also plans to focus on non-deed restricted MF housing, as it represents 80 percent of the over 320,000 units noted above.[76]

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[74] As described in D.21-06-015, p. 321, the last cycle, "IOUs were directed to propose a new multifamily whole building (MFWB) program designed and delivered by a third party." Additionally, D.21-06-015 Approved a regional (Northern and Southern) third-party program design, *see* p. 354-356.

[75] Res-Intel SCE Multifamily Market Characterization Final Report; October 23, 2025.

[76] *Id.*

*Table IV-11*[77]
*SCE Multifamily Market Characterization Summary*

| Property Size | Sites | % of Total | # of Dwelling Units | # of LI Dwelling Units[(a)] | % of Total |
|---|---|---|---|---|---|
| **5-10** | 22,867 | 60% | 157,190 | 65,428 | 20% |
| **11-20** | 7,892 | 21% | 115,510 | 48,370 | 15% |
| **21-60** | 4,814 | 13% | 164,501 | 67,479 | 21% |
| **61-100** | 1,203 | 3% | 95,024 | 40,467 | 12% |
| **101+** | 1,627 | 4% | 355,652 | 102,163 | 32% |
| **Total** | **38,403** | **100%** | **887,877** | **323,907** | **100%** |

(a) Number of Low-Income (LI) dwelling units based on CARE or FERA program enrollment.

**c) Lessons Learned from the Southern MFWB Regional Program**

SCE's experience with the MFWB Regional program has revealed critical limitations in the regional implementation model for delivering energy efficiency and electrification services to low-income MF housing. Despite efforts to expand participation and streamline delivery, this program consistently underperformed, falling short of 2021-2026 treatment targets and energy savings goals. Complete data for 2024 was not verified at the time of this filing; however, SCE received preliminary data that shows for 2024, the MFWB Regional Administrator completed three Common Area projects and treated 3,263 tenant units.[78],[79] By comparison, in 2021, through its MF offerings, SCE served nearly 22,000 units, which is over six times more units than the MFWB administrator completed in 2024. In addition, in 2022, the last full year that SCE administered the MF program, forty-four common area projects were completed, and more than 8,000 tenant units were treated. Table IV-12 below compares SCE MF

[77] Res-Intel SCE Multifamily Market Characterization Final Report; October 23, 2025.

[78] These preliminary results were provided by SDG&E through an electronic data transfer retrieved on November 6, 2025.

[79] In SCE's November 2025 monthly report, SCE included these projects and installations once SDG&E sent finalized numbers for 2024 and 2025.

administration results to Southern Regional administrator results, which highlights the performance gap and emphasizes the need for an alternative model.

***Table IV-12***
***MF Administration Results by Administrator***

| Description | SCE Administration 2021 | 2022 | 2023[(a)] | Southern Regional Administration 2024[(b)] |
|---|---|---|---|---|
| **Projects Completed (with CAM)** | 43 | 44 | 38 | 3 |
| **Total In-Units Served** | 21,893 | 8,274 | 129 | 3,263 |

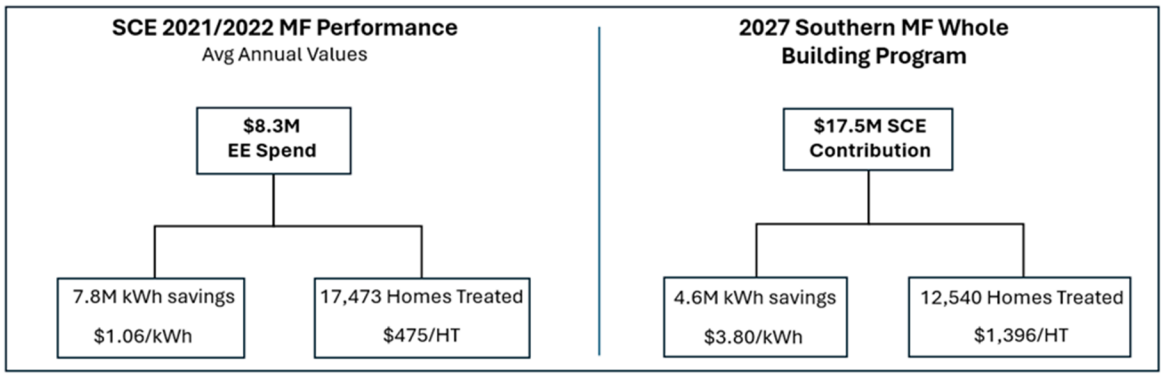
(a) Data reflects Jan-Jun 2023. The MF CAM Program launched in July 2023, but no treatment was performed for July-Dec 2023.

(b) These preliminary results were provided by SDG&E through an electronic data transfer retrieved on November 6, 2025.

Additionally, as shown in Figure IV-11 below, SCE finds that it was able to deliver its MF program more cost-effectively than the current MFWB administrator. The historic average annual cost to deliver SCE's MF CAM Program was $475 per home treated.[80] In the 2028 to 2033 program cycle, SCE's average forecast cost is approximately $835 per home treated. Whereas the 2027 MFWB program is projected to spend an average of $1,435 per home treated.

[80] Using SCE 2021 and 2022 recorded MF costs.

***Figure IV-11***
***MF Program Effectiveness (Program Costs & Energy Saved) by Administrator***




**d) Multifamily Proposals**

**(1) SCE Proposes Local Administration of the Multifamily Segment**

SCE is proposing a strategic transition to a locally administered, utility-led MF segment for the 2028-2033 ESA Program cycle, replacing the current regional MFWB approach. By assuming direct ownership and accountability for serving its low-income MF segment, SCE will leverage its infrastructure, contractor networks, and long-standing relationships with MF stakeholders to deliver streamlined and equitable energy solutions to income-qualified households, particularly those in disadvantaged communities and NOAH properties.

The proposed solution reflects a redesign of the MF ESA delivery framework, shifting away from the fragmented and underperforming regional model toward a structure that is more agile and responsive. SCE proposes to directly manage all aspects of MF ESA delivery, including both in-unit and common area measures. This approach eliminates the delays and inefficiencies associated with regional coordination and third-party oversight, allowing for faster decision-making, improved customer service, and better alignment with local housing characteristics and energy priorities.

Key Program Enhancements:

- **Integrated Service Delivery & Flexible Enrollment Pathways:** In-unit upgrades will be reintegrated under the ESA Program to eliminate fragmentation and offer consistent, equitable service. A dual enrollment pathway will allow both property owners and tenants to initiate participation, reducing barriers and expanding access. This approach allows services to reach households regardless of ownership structure or administrative capacity.
- **Data-Driven Geographic Targeting:** SCE will prioritize MF properties in underserved areas by using internal and public data to identify high-need communities and streamline eligibility through neighborhood-level income proxies.
- **SPOC Model**: SCE SPOCs will serve as dedicated liaisons, guiding participants through enrollment, assessment, and implementation. This model fosters trust, improves coordination, and supports integration with complementary programs and services.
- **Operational Improvement**s: SCE will leverage its existing IT systems for tracking and data collection, streamline procedures, and leverage and expand SCE's contractor network.
- **Policy Adjustments to Support Implementation**: SCE proposes to standardize MF copayments, and SCE proposes an update to the ESA definition of MF properties.

SCE has considered several lessons learned from the last program cycle, resulting in the key proposals described in Table IV-13 below.

## *Table IV-13*
## *Summary of SCE MF Proposals Based on Current Challenges and Lessons Learned*

| Regional 3rd Party Design Challenges | SCE Proposals | Desired Outcomes |
|---|---|---|
| SCE's MF sector (as a whole) is underserved. | Administer an SCE local MF Program, serving both MF buildings and tenants. | Increased agility to manage MF enrollments through the ESA Program and respond to the market, including customers and contractors. |
| Smaller Naturally Occurring Affordable Housing (NOAH) is underserved. | 1. Increase outreach and support NOAH Owners and Managers.<br>2. Develop a tenant-led entry path to whole building enrollments, when feasible. Ensure at minimum individual tenants are served. | 1. Increased MF enrollment numbers<br>2. Increased/balanced representation of NOAH and smaller MF buildings within ESA Program.<br>3. Increased in-unit/tenant enrollments. |
| Regional IT systems are limited, and MF data is unavailable. | 1. Use existing SCE ESA Program systems to collect local MF data.<br>2. Retire investments in SDG&E systems and outdated websites. | 1. Streamlined data source.<br>2. Reduced costs related to supporting regional systems and outdated websites. |
| Program delivery is fragmented. | 1. Utilize the Single Point of Contact (SPOC) model<br>2. Leverage SCE Contractor network<br>3. Include detached "bungalow" units within the MF definition and treat qualified customers through the ESA Program.<br>4. Dual enrollment pathway | 1. Improved customer experience with SCE SPOC support and increased contractor resources.<br>2. Increased enrollment and service to previously underserved MF "bungalow" and detached units. |
| Co-Payment requirements are not standardized across MF customers. | Remove co-pays for building owners for all MF ownership structures.<br><br>Do not require tenant co-pays. | 1. Reduce administrative complexities by standardizing procedures for all MF buildings and owners.<br>2. Reduce co-payment enrollment barriers for low-income customers. |
| Program administration is complex and bureaucratic. | Reduce steps in implementation process, less "approval" steps. | Streamlined enrollment and delivery process for customers and contractors. |

### (a) SCE's Local Administration Will Provide an Integrated Service Delivery and Flexible Enrollment Pathway

SCE is proposing a redesign of the MF energy efficiency strategy by integrating service delivery and establishing a flexible enrollment pathway that removes long-standing barriers to participation. Historically, the fragmentation between the ESA Main Program and the MFWB Program has created unnecessary hurdles for tenants seeking in-unit upgrades, often resulting in delayed or denied service due to owner non-participation or program processing constraints.

To address this challenge, SCE proposes a dual enrollment pathway that allows both tenants and property owners to initiate program participation. This dual enrollment approach mitigates customer exclusions that could result from administrative constraints. If a tenant initiates service, SCE will make every effort to engage the property owner to treat the entire building. However, if whole-building treatment is not feasible, SCE will proceed with approved in-unit upgrades, allowing equitable access and timely service delivery.

This integrated approach consolidates in-unit measures under one program, streamlining management and reporting, while enhancing customer experience. It aligns scopes of work with stakeholder authority and simplifies the customer journey. By removing unnecessary hurdles, SCE's strategy accelerates participation, improves equity, and delivers a more inclusive, responsive MF program model.

### (b) SCE's Local Administration Will Use Data-Driven Geographic Targeting to Advance Equity and Accelerate Multifamily Participation

SCE is proposing a data-driven geographic targeting strategy to direct MF program resources to communities with the greatest need. This approach leverages advanced analytics and public data tools to identify and automatically qualify MF properties located in areas with high concentrations of low-income households and provides insights on elevated energy burdens and aging or inefficient building stock. Leveraging tools such as CalEnviroScreen,[81] California Census,[82] and 3rd party segmentation data,[83] SCE will identify priority communities and tailor outreach, and measure packages based on building age, tenure, and fuel mix.

This targeted approach enables automatic qualification of MF properties using neighborhood-level income proxies and other approved methods, significantly reducing documentation requirements, and accelerating service delivery. This approach is consistent with Commission practices for ESA and MF targeting and helps underserved

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[81] CalEnviroScreen is a tool developed by the California Office of Environmental Health Hazard Assessment (OEHHA) that identifies communities most affected by pollution and other environmental hazards. By analyzing data on air quality, water quality, toxic releases, and other factors, CalEnviroScreen helps target low-income programs to areas with the highest environmental burdens. This ensures that resources are directed to communities most in need, improving health outcomes and promoting environmental justice.

[82] California Census data provides essential demographic, economic, and housing information about the state's population. This data supports identifying and targeting communities with high concentrations of low-income households. By analyzing income levels, housing conditions, and geographic distribution, the ESA program can design more effective and equitable initiatives, ensuring resources are allocated to those most in need.

