#### **BEFORE THE PUBLIC UTILITIES COMMISSION OF THE**

#### STATE OF CALIFORNIA

Order Instituting Rulemaking for Oversight of Energy Efficiency Portfolios, Policies, Programs, and Evaluation.

R.25-04-010

#### <u>SOUTHERN CALIFORNIA EDISON COMPANY'S (U 338-E) 2024 ANNUAL REPORT</u> <u>FOR ENERGY EFFICIENCY PROGRAMS</u>

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Dated: June 2, 2025

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Southern California Edison Company (SCE) hereby submits its 2024 Energy Efficiency Annual Report (EEAR) for its Energy Efficiency (EE) programs and results for Program Year 2024, as Attachment A hereto.

The Annual Report is filed and served in Rulemaking (R.) 25-04-010 established by the Commission as the forum for regulatory issues related to oversight and administration of EE programs.<sup>1</sup> R. 25-04-010 is the successor proceeding to R.13-11-005, which was closed in January 2025. The Annual Report is also filed pursuant to ALJ Kao's March 10, 2025, email ruling granting an extension to file the EEARs on June 2, 2025. In addition, in compliance with Commission Decision (D.) 18-01-004, Addressing Third Party Solicitation Process for Energy Efficiency Programs, SCE is including in this Annual Report a list of all third-party contracts in place, along with the information required by Ordering Paragraph (OP) 8 of that Decision, which is available in Appendix A, Section 11.

See Order Instituting Rulemaking, issued on April 24, 2025. "This will be the primary venue for all issues relating to the energy efficiency policies, programs, and evaluation efforts for oversight of the portfolio administrators conducting and implementing energy efficiency programs under the Commission's jurisdiction." See OIR at p. 1.

SCE is concurrently filing a Notice of Availability of the 2024 Annual Report and its appendices and related documents available for viewing and downloading for the parties on the Proposal Evaluation & Proposal Management Application (PEPMA) website.<sup>2</sup>

Respectfully submitted,

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June 2, 2025

<sup>&</sup>lt;sup>2</sup> PEPMA website location: https://pepma-ca.com/Public/Default.asp.

Appendix A

SCE's 2024 Energy Efficiency Annual Report

# 2024 ENERGY EFFICIENCY ANNUAL REPORT



June 2, 2025



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# **Executive Summary**

#### **Future Outlook**

Southern California Edison Company (SCE) promotes cost-effective energy savings programs and associated Total System Benefits (TSB) that support California's ambitious carbon production and Energy Efficiency (EE) and

reduction and Energy Efficiency (EE) goals. SCE supports California's demand-side flex strategies and whole-building energy solutions that deliver clean energy, promote decarbonization, and minimize, where possible, unplanned electric outages during peak times.

Achieving California's long-term decarbonization goals and managing unexpected constraints on the grid require effective collaboration from stakeholders across the state. As such, the California Public Utilities Commission (CPUC) issued Decision D.23-08-005,3 which adopts TSB and energy savings goals for ratepayerfunded EE portfolios from 2024 to 2035 for all Portfolio Administrators (PAs). Thereafter, SCE adopted the Commission's clean energy goals and decisions in its True-Up Advice Letter<sup>4</sup> (TUAL). In the TUAL, approved by the Commission February 7, 2024, SCE provided updated portfolio forecasts, budgets, and program initiatives and explained how SCE would work more closely with third-party implementers to achieve the EE goals set forth by the CPUC in the upcoming years.

In 2024, SCE worked closely with its third-party implementers to address program implementation barriers and evolving EE market dynamics, refine program goals and

#### 2024 SCE Energy Efficiency Portfolio Savings and Goal Achievements

• Codes and Standards (C&S):

Cost-effectiveness Total Resource Cost (TRC) is **1.39** 

Net electric energy savings is **114%** (1,225 GWh) of 1,071 GWh goal

Net electric demand reduction is **134%** (249.8 MW) of **186.5** MW goal

• Excluding C&S:

Total System Benefit (TSB) is **140%** (**\$157.7** million) of **\$112.5** million goal

Resource Acquisition Cost-effectiveness Total Resource Cost is (TRC) **1.05**, Ratepayer Impact Measure (RIM) **1.10**, Program Administrator Cost (PAC) **1.09** 

(see Appendix A, Section 3, for costeffectiveness definitions)

- Average electric rate of **0.21** \$/kWh and estimated first year ratepayer bill savings of \$275.9 million
- Avoidance of **491,725 net annual tons** of carbon dioxide (CO<sub>2</sub>) emissions
- Hard-to-Reach (HTR) and Disadvantaged Communities (DACs) TSB over **\$40** million

targets via contract amendments, and enable long-term customer relationships. Additionally, SCE introduced new Deemed program measures that offered customers more choice.

<sup>&</sup>lt;sup>3</sup> D.23-08-005, Decision Adopting Energy Efficiency Goals for 2024-25, issued August 16, 2023.

<sup>&</sup>lt;sup>4</sup> Advice Letter (AL) 5123-E-A effective November 15, 2023, Southern California Edison Company's Energy Efficiency Program and Portfolio True-Up Advice Letter for Program Years 2024-2027.



# **SCEs Energy Efficiency Strategy**

#### **Priority 1: Customer Affordability**

- Provide EE solutions that help customers manage their energy usage and save customers money.
- Ensure ratepayer dollars are funding programs that are most cost-effective.

#### **Priority 2: Diversify EE Portfolio**

- Drive performance across EE programs to generate more balanced results for SCE