[83] Third-party household segmentation tools are utilized to analyze demographic, socioeconomic, and technology adoption characteristics across diverse customer groups, including low-income households. Southern California Edison subscribes to these services to support program planning and outreach efforts.

communities receive timely and equitable access to energy-saving upgrades.

Additionally, SCE will establish a dedicated program pathway for NOAH properties, particularly those with 20 or fewer units. These properties, often excluded from traditional programs, house a significant share of income-qualified renters and face displacement risks.[84] SCE's offering will include direct-install packages and simplified eligibility processes so that NOAH residents benefit from meaningful upgrades.

By focusing on high-need geographies and underserved property types, SCE's proposal delivers multiple benefits: reduced energy burden, preserved affordability, accelerated participation, and meaningful energy savings. This strategy directly responds to equity gaps in the MF sector and supports statewide goals for energy efficiency, decarbonization, and housing stability.

**(c) SCE's Local Administration Will Expand and Enhance the SPOC Model for Multifamily Customer Engagement**

SCE proposes to expand and enhance its SPOC as a central feature of its locally administered MF ESA strategy. Building on the existing model already in place, as approved in D.21-06-015,[85] SCE will utilize SPOCs to deliver a seamless, customer-centric experience that improves

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[84] *See,* Unsubsidized Affordable Homes at Risk, 2024 Report, *available at* https://chpc.net/resources/california-naturally-occurring-affordable-homes-at-risk-2024/.

[85] *See,* D.21-06-015, p. 361; and OP 130" Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, and Southern California Gas Company's SPOC proposals are approved, with modifications to align key SPOC services. The Utilities' SPOC services must 1) offer benchmarking services (through EPA Portfolio Manager), 2) offer financial services, 3) be a "true one stop model" whereby a property owner, manager or tenant will rely on them to facilitate and coordinate program access, and 4) continue to offer on-bill financing to qualified deed-restricted multifamily properties."

program uptake, strengthens stakeholder relationships, and maximizes integration with complementary offerings.

Unlike third-party implemented models, SCE's SPOCs have direct access to customer data, utility systems, and program resources, which enables them to provide tailored support with speed, accuracy, and accountability. SPOCs serve as trusted liaisons, guiding property owners and tenants through every stage of the program, from initial outreach and eligibility verification to project completion. Outreach efforts will be culturally and linguistically tailored, delivered in partnership with local nonprofits, apartment associations, and housing advocates.

SCE's experience has shown that utility representation is often the supporting factor in whether property owners choose to participate. Many owners may not engage with contractors or implementers unless a utility representative is present, underscoring the credibility and trust that SCE brings to these interactions. SPOCs further strengthen relationships by assisting with billing inquiries, navigating utility services, and identifying opportunities for program layering.

To enhance program impact and support electrification readiness where appropriate, SPOCs will help property owners and operators evaluate complementary offerings from programs such as SOMAH,[86]

[86] Solar on Multifamily Affordable Housing (SOMAH) Program is a California initiative that provides financial incentives for installing solar energy systems on affordable housing properties. The program aims to reduce energy costs for low-income tenants and promote clean energy. It is administered by the California Public Utilities Commission (CPUC) and funded through the state's cap-and-trade program. Additional information is *available at* https://calsomah.org/.

SoCal REN Multifamily,[87] and TECH Clean California[88] while allowing for ESA to remain the single, streamlined entry point for qualifying customers. This coordination not only enhances the value proposition for participants but also supports broader decarbonization and affordability goals.

SPOCs will also play a proactive role in industry engagement by participating in trade associations, attending on-site meetings, and influencing decision-makers. Their presence supports long-term engagement and builds confidence in program offerings.

SCE's SPOC model reflects best practices for MF program delivery, emphasizing one-stop-shop designs and dedicated account management to reduce transaction costs, address split incentives, and support electrification readiness.[89] Expanding the SPOC role helps MF customers receive consistent, high-quality service that drives participation, deepens energy savings, and supports equitable decarbonization.

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[87] Southern California Regional Energy Network (SoCal REN) Multifamily Program provides energy efficiency upgrades and services to multifamily properties. The program aims to reduce energy consumption, lower utility bills, and improve the comfort and safety of residents in multifamily housing units. It focuses on serving hard-to-reach and underserved communities, ensuring equitable access to energy-saving measures. Additional information is *available at* https://socalren.org/multifamily.

[88] TECH Clean California is a statewide initiative aimed at accelerating the adoption of clean heating technologies in homes. The program provides incentives and support for the installation of heat pumps and other energy-efficient appliances, helping to reduce greenhouse gas emissions and improve energy efficiency. Additional information is *available at* https://techcleanca.com/incentives/multifamily-information/.

[89] Hynek, Don, Megan Levy, and Barbara Smith. "Follow the Money: Overcoming the Split Incentive for Effective Energy Efficiency Program Design in Multi-family Buildings." Wisconsin Division of Energy Services. This paper highlights the importance of minimizing the burden on property owners and managers, who are often risk-averse and focused on immediate returns, by designing energy efficiency programs where program staff handle costs, labor, and retrofit management. It emphasizes the value of marketing programs through contractors or intermediaries who can act as a single point of contact to engage property owners, ensure timely applications, and facilitate program participation. This approach is particularly effective in overcoming barriers like the split incentive and resistance to energy efficiency investments, *available at* https://www.aceee.org/files/proceedings/2012/data/papers/0193-000192.pdf.

### (d) SCE's Local Administration Would Address Naturally Occurring Affordable Housing

As illustrated in Table IV-11 above (see market overview), nearly seventy percent (70 percent) of low-income MF housing in SCE's territory is 100 or less units, whereas under regional MFWB administration, larger MF buildings with 100 or more units were the primary outreach targets. Unfortunately, with this approach, in the 2021-2026 program cycle, the opportunities to serve smaller buildings and NOAH have been missed. As such, SCE proposes administering a MF program that serves its diverse customers, many of whom live in smaller MF properties, including non-deed restricted naturally occurring affordable housing. 80 percent of MF buildings in SCE's territory are 20 or less units, and 35 percent of low-income MF units are in buildings with 20 units or less. These properties and their residents should not be neglected. SCE proposes to target and serve MF properties large and small, both deed-restricted and non-deed-restricted.

## (2) SCE Requests Copay Alignment and Flexibility Across Its ESA Program

D.21-06-015 requires co-pays from MF property owners when common area measures are installed.[90] This policy only applies to the MF segment of ESA-eligible housing. SCE proposes to discontinue this segmented copay requirement and instead implement a uniform copay policy across all MF property types. This uniform approach will promote fairness, simplify program administration, and support consistent expectations for property owners. More specifically, the

[90] D.21-06-015, p. 364.

current MFWB design includes a 50 percent copay for owners of qualified non-deed-restricted properties to receive common area measures. However, deed-restricted properties are not required to pay copays (this requirement was introduced as part of D.21-06-015).[91]

To align copays across MF building types in the 2028-2033 program cycle, SCE proposes to begin the next program cycle with no copays for either deed-restricted or non-deed restricted properties. This change will remove an inconsistency between co-pays for non-deed and the remainder of SCE's ESA Program (including deed restricted properties) and will result in reduced enrollment hurdles for non-deed restricted properties. Given underscored affordability priorities in other areas of this testimony, SCE requests flexibility to adjust the copay percentage as appropriate during the cycle if budget spend becomes disproportionate (for example, if copays are more than 25 percent of MF spend) as compared to costs associated with the number of MF units treated.[92], [93] SCE's proposal will align copay treatment with the rest of the ESA Program.

**(3) SCE Proposes to Expand Multifamily Definition to Include Detached and Semi-Detached Units**

In Southern California, MF housing takes many forms, including but not limited to garden style walk-ups, dingbats, and sites with multiple bungalows or duplexes. To be more inclusive of diverse MF housing stock, SCE proposes updating the definition of MF properties to include sites with five or more dwelling units under common ownership, regardless of structural configuration.

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[91] *See,* D.21-06-015; p.364 requires 50 percent copays for non-deed restricted properties but does not require the copay for deed restricted properties.

[92] To be evaluated on an annual basis.

[93] SCE has historically charged copays to high-cost measures, such as cooling systems, to support affordability and equitable access.

Currently, MF properties are defined as buildings with five or more dwelling units, where eligible units share a common wall, ceiling, or floor with at least one other unit. This definition excludes certain community arrangements, such as bungalows or other detached units on a single property, which under current program rules are classified as single-family despite operating as MF communities. Expanding the definition would unlock efficiency benefits and support common area upgrades that are currently inaccessible under the existing classification. By revising the MF definition, SCE will be better able to serve bungalow units, which represent a portion of Southern California's diverse MF housing stock.

**(4) Operational Improvements**

**(a) SCE's Local Administration Will Use SCE's Existing Systems to Collect Data**

By end of 2025, SCE will have contributed an estimated total of $960,935 toward SDG&E's administrative MF costs.[94] However, in the 2028-2033 cycle, SCE proposes using its existing data system for streamlined enrollments and tracking, improving contractors' experience, and reducing ad hoc information systems costs. The use of SCE's database should also help address data gaps.[95] To clarify, the third-party regional administrator supports program operations through the lead utility's workflow database. The lead utility is then tasked with generating reports,

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[94] An annual true-up will be conducted and may result in a refund for any unspent administrative funds, as well as unspent dollars allocated to program costs.

[95] To date, SCE has not received verified program data from the lead utility, SDGE. The data provided by SDGE consists solely of monthly reports prepared by the program implementer, RHA. These reports have not been validated by SDGE and therefore could not be used for official reporting purposes.

disaggregating data by participating IOUs, and distributing information accordingly. Migrating to an SCE managed database would enable direct data access and address current reporting gaps.

SCE will leverage existing predictive MF models[96] and income proxies[97] to support targeted outreach to MF buildings for whole building treatment. The predictive dashboard incorporates counties' income data, utility advanced metering infrastructure (AMI) data, and assessors' owner data. SCE has information on deed-restricted and non-deed-restricted properties that may be eligible for the ESA program.

**(b) SCE Proposes to Retire Investments in External Systems and Websites**

Given the proposed targeting and outreach approach described above, as well as its SPOC model, SCE proposes retirement of the Multifamily Central Portal (MCP) to generate MF leads and applications. D.21-06-015 ordered IOUs to create an online statewide multifamily application portal, called the Multifamily Central Portal (MCP) funded at up to $500,000 statewide.[98] However, based on historical performance of the MCP, SCE finds that sustaining the portal would likely result in

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[96] SCE partners with a 3rd party that provides data-driven analytics. They aggregate property-level information for multifamily housing to assess energy use patterns, building characteristics, and retrofit potential. They combine utility meter data, spatial matching, and building attributes to benchmark energy performance and identify opportunities for efficiency improvements. This methodology supports program planning and equitable outreach by highlighting segments with higher energy burdens and informing targeted interventions for underserved housing sectors.

[97] SCE partners with a 3rd party that hosts a geo-demographic segmentation system that classifies households into distinct groups based on factors such as income, education, lifestyle, and consumer behavior. It uses publicly available data and statistical modeling to identify patterns and similarities among households, enabling analysis of demographic trends and market characteristics. This approach supports program design, outreach strategies, and eligibility determinations.

[98] D.21-06-016, OPs 126-127, p. 503.

minimal impact on future MF leads and applications[99] compared to targeted outreach and customer management under the SPOC model. Therefore, SCE does not request a budget to operate the MCP in 2028-2033.

### (c) Leverage and Expand SCE Contractor Network

SCE is well positioned to mobilize its contractor network to begin enrolling and serving smaller MF buildings and tenants shortly after program launch. This early mobilization enables immediate impact while SCE simultaneously expands its contractor pool to support growth, address specialized needs, and serve larger MF properties.

To meet evolving program demands, SCE proposes to implement a strategic recruitment and onboarding plan focused on contractors with demonstrated expertise working with larger MF buildings and region-specific capabilities. This strategy includes leveraging existing ESA contractors and those engaged in or trained through initiatives such as TECH Clean California and SoCal REN MF, to support the integration of qualified professionals.

As outlined in Section VI.A.2 of this Exhibit SCE-02, SCE proposes a new contractor framework designed to streamline recruitment, accelerate onboarding, and scale operations efficiently. SCE will prioritize qualified contractors with demonstrated MF experience with an emphasis on engaging local firms and disadvantaged business enterprises (DBEs) to drive economic benefits in the communities served.

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[99] In 2025, MCP recorded 84 total records within the SCE service territory, whereas SCE is proposing to serve nearly 15,000 MF units a year in the 2028-2033 program cycle.

Through enhanced contract oversight, SCE anticipates improved coordination in scheduling, standardized scopes of work, and improved quality assurance protocols. This approach supports continuous improvement throughout the program cycle and expansion of MF segment services responsively and effectively where they are needed most.

**e) Proposed Transition Timeline and Coordination**

If the Commission approves a locally administered MF approach, SCE requests that SDG&E begin an orderly and scheduled ramp down of its MFWB activities in SCE's service territory. SCE will concurrently initiate ramp-up activities for its locally administered, utility-led MF ESA approach. This coordinated transition will minimize customer confusion, avoid duplicative infrastructure, and support continuity of service for income-qualified households.

At the start of the 2028–2033 program cycle and consistent with SCE's local administrative proposal described in this section, SCE will immediately launch a bottom-up strategy focused on in-unit treatments and small MF properties, including NOAH. Leveraging the existing ESA contractor base and infrastructure allows SCE to deliver direct benefits to tenants without delay, as these properties typically feature appliances and equipment similar to those in single-family homes. In line with SCE's proposed contracting strategy (see Section VI.A.2 of this Exhibit SCE-02), SCE will also develop the capacity to serve larger MF properties by recruiting contractors with expertise in common-area and central systems and by finalizing protocols for whole-building assessments and program layering opportunities as described in Section IV.B.2 of this Exhibit SCE-02. This phased approach provides for a more seamless transition, accelerates early service delivery to high-need communities, and positions SCE to implement an equitable MF strategy aligned with SCE's proposal.

### f) Request CPUC Action to Approve SCE Local Multifamily Program and Ramp Down the Regional MFWB Program

SCE respectfully requests that the Commission approve this proposal and authorize the transition to a locally administered, utility-led MF ESA model for the 2028–2033 program cycle. These actions will enable SCE to deliver a streamlined, equitable, and scalable utility-led model that accelerates participation and advances California's affordability and climate goals while supporting meaningful benefits for low-income and disadvantaged communities. To enable a timely and effective transition to a locally administered, utility-led MF ESA model, SCE respectfully requests that the CPUC:

- Approve SCE's proposal to replace the current regional third-party MFWB model with an SCE administered ESA MF strategy for the 2028–2033 program cycle, supporting a streamlined, equitable, and customer-centric delivery
- Authorize SCE to manage all aspects of MF ESA implementation within its service territory, including in-unit and common-area measures, and to integrate these services under the ESA Main program using a utility-led SPOC model to enhance trust, improve coordination, and simplify navigation for property owners and tenants
- Approve policy and design enhancements that reduce barriers and promote equity, including:
  - Standardized copay structures across MF properties, so that neither deed restricted, nor non-deed restricted properties are required to copay on ESA measures or services
  - Revise MF definition to include detached and semi-detached units under common ownership
  - Consolidate in-unit work under ESA

  - Retire the Multifamily Central Portal
- Acknowledge and support targeted strategies that advance equity and affordability, including:
  - A dual engagement strategy to serve both property owners and tenants
  - A dedicated program pathway for NOAH properties, with simplified eligibility and direct-install offerings
  - Data-driven geographic targeting using data sources such as CalEnviroScreen, California Census and 3rd party segmentation data to prioritize disadvantaged and high-burden communities
- Direct SDG&E to initiate an orderly and scheduled ramp-down of MFWB activities in SCE's service territory upon the effective date of the Commission's decision and require SCE and SDG&E to submit a joint Tier 1 advice letter within 30 days outlining transition milestones, data-sharing protocols, customer communication strategies, and contractor onboarding plans.

## C. Measure Prioritization and Expansion

### 1. Overview

In the 2028-2033 program cycle, SCE will refine its approach to measure selection and prioritization within the ESA Program to better align with customer needs, building decarbonization and equity objectives. SCE proposes shifting from a "deeper energy savings" approach to a framework focused on "meaningful energy savings," defined as measures that deliver benefits such as lower energy bills, improved comfort and safety, or enhanced long-term energy resilience.

To enhance customer benefits, SCE will deploy measures using a sequenced approach that improves customer value. Core EE measures (e.g., appliances like refrigerators, pool pumps,

and evaporative coolers) will be installed prior to the installation of electrification measures. Electrification measures will be considered only when technically appropriate, based on a comprehensive home assessment, bill and rate analysis, and confirmation of customer readiness.[100]

Additionally, SCE proposes to expand HVAC offerings beyond climate zones 13-15 to address the increasing risks of extreme heat and climate variability. This proposal includes providing cooling measures such as HP HVAC systems and portable air conditioners to customers outside of traditionally targeted hot zones. Expanding access to these measures will improve HCS outcomes and support climate resilience for vulnerable populations.

By redefining success around tangible customer outcomes, the ESA Program will deliver more meaningful benefits to California's most vulnerable households while advancing Commission priorities.

### 2. SCE Proposes to Expand Building Electrification Measures

In this section, SCE details its plan to expand its measure offerings in the ESA Program for the 2028-2033 cycle, to include the following:

- Expansion of heat pump offerings, integration of induction cooking appliances, and infrastructure upgrades for affordability and resilience
- Transition of BE Pilot learnings into ESA for scalable, equitable delivery

SCE proposes expanding its ESA Program offerings to include other BE measures. This proposal builds on the success of the ESA BE Pilot and aims to deliver targeted retrofits to low-income households, including those in single-family, mobile/manufactured, and MF homes. By integrating HP technologies, induction cooking appliances, and infrastructure upgrades, SCE seeks to improve energy affordability, health outcomes, and climate resilience. The proposal also

[100] Historically prioritized basic measures like lighting and power strips will be de-emphasized in favor of installations that deliver substantial and meaningful energy savings

aligns with California's decarbonization goals and CPUC directives, offering a scalable model for equitable clean energy access.

**a) Background**

The ESA Program is a long-standing program which improves energy affordability for low-income customers by providing a variety of energy efficiency measures and services, including weatherization, lighting, refrigerators, HVAC, and other equipment. Historically, the ESA Program focused on electric-only savings opportunities (primarily like-to-like, electric-to-electric retrofits). However, in D.21-06-015, the Commission authorized SCE's BE Pilot, which is designed to reduce the impacts of climate change, improve public health, and advance environmental equity, to replace combustion-based appliances.[101] The pilot complements SCE's other ESA offerings by providing comprehensive retrofit packages that consist of electric HPWHs, HP HVAC systems, induction cooking appliances, and high-efficient electric clothes dryer installations, along with necessary electrical and plumbing upgrades. These retrofits go beyond basic upgrades and were selected based on rate and bill analyses and their potential to deliver meaningful energy savings, GHG reductions, and health benefits.

While the pilot experienced a slower-than-expected ramp-up, it has since developed a stable pipeline of projects and has gained momentum. More than 375 low-income homes[102] have received comprehensive BE retrofits, with an additional 546 homes in various stages of implementation.[103] In 2024 and 2025, SCE made significant strides in advancing BE for income-qualified customers. For the current program cycle,

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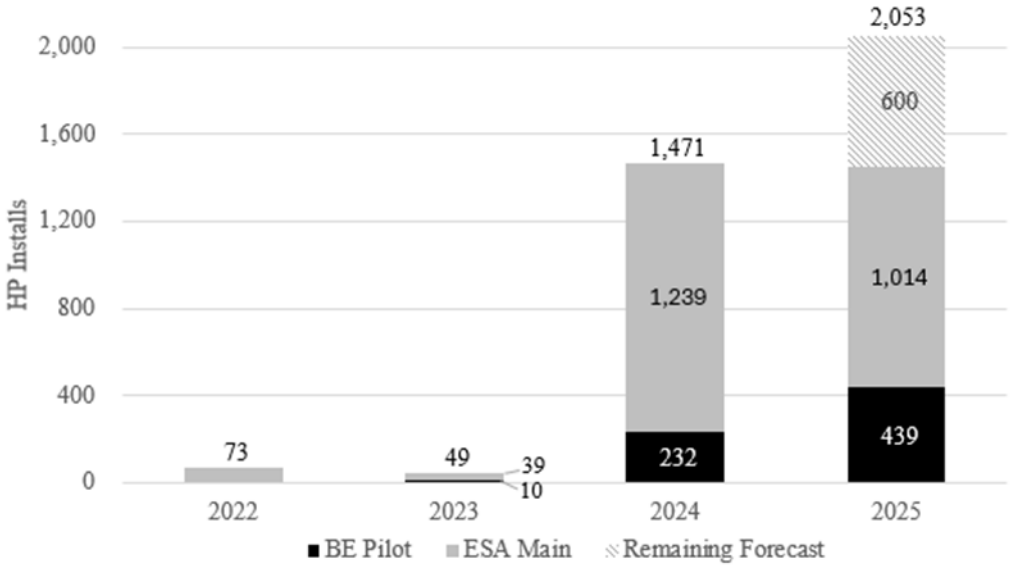
[101] *See* D.21-06-015, p. 386.

[102] Includes all projects completed since the BE Pilot launch, including those approved for payment and those pending review as of August 2025.

[103] Results reflect ongoing implementation as documented in SCE's August 2025 ESA Monthly Report narrative submitted to the CPUC. Project stages include Enrollment (e.g., assessment and scope development), Installation in progress (e.g., equipment procurement, permitting, electrical upgrades), and Installation complete or pending final documentation (e.g., Title 24 compliance, permit inspections).

SCE installed 3,046 space and water HPs,[104] which demonstrates an improved pace of technology adoption and customer acceptance of electrification (see **Error! Reference source not found.** below).

***Figure IV-12***
***ESA Space and Water Heat Pump Installation***




As evidenced by a steady increase in enrollments, the pilot has demonstrated success in overcoming early barriers to customer participation. Initial apprehension around perceived operating costs of electrification was addressed through targeted educational materials and community workshops. SCE refined its engagement strategy to emphasize health, comfort, and safety, while leveraging a bill and rate analysis tool to inform customers of potential savings and to empower informed decisions; see Section IV.A.4 of this Exhibit SCE-02 for more details. These efforts have led to increased customer trust, satisfaction, and willingness to participate.

[104] Includes all physical space and water heat pump installations completed under the ESA BE Pilot and ESA Main program from 2022 through August 31, 2025. An additional 600 HP installations are forecasted by year-end 2025, bringing the projected installations total to 3,646 heat pumps.

**b) SCE's Proposal Summary**

In the 2028-2033 program cycle, SCE proposes to expand its BE offerings into the ESA Program, which will provide additional energy and cost savings measures for low-income customers and accelerate progress toward California's climate and equity goals. This expansion is designed to address the unique challenges faced by vulnerable households[105] (including those in single-family homes, manufactured housing, and MF buildings) by providing targeted electrification retrofits that improve energy affordability, health, and resilience.

SCE proposes closing out its BE Pilot in 2027 and incorporating lessons learned into the 2028-2033 ESA Program, including mobile/manufactured homes (see Section IV.B.3 of this Exhibit SCE-02 for more details), and MF buildings (see Section IV.B.4 of this Exhibit SCE-02 for more details). SCE anticipates a smooth transition because the BE Pilot is currently leveraging many of the ESA contractors to execute BE projects.[106] Moreover, SCE proposes to streamline the contracting process to facilitate recruitment and contracting of additional installation contractors, as needed, to improve the delivery of services to SCE's customers.

**c) Rationale**

**(1) SCE's BE Pilot has Proven Its Benefits and BE Measures Should Be Offered as Part of SCE's ESA Program**

The BE Pilot goals were "… to provide cleaner, more affordable energy options to low-income single family residential customers located in DACs within SCE service territory, and to continue gathering data needed to refine SCE's

[105] Low-income households often face disproportionately high energy burdens, limiting their ability to invest in efficiency upgrades. Even with incentives, significant barriers such as health and safety issues remain. Additionally, outdated wiring or structural deficiencies add complexity and cost.

[106] Contingent on SCE's 2027 Bridge Funding Application approval and timing (A.25-06.025).

efforts to offer clean, affordable energy options to residents of DACs."[107] SCE's BE Pilot has achieved this goal by delivering comprehensive electrification retrofits to more than 375 low-income homes,[108] resulting in over 3.1 million[109] claimable kWh savings. This success reflects growing customer acceptance with a stable pipeline of projects. As such and as described below, SCE proposes to transition its BE Pilot learnings, processes, and approach into the overall ESA Program. By scaling successful elements of the pilot and integrating them into a broader, streamlined delivery model, SCE can accelerate progress toward California's climate goals while improving affordability and HCS outcomes for low-income households.

**(2) BE Measures Will Support Low Income Households**

The unique challenges that low-income households face often include living in older buildings with aging, non-efficient appliances and inadequate electrical infrastructure. These conditions contribute to higher energy bills, increased exposure to indoor air pollutants, and limited access to clean energy technologies. By integrating BE offerings into ESA, SCE can leverage existing program infrastructure to deliver comprehensive retrofit solutions that include HP installations, infrastructure upgrades (e.g., panel upgrades, sub-panels, socket adaptors, etc.), and other electrification measures. This approach aligns with California's broader decarbonization strategy so that disadvantaged communities are not left behind in the clean energy transition. Expanding BE measures into ESA is important for several reasons:

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[107] *See*, A.19-11-003, Exhibit SCE-02, p. 108.

[108] Includes all projects completed since the BE Pilot launch, including those approved for payment and those pending review as of August 2025.

[109] *See,* SCE 2023 Annual Report, SCE 2024 Annual Report, and SCE August 2025 Monthly Report (filed in September 2025).

- **Equitable Access to Electrification:** Electrification retrofits can significantly reduce energy costs and improve indoor air quality for low-income households. ESA's existing eligibility framework allows SCE to target customers who are most in need of support.[110]
- **Climate Resilience:** HPs provide both heating and cooling, which is increasingly critical as climate change drives more extreme temperatures. Electrification also reduces reliance on fossil fuels, improving air quality and public health.[111], [112], [113]
- **Scalable Program Delivery:** ESA's established delivery mechanisms and customer relationships provide a strong foundation for scaling BE retrofits efficiently and equitably. Introducing BE measures into ESA allows SCE to leverage already existing program infrastructure.

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[110] SCE partnered with TECH Clean California on the Customer Targeting Pilot to develop an approach to enhance the benefits of HP electrification. By leveraging meter-based consumption data and customer propensity models, the pilot identified high-value customer segments where electrification offers the greatest impact. The initiative also tested targeted outreach methods to determine the most effective strategies for driving customer engagement and adoption of HP technologies; additional information *available at* https://techcleanca.com/pilots/strategic-customer-targeting/.

[111] HPs, powered by low-emissions electricity, are a central technology in the transition to sustainable heating and cooling. They are 3–5 times more efficient than gas boilers and can provide both heating and cooling, making them especially valuable as climate change drives more extreme temperatures. Their deployment reduces greenhouse gas emissions and enhances energy security, even in cold climates. For more information see, International Energy Agency (IEA) – The Future of Heat Pumps; *available at* https://www.iea.org/reports/the-future-of-heat-pumps.

[112] MIT research shows that widespread adoption of high-efficiency HPs, combined with home weatherization, can significantly reduce carbon emissions and lower overall energy system costs. Electrifying residential heating is essential for decarbonizing the building sector and improving resilience to climate impacts. For more information see, MIT Climate Portal – Reducing Carbon Emissions from Residential Heating; *available at* https://climate.mit.edu/posts/reducing-carbon-emissions-residential-heating-pathway-forward.

[113] Electrifying U.S. homes by replacing fossil-fuel appliances with electric alternatives like HPs could prevent 3,400 premature deaths, 220,000 asthma attacks, and yield $40 billion in annual health benefits. This transition significantly reduces outdoor air pollution, especially fine particulate matter (PM2.5), improving public health and air quality. For more information see, Rewiring America – Breathe Easy Report; *available at* https://www.rewiringamerica.org/research/home-electrification-health-benefits.

- **Manufactured and Mobile Homes:** These types of homes are a vital source of affordable housing but often lag in energy efficiency. Electrification retrofits can provide benefits otherwise unavailable to SCE's customers living in them. See Section IV.B.3 in this Exhibit SCE-02 for more details.
- **Multifamily Buildings:** SCE's MF approach will include tailored solutions and technical assistance to overcome participation barriers and provide equitable access to clean energy technologies that would otherwise generally not be available to customers living in MF buildings. See Section IV.B.4 in this Exhibit SCE-02 for more details.

**d) SCE Requests Approval to Include BE Measures in its ESA Measure Portfolio**

Based on the information provided above, SCE requests the Commission approve SCE's proposal to expand BE measures as part of SCE's ESA Program during the 2028-2033 program cycle, with budget incorporated into the overall program funding request. SCE's approach aligns with CPUC directives and California's decarbonization goals by minimizing infrastructure costs through strategies such as panel optimization and smart load management. To advance these objectives, SCE will seek to align its BE efforts with related proceedings and initiatives, including Building Decarbonization Phase 4 Track A[114], which emphasizes avoiding unnecessary upgrades; the Distributed Energy Resources Action Plan 2.0,[115] promoting load flexibility and demand response; and the

[114] California Public Utilities Commission (CPUC), Decision D.25-06-034, Building Decarbonization Phase 4 Track A.

[115] CPUC, Distributed Energy Resources Action Plan 2.0, *available at* https://www.cpuc.ca.gov/about-cpuc/divisions/energy-division/der-action-plan.

CEC EPIC Grant Project EPC-24-005,[116] which develops open-source tools for cost-effective electrification planning. Where upgrades are unavoidable, SCE will pursue alternate funding sources such as the Charge Ready Home Program authorized by Resolution E-5236 and funded through LCFS credits, offering full cost coverage for income-qualified customers.[117] If approved, SCE will align its BE offerings with these efforts to reduce barriers and deliver equitable access to clean energy technologies for low-income households.

[116] California Energy Commission (CEC), EPIC Grant Project EPC-24-005, details *available at* https://www.energy.ca.gov/programs-and-topics/programs/electric-program-investment-charge-epic.

[117] CPUC, Resolution E-5236, authorizing Charge Ready Home Program funded by LCFS credit proceeds.

### 3. SCE Proposes to Expand HVAC Offerings Beyond Climate Zones 13-15

In this section, SCE outlines its proposal to broaden HVAC measure availability beyond historically targeted extreme heat zones to address evolving climate and customer health needs during the 2028–2033 program cycle. Specifically, SCE proposes:

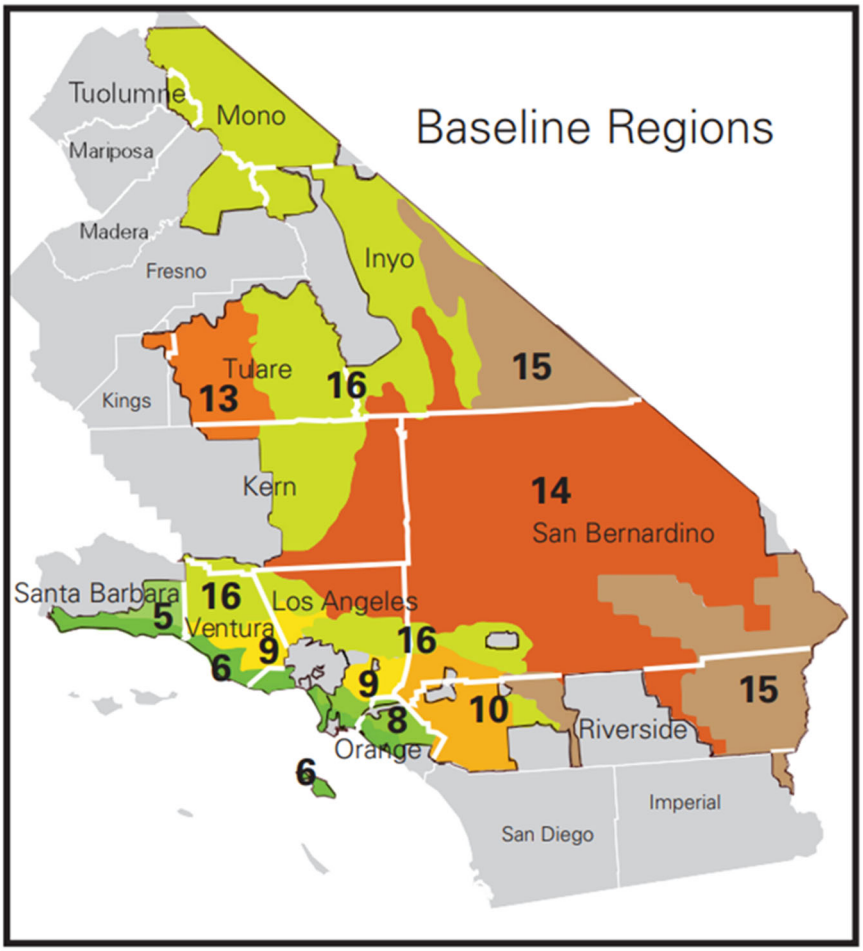
- Expanding HVAC offerings across its service area to additional climate zones (CZ 6, 8-10, and 16) to reflect rising heat risks and improve customer resilience
- Offering high-efficiency heat pump HVAC systems to deliver greater energy and bill savings
- Replacing non-operational HVAC units to restore thermal comfort and mitigate heat-related health hazards for vulnerable households

This expansion reflects SCE's commitment to improving HCS and affordability for income-qualified customers while supporting climate resilience and decarbonization objectives.

#### a) Background and Rationale

Historically, SCE's ESA Program has only offered minimum code-compliant HVAC systems, and has limited installations to climate zones 13-15, where extreme heat conditions were most prevalent. See Figure IV-13 below.

***Figure IV-13***
***SCE Territory Climate Zones***




However, SCE's service area is projected to experience higher temperatures and more extreme heat events in the future, and as a result, cooling is becoming a greater

necessity for HCS[118] beyond climate zones 13-15.[119] This observation is supported by the Impact Evaluation for Program Years 2015-2017.[120] To address this need, SCE proposes three key changes: expanding HVAC offerings across its service area to provide cooling measures for more customers [121], introducing high-efficiency heat pump systems to deliver greater energy savings and improved comfort, and replacing non-operational units to restore cooling functionality and reduce heat-related health risks.[122] These enhancements will improve customer well-being, reduce the potential for heat-related illnesses, and align ESA with California's climate resilience objectives.

**b) SCE's BE Pilot has Demonstrated Success in Climate Zones 6, 8-10 and 16 Through the Installation of Higher Efficiency Heat Pump HVAC Units**

SCE's BE Pilot provides compelling evidence supporting the expansion of HVAC measures beyond traditional hot climate zones. As shown in Table IV-14, 54 percent[123] of heat pump HVAC installations under the pilot occurred outside climate zones 13–15, demonstrating both technical feasibility and strong customer acceptance in non-

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118 According to Dr. Eisenman is a professor of medicine at the David Geffen School of Medicine at UCLA Health, "On average, extreme heat events lead to more deaths each year than all other weather events combined." https://www.uclahealth.org/news/article/map-extreme-heat-california-health.

119 The trend of warming and increased cooling days across SCE territory has continued, and when modeling 2050 extreme heat scenarios, even the typically cooler coastal city of Goleta could have up to 6 days of extreme heat (in a +2 degree Celsius scenario).

120 DNV-GL. *Energy Savings Assistance (ESA) Program Impact Evaluation: Program Years 2015-2017.* Prepared for the CA IOUs and CPUC ED. p. 23. April 26, 2019. The study indicates that over the evaluation period, modeled cooling degree days over typical meteorological days show CZ 6-10 with more observed cooling days than "typical". Available at https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fpda.energydataweb.com%2Fapi%2Fview%2F2161%2FESA%2520Impact%2520Evaluation%2520-%2520DRAFT%2520-%2520March%252029%2520Public%2520Posting.docx&wdOrigin=BROWSELINK.

121 In the 2028-2033 program cycle moderate climate zones 6,8,9,10, and16 are generally as cost effectiveness to serve as hotter climate zones 13-15.

122 Mapping the harms of extreme heat in California-UCLA Heat Maps, "Heat can cause problems such as: heart attacks, strokes, respiratory illnesses, mental health problems, and accidents.", *available at* https://www.uclahealth.org/news/article/map-extreme-heat-california-health.

123 54% = 1% + 10% + 10% + 32% + 1% (from Table IV-14).

traditional zones. These installations delivered energy savings and improved comfort, validating the need for broader deployment.

***Table IV-14***
***BE Pilot Demonstrated Energy Savings in Non-Traditional Climate Zones – HVAC Installations as of August 2025***

| Climate Zone | HVAC Quantity | Climate Zones % | SEER >+18 |
|---|---|---|---|
| 6 | 3 | 1% | 33% |
| 8 | 48 | 10% | 79% |
| 9 | 47 | 10% | 66% |
| 10 | 150 | 32% | 65% |
| 13* | 166 | 35% | 95% |
| 14* | 36 | 8% | 67% |
| 15* | 16 | 3% | 44% |
| 16 | 4 | 1% | 100% |
| **Total** | **470** | **100%** | **N/A** |

* Indicates current traditional climate zones in which ESA installs HVACs.

The pilot also revealed that customers in these zones face similar challenges to those in hotter regions, including aging HVAC equipment and limited access to efficient cooling technologies. By leveraging lessons learned such as streamlined contractor engagement, targeted outreach, and bill impact education, SCE can scale HVAC offerings effectively across additional zones. Importantly, the pilot confirmed that high-efficiency heat pump systems provide measurable energy savings and enhanced thermal comfort, reinforcing their inclusion in ESA's measure portfolio.

**c) <u>SCE Requests Approval to Expand HVAC Measures Across Its Service Area</u>**

SCE proposes to integrate high-efficiency heat pump HVAC systems into ESA's measure portfolio for all climate zones, while continuing to prioritize installations in hotter climate zones 13-15. At the same time, these measures will also be available to

low-income households with non-operational units and those most vulnerable to heat-related health risks.

This approach enhances HCS by providing reliable cooling that mitigates heat stress and associated medical complications, particularly for seniors and medically sensitive customers. High-efficiency heat pumps will deliver higher energy savings compared to older systems, lowering utility bills and supporting long-term affordability. Electrifying HVAC systems also advances California's climate goals by reducing reliance on fossil fuels, cutting greenhouse gas emissions, and improving air quality. Through this effort, SCE aims to help customers experience improved comfort, reduced energy costs, and greater resilience to extreme heat events.

**d) Budget and Alignment with Commission Objectives**

The budget for expanded HVAC measures is included in SCE's overall ESA funding request, accounting for incremental costs associated with higher efficiency systems [124] and for installations in new climate zones. SCE's proposed measure mix and measure budget will enable SCE to support this focused change.[125] This proposal aligns with CPUC directives on equity, decarbonization, and climate resilience, helping low-income households receive comprehensive solutions to adapt to changing environmental conditions.

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[124] The ESA Program has only offered code baseline equipment in previous cycles; the use of high efficiency HVAC equipment will increase costs.

[125] SCE maintains the flexibility to fund shift within program years and the program cycle, and between program categories. *See* Section III.B.2 Exhibit SCE-02 for details on SCE's fund shifting proposals.

# V.

# MARKETING, EDUCATION AND OUTREACH

SCE's proposed 2028-2033 ESA Program balances the importance of installing energy-saving measures that improve the health, safety, and comfort of the home with providing customized, personalized, and actionable education that inspires customers to adopt and sustain energy management behaviors. ESA's proposed marketing and outreach strategy focuses on building trust, increasing participation, and helping customers understand the value of clean energy solutions. As described below, SCE's proposed Marketing, Education and Outreach (ME&O) approach was designed to support key ESA Program strategies, including providing a customer-centric implementation experience and supporting the adoption of BE measures. Other key ESA ME&O elements include the following:

- Simplified, culturally relevant messaging that explains the "why" behind electrification and energy efficiency
- Targeted outreach to high-need segments, including disadvantaged communities
- Use of trusted messengers and community-based organizations (CBOs) to increase reach and credibility
- Use data analytics to tailor outreach based on customer stage (e.g., awareness, interest, action)[126]
- Highlight health, comfort, and financial benefits in messaging

## A. ESA ME&O Strategies

This section describes SCE's ME&O strategies for the 2028-2033 cycle. SCE proposes the following:

- Align ME&O with Customer-Centric Program Implementation Framework

[126] Awareness: The customer learns that ESA offers free energy-saving upgrades to help reduce utility bills.
Interest: The customer explores ESA benefits, eligibility requirements, and how the program can improve home comfort.
Action: The customer applies for ESA by acting and applying online, calls phone center etc.

- Create and release BE tailored messaging based on data-driven targeting criteria

Consistent with ESA Program strategy and proposals discussed previously in this Exhibit, SCE developed key ME&O strategies which are further discussed below: (1) provide ME&O to support the customer-centric implementation which will position ESA as an entry point for low-income customers to be aware of and enroll in other rates and programs, and (2) incorporate BE into the ESA ME&O approach and tactics.

### 1. Provide Customer Centric ME&O to Position ESA as an Entry Point for Low-Income Customers to be Aware of and Enroll in Other Rates and Programs

As discussed earlier in Section IV.B.2 of this Exhibit SCE-02, SCE is proposing a unified, customer-centric delivery model for the 2028–2033 ESA Program that will aim to streamline all income-qualified and equity-focused offerings into a single, cohesive experience. This approach seeks to position ESA as the central access point for program enrollment and engagement for low-income customers seeking energy efficiency, electrification, rate optimization, health and safety improvements. This approach reflects an evolution in how SCE engages low-income customers, moving from fragmented program interactions to a holistic, responsive, and scalable service model.

Historically, low-income customers have engaged with programs like ESA, CARE/FERA, and Demand Response (DR) through siloed channels, each with its own branding, enrollment process, and delivery model. This fragmented structure has led to inconsistent customer experiences, duplicated outreach efforts, and underutilization of available benefits. To address this inefficiency, SCE will enhance and expand its messaging and cross-promotions to other rates and programs.

For potential ESA customers, SCE will continue to enhance the ESA messaging and promotions to better integrate with CARE/FERA, and explore messaging coordination with other programs (e.g., DR and Time-Of-Use (TOU) rates). This approach will include bundled

messaging, integrated communication journeys and cross-promotions where appropriate.[127] For example, by leveraging customer profile data, SCE can identify potential ESA customers with HVAC units that are not currently enrolled in SCE's A/C cycling program, SCE can provide information about enrolling in the Summer Discount Program (SDP).

### 2. Incorporate Building Electrification into ME&O Approach and Tactics

As discussed earlier, SCE is proposing to incorporate BE measures into the ESA Program. In the previous cycle, SCE developed and managed its BE Pilot which installed BE measures to convert space and water heating systems from natural gas to electric HPs to reduce energy costs and greenhouse gas emissions. Since its launch in 2023, the BE Pilot has contributed over 2.8 million kwh savings.[128] Given the success of the BE Pilot and as described earlier in Section IV.A.4 of this Exhibit SCE-02, SCE proposes to leverage the BE Pilot lessons learned and processes and include measures within the ESA Program during the 2028-2033 program cycle.

To effectively support ESA BE measures, SCE proposes a tailored approach to educate customers on electrification measures, potential benefits, and the enrollment/installation processes. This BE-tailored approach will require updated tactics, campaigns, and updates to existing materials so that customers are well-informed and engaged.

To support this strategy, SCE plans to develop and distribute BE educational materials and incorporate targeted BE messaging into its campaigns and communications. Tactics may include brochures, videos, online resources, and SCE.com content updates. As executed in the BE Pilot, SCE plans to provide BE-specific contractor training materials, training, and other

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[127] SCE will leverage its data-driven framework and automated customer journeys to support this strategy. Specifically, SCE will use enhanced targeting with automated propensity modeling and automated personalized communications to (1) identify customer program and rate enrollment status, (2) forecast individual customer propensities to potentially enrolling in other programs/rates, and (3) develop automated personalized messaging based on individual customer enrolment status and propensity scores. See Section VI.B. SCE-02 for more information.

[128] *See*, SCE 2023 Annual Report, SCE 2024 Annual Report and September SCE 2025 Monthly Report.

collateral assets so that contractors are properly educated when speaking to customers. SCE also plans to develop community outreach campaigns for existing customers who may also benefit from BE measures.

## B. Data-Driven Framework

In this section, SCE describes the benefits of data modeling to enhance marketing effectiveness and desired outcomes. For the 2028-2033 cycle, SCE plans the following:

- Implement enhanced data analytics to optimize ME&O campaigns
- Collect customer lifecycle data (at all stages) to customize messaging at any point in the journey
- Leverage data insights to provide tailored messaging based on customer attributes and location on journey

Adopting an enhanced data-driven framework is crucial for optimizing ESA ME&O efforts, and implementing such a framework will enable personalized communications, optimize campaign performance, and ultimately drive higher engagement and enrollments in the program more efficiently. These components include efforts to streamline data collection, enhance targeting and automated propensity modeling, and automate personalized communications.

SCE plans to streamline data gathering from various sources (internal and external) and enhance the utilization of marketing technologies to improve targeting, outreach efforts, and reporting to optimize campaigns. In addition, by using advanced data analytics, machine learning, and propensity modeling, SCE plans to enhance and scale targeting efforts to identify and reach customers who are most likely to enroll in the ESA Program based on shared data characteristics. SCE expects to continue to enhance and improve its propensity model by continuing to streamline data, modify based on changing program requirements, and analyze customer data to identify areas to improve engagement.

In addition, SCE plans to use customer data captured throughout their lifecycle, starting as a new customer and leveraging data analytics and marketing automaton technologies to develop personalized, sequential messaging that will help to guide customers. As customers take action and enroll in various

programs to develop customer profile segments, SCE will activate targeted lead nurturing campaigns that 1) identify other available IQP and beneficial programs, 2) provide relevant information (e.g. enrollment information, FAQs, resources), and 3) encourage customers to move the next phase of their IQP journey through to enrollment to maximize their savings. Furthermore, to support the customer-centric program implementation framework and BE measures described previously, SCE plans to utilize customer data to recommend the most relevant programs or services (including BE measures) to customers based on their journey and previous interactions, leveraging data insights, propensity modeling and user engagement.

## C. Customer Segmentation and Targeting

This section describes SCE's approach to customer segmentation and how it will optimize targeting to yield desired results. For the 2028-2033 cycle, SCE plans the following:

- Evolve customer segmentation to include attributes associated with life stages
- Leverage geo-targeting to focus ME&O and align with contractor presence and their lead generation efforts

To effectively reach and engage with customers, SCE will evolve current segmentation approaches to include other approaches such as developing customer segments based on various life stages and circumstances that may influence the need for affordable energy options (e.g., new families, college students, job seekers, recently moved) that may have customers seeking or in need of affordable options. In addition to enhanced data analytics, machine learning, and propensity modeling, SCE plans to implement geo-targeting techniques to assist contractors in need of leads for all measures, including BE. For these customer segments, SCE will continue to evolve its approaches to provide communications that are relevant and resonate with the specific needs and circumstances of each segment. This approach will involve tactics such as personalized messaging, and segment-specific channel and outreach planning.

In addition, ESA ME&O will continue to use a data-driven approach to identify and prioritize customers using such factors as high energy use, CARE/FERA enrollment status data, usage history,

geographic equity indicators (e.g., CalEnviroScreen), disconnection risk, tribal communities, medically vulnerable and seniors, underserved populations, property owners and renters, customers in high fire risk areas, customers in extreme heat areas, and community-based input.[129]

SCE will continue reporting on marketing efforts and related program delivery activities through ESA Table 7 and is open to discussions about improving the reporting across all the IOUs.

## D. Customer Experience

In this section, SCE describes its approaches to enhance customer experience. For the 2028-2033 cycle, SCE plans the following:

- Develop customer journey maps to better align insights from customer data
- Utilize data analytics to identify opportunities to streamline the customer journey and improve satisfaction
- Explore the use of a data management framework to help monitor and improve performance along the customer journey

To enhance customer experience, customer segmentation, and targeting, SCE plans to create customer journey maps with a focus on SCE's customer centric approach. These maps will outline the

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[129] For example, plans on the following approaches to prioritize its ESA-eligible customers:

- High-Usage and Disconnection Risk: Customers exceeding 300 percent of baseline usage or with recent disconnection history will be prioritized for enhanced packages and electrification measures.
- Tribal and Rural Communities: SCE plans on prioritizing customers who are members of Tribes and/or reside in Tribal areas. Households in remote or underserved areas will receive targeted outreach and regionally adjusted service delivery. Continue to offer the tribal grants.
- Medically Vulnerable and Seniors: Customers on medical baseline or fixed incomes will be prioritized for HCS and resiliency measures.
- Immigrant and Underserved Populations: Outreach will be culturally and linguistically tailored to increase participation and trust.
- Property Owner and Renter Strategies: Develop outreach materials and messaging that align with the interests of property owners by highlighting the benefits of tenant participation in the ESA Program, including clear information on other available incentives for landlords.
- High Fire Risk Areas: SCE will prioritize customers in high fire risk areas and, among other things, will provide attic screens during program enrollments.
- Extreme Heat Areas. SCE will prioritize customers in hot climate zones or extreme heat areas.

key touchpoints and interactions that customers have with the program from initial awareness to enrollment to ongoing engagement. By understanding the customer journey and identifying key phases within the journey (e.g., awareness, consideration, decision, action, retention), SCE can identify opportunities to streamline processes, reduce barriers, and provide a supportive experience for ESA eligible customers. As customers progress through each stage of the customer journey, efforts will be made to shorten the time it takes customers to move to the next phase to support a quicker and more efficient enrollment process (e.g. engage with customers who are not progressing or who have dropped out of the journey).

## E. Portfolio Level Planning and Cross Promotion

In this section, SCE describes how it plans to integrate ME&O across IQP programs to strengthen messaging and cross-promote. In the 2028-2033 cycle, SCE proposes the following:

- Combine IQP messaging to reinforce program availability
- Deliver integrated messaging based on journey analytics and customer attributes

SCE plans to adopt a more holistic approach to portfolio-level planning by further integrating and aligning CARE, FERA, and ESA to support mutually reinforcing messaging. SCE plans to continue to leverage its cross-promotion efforts to reach a broader audience through bundled messaging,[130] integrated communication journeys, and cross-promotion.

SCE also plans to continue providing dedicated messaging that supports the integrated communication journeys and that automatically triggers communications based on customer behavior, program engagement history, and customer insights. For example, if a customer enrolls in CARE, then SCE anticipates developing a system and process that will automatically trigger follow-up messaging

[130] Bundled messaging includes, among other things, including the relevant information for SCE's programs to ensure customers receive comprehensive information. In the initial stages of the customer journey, SCE plans to develop and deploy bundled communications that include information about all three programs—CARE, FERA, and ESA—within its outreach efforts. This will provide that customers are presented with a comprehensive view of available program offerings and reduce the likelihood of missed opportunities due to fragmented messaging. As discussed earlier, bundled messaging will also be tailored to customer segments using data-driven insights to ensure relevance and resonance.

about ESA eligibility and benefits. These journeys will be informed by customer engagement history, demographic data, and predictive analytics to deliver personalized outreach at optimal times. This approach is expected to enhance efficiency and improve conversion rates. In addition, to support the previously described customer-centric program implementation experience, SCE will actively cross-promote ESA with other IQP communications to generate awareness and interest in the ESA Program. This approach will include embedding ESA messaging in email campaigns related to CARE and FERA enrollment. By positioning ESA as a complementary offering, SCE can increase program visibility and encourage customers to take advantage of multiple forms of assistance. Cross-promotion will also extend to community outreach events and partnerships with local organizations to amplify reach.

## F. Multi-Channel Outreach Tactics

To effectively reach and engage customers, SCE plans to utilize a variety of channels, such as email, direct mail, paid media, advertising, paid search websites, social media, and on-bill messaging. In addition, SCE plans to explore and integrate additional channels such as SMS, app push notifications and others based on specific segments (e.g., job boards for customers experiencing job loss). Finally, SCE plans to continue to provide ME&O support at community events and workshops, provide co-branded materials with local partners, and coordinate appropriately with other SCE and statewide campaigns to avoid overlap and maximize impact.

## G. Cohesive and Coordinated Outreach Efforts to Support Contractors

SCE will continue to support ESA contractors with tactics such as:

- Priming the Marketing. Before contractor arrival, targeted communications and media can be in place to raise awareness about the program and benefits so that customers are familiar with the program and its offerings.
- Contractor-Specific Communications. Communications can be personalized to be sent from the specific contractor informing customers who will be reaching out to them for an assessment.

- Follow-up Communications. After the initial home visit, follow-up communications can be sent to maintain customer engagement and support.

## H. Customer Education and Outreach

In this section, SCE describes its customer education and outreach approaches. For the 2028-2033 cycle, SCE proposes the following:

- Expand safety information as part of energy education curriculum
- Expand digital energy education platform to make it more user-friendly
- Strengthen outreach and engagement through community and faith-based organizations

SCE is committed to advancing the ESA Program through an approach that integrates both customer education and outreach. This approach supports eligible customers, particularly those in disadvantaged and underserved communities, who benefit most from ESA offerings.

### 1. SCE Will Expand Customer Education and Upgrade Digital Strategies

SCE proposes to enhance customer safety education as part of ESA's energy education curriculum.[131] Energy education already includes information on electrical safety, earthquake safety, natural gas and gas appliance safety, furnace, and heater safety, and "downed wire – call 911" or "call before you dig" messaging. To improve customer engagement, SCE proposes to upgrade its digital energy education platform to expand interactive, multilingual content on energy efficiency and related programs, including a mobile-friendly design and self-service features such as document uploads, enrollment tracking, and issue reporting. These enhancements are expected to improve customer satisfaction.

[131] Energy education is provided to all enrolled ESA customers, and is *available at* https://www.sce.com/sites/default/files/custom-files/PDF_Files/128346_Cust_Energy_Ed_Resource_Web_5.20.19.pdf.

### 2. SCE Will Continue to Strengthen ESA Outreach Through Community Partnerships and Inclusive Engagement

Community outreach efforts are central to SCE's ESA strategy and complement the broader marketing strategy by building trust in the program. These efforts are delivered in local and situational settings, making the program more accessible and relevant to customer's life experiences.[132] For instance, Community-Based Organizations (CBOs) play a pivotal role in reaching income-qualified, senior, disabled, and Access and Functional Needs (AFN) populations. CBOs lead safety preparedness workshops where ESA is introduced as a secondary message, aligning energy efficiency resources with community priorities. Faith-Based Organizations share ESA information via newsletters, social media, and in-person events, often in conjunction with financial literacy and emergency readiness messaging.

SCE plans that CBOs will continue to share ESA Program information through webinars, in-person events, and digital channels such as social media posts and email blasts sent to their constituents. SCE will continue to provide these partners with turnkey outreach resources including fact sheets, Edison Energized articles, and infographics. SCE has designed these materials to be accessible and culturally relevant and has made them available in multiple languages (e.g. English, Spanish, Chinese, Vietnamese, and Korean) so that all customers feel seen, heard, and supported.

To better serve customers with disabilities and AFN populations, SCE will implement a targeted outreach strategy that includes partnerships with disability advocacy organizations, independent living centers, and healthcare providers. Tailored outreach and support for immigrant, linguistically isolated, and underserved communities will involve culturally appropriate marketing and partnerships

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[132] For example, in 2024, SCE held over one hundred community events and ESA materials were distributed at each event. In addition, CBOs reported over 5,000 customer interactions where ESA was discussed as part of broader safety and preparedness messaging. Faith-based partners reached over 2,000 households through newsletters and social media posts promoting ESA. These activities have helped generate over 1,200 leads through canvassing and digital outreach and many converted to ESA enrollments. These results reflect the effectiveness of SCE's community-centered approach to ESA promotion.'

with trusted community organizations. Data analytics will be used to identify and prioritize these communities for streamlined enrollment and proactive outreach.

SCE remains committed to evolving its outreach strategy to meet the needs of the communities it serves. Through continued investment in partnerships, multilingual and culturally responsive messaging, and expanded support for CBOs, ESA will continue to support energy equity and climate resilience for California's most vulnerable populations. These efforts not only improve program outcomes but also empower customers with knowledge, resources, and support to manage their energy use more effectively and safely.

## I. ME&O Budget

The table below presents SCE's proposed ESA ME&O budget for 2028-2033.

***Table V-15***
***Proposed Budget, ME&O Activities, 2028-2033***
***($s in Thousands)***

| Description | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | Total |
|---|---|---|---|---|---|---|---|
| ME&O | $2,685 | $2,820 | $2,961 | $3,109 | $3,264 | $3,427 | $18,265 |

Note: Totals may not sum due to rounding.

## J. Evaluation of ME&O Tactics

SCE will evaluate the effectiveness of its multi-channel marketing approach by assessing metrics such as:

- Site visits and page
- Email click-through and open rates
- Direct mail reach
- Social media engagement
- Number of media impressions.

These metrics will allow SCE to optimize its approach and shift the mix of ME&O tactics to improve effectiveness as necessary.

# VI.

# OTHER ESA TOPICS

## A. ESA Program Solicitations

This section summarizes lessons learned from SCE's 2021-2026 ESA Program solicitation and introduces a flexible, equity-focused contracting model for 2028-2033. It covers the following:

- Key challenges of the prior cycle, including process rigidity and limited geographic reach
- A modified contracting approach utilizing three pillars: SCE will establish a Prequalified Contractor Pool through an initial RFP, onboard additional vendors throughout the cycle via RFIs, and award targeted contracts through RFQs based on program needs
- Additional strategies to enhance efficiency, including equipment solicitations for cost savings

### 1. Overview of 2021-2026 Contract Solicitation, Negotiation, Management and Performance, Challenges, Benefits

As authorized in D.21-06-015, the 2021–2026 ESA core program solicitation marked a milestone for the ESA Program, resulting in the contracting of thirteen qualified contractors through an open competitive bidding process that attracted approximately thirty bids from companies with diverse experience and backgrounds. This rigorous solicitation established a procurement framework and enabled SCE to leverage a broad contractor network for program delivery across its service territory. However, as described below, this solicitation resulted in some challenges and lessons learned that SCE plans to leverage to improve its 2028-2033 solicitations.

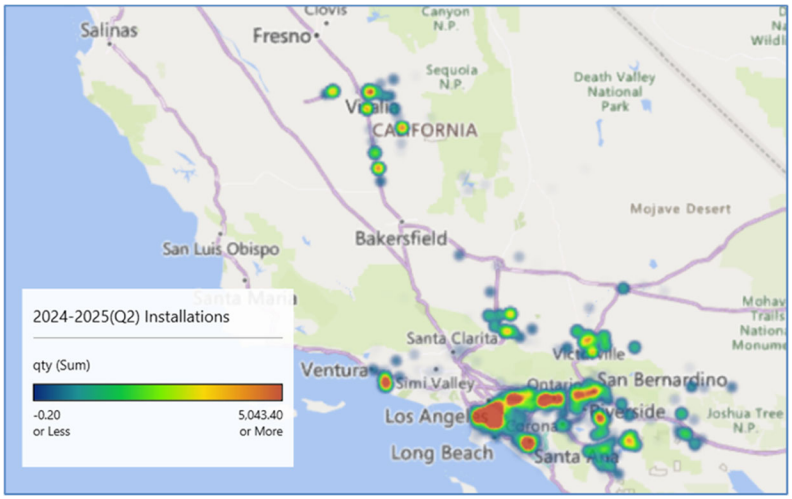
Challenge. The structure and limitations of SCE's RFP process reflect the process and requirements established in D.21-06-015.[133] In accordance with D.21-06-015, SCE implemented a competitive solicitation process for the program, resulting in the selection of contractors at the

[133] D.21-05-015, Sections 6.14.8. and 7.9.1. and OPs 107, 108, 109, 116, 117, 118, 120, 121, 122.

start of the current program cycle. The RFP process, while providing transparency and fairness, is lengthy, resource-intensive, and requires significant time and effort from both SCE and participating vendors. Under this contracting model, SCE was required to work exclusively with contractors selected through the initial solicitation, and any mid-cycle additions of new contractors would have necessitated a subsequent, Commission-approved RFP process (i.e., a second RFP process which could take 12-18 months). This potential lengthy mid-cycle RFP process would have hindered SCE's ability to adapt to evolving program needs, address emerging priorities, and respond to market changes.

Unintended Process Rigidity. This unintended rigidity (i.e., a second 12-18 month RFP process) effectively restricts SCE's ability to add contractors mid-cycle to serve additional geographies. For example, a geographic analysis from 2024 to Q2 2025 revealed that 80 percent of all measures were installed in just 20 percent of the 443 zip codes served (i.e., 450 zip codes did not have any installed measures). This initial concentration of measures highlights the need for greater flexibility throughout the program cycle (in this case, to acquire additional contractor services to reach underserved areas). The heat map below, in which the red indicates high concentration of contractor interventions and blue/green or no color indicates low or no customer interventions, demonstrates this dynamic. As a result of the unintended RFP process rigidity, significant areas of hard-to-reach customers are not currently adequately served.

***Figure VI-14***
***Concentration of ESA Contractor Installations***




The lack of flexibility to right-size the contractor network throughout the current program cycle constrained SCE's capacity to address underserved areas, respond to new electrification priorities, and rapidly enroll new contractors. Furthermore, the program was restricted in engaging specialized contractors with expertise in building electrification, which became increasingly important as the program evolved. Ultimately, these constraints reduced program responsiveness and adaptability, limiting SCE's ability to meet performance goals and deliver timely, equitable services to income-qualified customers. Drawing on this lesson learned, SCE proposes an updated open competitive bidding process that balances continuity with the need for greater flexibility for the 2028-2033 program cycle as described below.

## 2. SCE's Proposed Contracting Model

SCE proposes a modified open competitive bidding process with the following three-pillar contracting model that modifies the current contracting process and prioritizes flexibility, scalability, and equity in contractor participation.

**a) Initial RFP Will Result in Prequalified Contractor Pool**

SCE will establish a Prequalified Contractor Pool (PCP) which will be established through a competitive Request for Proposal (RFP) process. This initial RFP will be a streamlined competitive solicitation bid proposal process where contractors will be evaluated against criteria for licensing, experience, and capacity, supporting a capable network at program launch. SCE expects that its proposed process will be similar to the process authorized in D.21-06-015, but with one notable process improvement. The output will be a PCP that may be awarded a contract through this RFP process.

**b) RFI's Will Qualify Additional Vendors**

SCE proposes that throughout the program cycle, it be authorized to issue Requests for Information (RFI) to identify and qualify additional contractors. This process enables SCE to augment the PCP and onboard new contractors who meet established standards, allowing for real-time adjustments to address service gaps, geographic needs, or emerging priorities. This RFI process may be more focused and streamlined than the proposed RFP process described above, which will allow SCE to add additional contractors during the 2028-2033 program cycle without disruptions to its ESA Program services. The result of this step will be additional vendors added to the PCP.

**c) RFQ's Will Provide Vendor Contract Awards**

At the beginning and during the program cycle, qualified contractors in the PCP may be awarded contracts through an RFQ based on program needs and the vendor's expertise. This approach supports accelerated deployment, targeted interventions in underserved areas, and engagement of small and diverse businesses. SCE expects this step to be accelerated and targeted and improve SCE's ability to meet customer needs.

This multi-faceted strategy incorporates the lesson learned discussed above (i.e., restricted ability to add contractors due to the lengthy RFP process). By facilitating the ability to add contractors throughout the program cycle, SCE's proposed contracting model enhances local responsiveness. The approach aligns with CPUC's guiding principles by promoting operational efficiency, equity, transparency, and integration with other low-income initiatives.

3. **Benefits of the Proposed Contracting Model**

**a) Improves Market Competition and Transparency**

The proposed PCP fosters sustained competition throughout the program cycle. Unlike traditional solicitations that lock in a static vendor pool, SCE's model allows contractors to be added via RFI and RFQ processes based on qualifications and program needs. This concept supports responsiveness to market conditions, pricing volatility, and promotes fair, merit-based participation. Continuous performance evaluation and open enrollment support high service standards and effective right-sizing.

**b) Expands Access to Hard-to-Reach Areas**

The PCP model enables SCE to address persistent service gaps in rural, tribal, and remote communities. By offering targeted goals or onboarding geographically focused contractors, SCE can improve coverage in underserved zip codes and support equitable access to ESA services across its service territory.

**c) Implementation Details: A Transparent and Fair Competitive Process**

The RFI and RFQ processes will be structured to support clarity, fairness, and accessibility. Contractors will be evaluated on criteria including licensing, experience, capacity, and past performance. The RFI will be publicly posted and open to all qualified entities, including small and diverse businesses. SCE will provide a mock-up of the RFQ

and guidance on evaluation criteria, onboarding steps, and performance expectations to support transparency and stakeholder confidence.

In addition, as needed, SCE proposes conducting an ESA Equipment Solicitation for the aggregated procurement of high-cost equipment measures, such as HPWHs and HVAC units to leverage volume pricing and discounts, enhancing program effectiveness.

SCE's proposed contracting strategy builds on the strengths of the diversified contractor network and directly addresses the lessons learned from the prior cycle. It promotes continuity, expands opportunity, and delivers a more agile, equitable, and cost-effective ESA Program for 2028–2033, while upholding the principles of transparency, competition, and customer value that are central to regulatory and ratepayer interests.

SCE does not recommend the use of an Independent Evaluator (IE) and Process Review Group (PRG) for solicitations for its ESA Program solicitations. During the current program cycle, the Commission required the use of an IE and PRG for solicitations under the MFWB program.[134] The IE and PRG did not materially influence the solicitation results of the MFWB program. Although the PRG facilitated some statewide discussion on the MFWB program scope, SCE's proposal to integrate the MF segment into the ESA program makes continued PRG involvement unnecessary. As such, SCE proposes to remove the PRG as a stakeholder in the ESA Program solicitation process. SCE will address coordination of MF strategies through the established Working Group framework, which provides a more efficient and collaborative approach.

## B. Contractor and Workforce Education and Training

This section provides an overview of SCE's contractor and Workforce Education and Training (WE&T) activities performed in the current program and SCE's 2028-2033 program updates for the following:

[134] D.21-06-015, OPs 109, 116, 120, 121, 122.

- SCE plans to design and deliver localized training programs tailored to the specific ESA Program policies and procedures
- SCE plans to implement an incentive-based apprenticeship model to support the onboarding and development of contractor crew members and inspectors
- SCE plans to track certain WE&T metrics annually

**Current Program Cycle Activities**

SCE's ESA Program has prioritized workforce development through targeted training and education initiatives. These efforts are designed to equip individuals from low-income and disadvantaged communities, as well as ESA contractors, with professional and technical skills needed to support effective program delivery and long-term career advancement. Below are some examples of ESA WE&T related initiatives of SCE:

Energy Career Training Program. In 2024, SCE launched the ESA-focused Energy Career Training (ECT) program in partnership with a vendor. The ECT program provided individuals from low-income and disadvantaged communities with essential professional and technical skills to support local hiring and career advancement. The eight-week cohort included four weeks of classroom instruction and four weeks of hands-on training, covering OSHA 10-hour construction safety, HVAC installations, plumbing, and heat pump measures. In 2024, eighty-six students graduated, with several securing employment with local contractors.

Contractor Demand Building Program. To further support ESA contractor readiness, SCE launched the Contractor Demand Building Program in July 2024, offering approximately thirty training courses focused on heat pump water heater (HPWH) technology. These courses covered installation techniques, rebate utilization, and troubleshooting. SCE collaborated with TECH Clean California and its ESA Program vendor to expand the reach and effectiveness of these sessions, including in-person HPWH training specifically for ESA contractors.

Educational Opportunities. SCE promoted educational opportunities at its Energy Education Centers (ECC) in Tulare and Irwindale so that ESA contractors and vendors were aware of and encouraged to participate in training programs that enhance technical and professional competencies.

For the 2028–2033 program cycle, SCE proposes to maintain participation in broader statewide EE WE&T initiatives, while also establishing an ESA-specific WE&T component to address unique program needs. This combined approach allows for ESA contractors and workers to benefit from both statewide training and targeted support tailored to the ESA Program.

### 1. SCE Will Continue to Leverage Energy Efficiency-Funded WE&T Initiatives

The ESA-specific WE&T activities mentioned above complement the broader WE&T provided by the statewide EE Programs, supporting a comprehensive approach to workforce readiness across California's clean energy sector. SCE proposes to continue to leverage its EE WE&T program to support the ESA Program's WE&T initiatives.[135] These efforts are funded through SCE's EE proceeding[136] and are designed to build a skilled and equitable workforce aligned with California's decarbonization and electrification goals. These sessions provided contractor training at SCE's EECs. SCE will continue to encourage ESA contractors to participate in monthly EEC courses held in Irwindale and Tulare. These courses, which will include topics such as all-electric residential building design, HP water heater systems, and automation technologies, are promoted through regular email communications to ESA contractors. SCE's outreach will provide consistent engagement and access to technical training resources. In June 2025, for example, 42 courses were offered to ESA contractors and vendors.

Career & Workforce Readiness. In addition to EEC offerings, SCE supports the Career & Workforce Readiness (CWR) program, which is administered statewide with PG&E serving as the lead contract. The CWR program trains, supports, and places disadvantaged workers into energy-efficiency jobs, providing job retention services for up to 12 months to support long-term employment success. In 2024, the CWR program enrolled 202 participants. Of these enrolled participants, 139 were placed in jobs utilizing energy efficiency skills.[137] These outcomes reflect

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[135] D.23-06-055, OP 1.

[136] *Id.*

[137] SCE 2024 Annual Report for ESA and CARE Programs, Section 1.7.3, p. 70.

the program's ability in preparing individuals for long-term careers in the energy efficiency sector.

Training and Readiness Is Focused on Disadvantaged Communities.[138] SCE expects that this high level of inclusion will continue in the 2028-2033 program cycle and continue to support California's broader workforce development goals and foster training opportunities for underserved communities. In 2024 for example, 71.3 percent of WE&T Program participants met the definition of a disadvantaged worker.[139]

By leveraging the EE funded WE&T Program, SCE can provide opportunities to ESA contractors to participate in broader statewide efforts to build a qualified and diverse workforce. These programs provide both foundational and advanced training opportunities, helping ESA contractors meet program requirements while supporting California's climate and equity objectives. In the 2028-2033 program cycle, SCE plans to continue leveraging activities of the EE WE&T program to build the ESA workforce.

### 2. SCE Proposes Targeted Training Enhancements to Supplement EE-Funded WE&T Training

In SCE's ESA Contractors' Needs Assessment, contractors reported challenges in hiring qualified candidates, a lack of ESA-specific training, and limited career advancement opportunities. Without program changes, these gaps will negatively impact the effectiveness of ESA Program delivery in the 2028-2033 program cycle and SCE's ability to scale energy efficiency and electrification efforts in low-income communities.

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[138] "Disadvantaged Worker" is a worker that (1) has a referral from a collaborating community-based organization (CBO), state agency, or workforce investment board; or (2) lives in a ZIP code that is in the top 25 percent in one or more of the five socioeconomic indicators as defined in the California Office of Environmental Health Hazard Assessment's CalEnviroScreen Tool. These socioeconomic indicators are educational attainment, housing burden, linguistic isolation, poverty, and unemployment. *See,* D.18-10-008, p. 54.

[139] *See,* SCE 2025 Annual Report, p. 70.

While general skill development through the EE-funded WE&T program remains valuable (see prior section of testimony), ESA contractors have emphasized the need for more specialized training tailored to ESA-specific protocols and procedures. To address this gap, SCE proposes targeted enhancements based on the ESA Contractors Needs Assessment. As such, SCE respectfully requests Commission approval for two new initiatives to address ESA-specific workforce gaps: 1) Conduct Localized ESA Training and 2) Launch Incentivized Apprenticeship Training (as described below).

The third-party provider will manage both the training modules and apprenticeship oversight, providing an approach that supports theoretical and practical skill development. These proposals are designed to strengthen the contractor network that operates extensively within low-income communities served by the ESA Program. Unlike existing EE WE&T offerings, these initiatives supplement foundational skills and directly support the ESA workforce.

Given the ESA Program's reliance on contractor-based labor, particularly from historically underserved and economically disadvantaged areas, strategic investment in workforce development is essential. This investment includes targeted training, upskilling, and transitional support to align the labor force with California's clean energy objectives and regulatory mandates.

**a) <u>SCE Proposes Third-Party Localized Training with an ESA Focus</u>**

SCE will solicit a qualified third-party provider to design and deliver localized training programs tailored to specific policies and procedures of the ESA Program. Contractors reported confusion and inefficiencies due to inconsistent interpretation of ESA standards. Guidelines included in training will streamline operations and improve installation quality and overall program delivery, benefiting ESA Program participants.

The third-party provider will conduct trainings throughout the 2028–2033 program cycle to ESA Contractors, and these trainings will be offered in multiple formats, including in-person sessions at local contractor offices and virtual platforms to

support accessibility across diverse geographic regions. The third-party provider will be responsible for curriculum development and instruction. Curriculum developed would be different from the EE WE&T offerings, as it is specific to ESA requirements and policies and procedures. This integrated approach will combine theoretical classroom instruction with practical field experience, equipping trainees to be well-versed in ESA standards and prepared for real-world implementation. By aligning training with ESA protocols and incorporating oversight of hands-on learning, this proposal addresses contractor needs that were identified in the ESA Contractors Needs Assessment and strengthens workforce readiness.

**b) <u>SCE Proposes to Implement Incentivized Apprenticeship Training</u>**

SCE proposes that the same third-party will implement an incentive-based apprenticeship model to support the onboarding and development of new and existing crew members and inspectors within ESA contractor organizations. Under this proposal, crew members will undergo about 80 hours of supervised apprenticeship training with senior contractor staff. Both the apprentice and the mentor will be eligible for wage subsidies or stipends. The third-party provider will monitor this hands-on training to support alignment with ESA Program standards and to complement classroom-based instruction. The apprenticeship component fosters mentorship, facilitates skill transfer, and promotes career-ladder opportunities for disadvantaged workers.

Low wages and limited advancement opportunities are major barriers to retaining staff and crews. The incentive-based apprenticeship model can help build a stable and motivated ESA workforce. Furthermore, by embedding training within contractor operations and providing financial support, this model enhances workforce capacity and retention while delivering consistent quality across ESA service delivery.

These proposals address key workforce challenges identified in the ESA Contractors' Needs Assessment. Third-party training provides standardization and alignment with ESA

protocols, while apprenticeship incentives promote contractor engagement and employee retention. Together, these initiatives enhance program delivery, improve customer satisfaction, and build contractor capacity to meet future demand.

Furthermore, the proposed workforce development strategies align with California's goals to build a skilled workforce focused on GHG reduction and electrification. By integrating ESA-specific training and incentivizing hands-on experience, SCE supports the development of a diverse and capable workforce equipped to implement energy efficiency measures and electrification upgrades in underserved communities. These efforts contribute to the state's climate objectives and promote equitable access to green career opportunities.

### 3. Evaluation of WE&T Effectiveness

To support accountability and continuous improvement, SCE plans to track the following metrics annually to evaluate effectiveness of the ESA-specific WE&T initiatives:

Training Completion and Certification Rate: The percentage of participants who successfully complete ESA-specific training modules and receive certification from the third-party provider. This metric will assess the accessibility, relevance, and instructional quality of the training curriculum developed under the ESA Program. A high completion rate will indicate effective engagement and alignment with ESA Program standards.

Apprenticeship-to-Employment Conversion Rate: The proportion of individuals who complete the 80-hour apprenticeship training and are subsequently hired or retained by ESA contractors. This metric will evaluate the practical impact of the apprenticeship model on workforce integration and contractor capacity building. It will serve as a key indicator of the program's success in transitioning trainees into long-term employment.

Contractor Satisfaction and Workforce Readiness Index: A composite score derived from contractor feedback surveys assessing new hires' preparedness, ESA-specific competencies, and job performance. This metric will provide qualitative insights into the effectiveness of both

classroom and field training components. Results will inform future curriculum adjustments and advances alignment with contractor expectations and ESA operational needs.

# VII.

# REVENUE REQUIREMENTS AND COST RECOVERY PROPOSAL

## A. Overview ESA Programs Revenue Requirement

In this proceeding, SCE is requesting the Commission adopt a total revenue requirement of $674.5 million[140], to support the 2028-2033 ESA Program cycle. SCE will continue to use the Public Purpose Program Adjustment Mechanism (PPPAM) and Energy Savings Assistance Program Adjustment Mechanism (ESAPAM) to recover and track the proposed ESA Program revenue requirement. Furthermore, SCE requests that the 2028 revenue requirement adopted in this proceeding become effective as of January 1, 2028.

## B. Proposed ESA Programs Annual Revenue Requirement

Starting in 2028, SCE's proposed total ESA Program revenue requirement to be recovered in rates is $674.5 million over the 2028-2033 program cycle. SCE's budget forecast does not include the use of unspent and uncommitted funds. SCE proposes that any unspent and uncommitted funds remaining at the end of 2027 be applied to the 2028-2033 program cycle.[141] SCE plans to include the proposed ESA Program revenue requirement within its Public Purpose Programs revenue requirement and Public Purpose Programs Charge (PPPC) rate levels, which are applicable to all customers. The 2028-2033 proposed ESA revenue requirements are shown in Table VII-16 below.

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[140] A gross-up for Franchise Fees & Uncollectibles (FF&U) will be added to the revenue requirements when put into customer rate levels.

[141] In A.25-06-025, SCE's Application for 2027 Income Qualified Program Bridge Funding, SCE requested unspent funds from the 2021-2026 program cycle be applied to the 2027 program budget.

***Table VII-16***
***Proposed ESA 2028-2033 Revenue Requirement***
**(*$s in Thousands*)**

| Description | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | Total | 2028-2033 Annualized Revenue Requirement |
|---|---|---|---|---|---|---|---|---|
| EE Subtotal | $90,812 | $93,227 | $96,062 | $98,987 | $102,004 | $105,116 | $586,208 | $97,701 |
| Administrative Subtotal | $4,701 | $4,835 | $4,974 | $5,116 | $5,263 | $5,413 | $30,301 | $5,050 |
| DI + Marketing & Outreach + EM&V Subtotal | $9,281 | $9,637 | $9,832 | $9,789 | $9,702 | $9,782 | $58,023 | $9,671 |
| Total ESA Portfolio Revenue Requirement | $104,794 | $107,699 | $110,868 | $113,892 | $116,968 | $120,311 | $674,532 | $112,422 |

## C. Rate and Bill Impacts

Table VII-17 compares SCE's current bundled average rates (i.e., rate in effect as of October 1, 2025) by customer group to proposed bundled average rates if SCE's ESA annualized revenue requirement of $112.422 million, without FF&U, is approved. This represents a revenue requirement increase of $19.960 million relative to the $92.462 million currently in rates. This will result in a system average rate (SAR) increase of approximately 0.09 percent for bundled service customers relative to current rates.

***Table VII-17***
***ESA Revenue Requirements Rate and Bill Impacts***

| Bundled Average Rates (¢/kWh) | | | | |
|---|---|---|---|---|
| **Customer Group** | **Current Rates** | **Proposed Increase** | **Proposed Rates** | **Increase %** |
| Residential | 35.26 | 0.03 | 35.29 | 0.09% |
| Lighting - Small and Medium Power | 32.18 | 0.03 | 32.21 | 0.08% |
| Large Power | 21.27 | 0.02 | 21.29 | 0.09% |
| Agricultural and Pumping | 25.38 | 0.03 | 25.41 | 0.10% |
| Street and Area Lighting | 36.07 | 0.03 | 36.10 | 0.09% |
| Standby | 17.99 | 0.02 | 18.01 | 0.09% |
| **Total** | **30.16¢** | **0.03¢** | **30.19¢** | **0.09%** |

| Residential Typical Bill Impact ($/Month) | | | | | |
|---|---|---|---|---|---|
| **Description** | **Average Usage** | **Current Bill** | **Proposed Increase** | **Proposed Bill** | **Increase %** |
| Residential \| Non-CARE | 500 kWh | $193.23 | $0.17 | $193.39 | 0.09% |
| Residential \| FERA | 500 kWh | $158.43 | $0.14 | $158.57 | 0.09% |
| Residential \| CARE | 500 kWh | $122.31 | $0.11 | $122.41 | 0.09% |

Based on an estimated average annual revenue requirement increase of $19.96 million; assumes average usage of 500 kWh per month in baseline region 9 and excludes climate dividend (i.e., GHG credits).Current rate based on October 1, 2025 effective rates and January 1, 2025 sales forecast, and excludes BSC.

A typical CARE residential customer using 500 kWh per month could see a monthly bill increase of $0.11, (an increase of approximately 0.09 percent). Similarly, a typical non-CARE residential customer using 500 kWh per month could see a monthly bill increase of $0.17, (an increase of approximately 0.09 percent).

## D. ESA Ratemaking Treatment

SCE proposes to continue to recover ESA revenue requirements through the operation of the PPPAM. SCE proposes no change to the ESA ratemaking as previously authorized. SCE's current ratemaking associated with its ESA Program includes: 1) the recovery of the Commission-authorized ESA revenue requirement through the operation of the PPPAM; and 2) the comparison of the authorized ESA revenue requirements with actually incurred ESA expenses in the ESAPAM. The year-end PPPAM balances are currently consolidated in SCE's PPPC revenue requirement and included in PPPC rate levels in the subsequent year through the January 1 consolidated revenue requirement change.

## E. Revenue Requirement and Cost Recovery Conclusion

SCE respectfully asks the commission to approve its proposed $674.5 million revenue requirement to fund its 2028-2033 ESA Program cycle. Once this application is approved, SCE will file the appropriate advice letter when it implements the authorized revenue requirement.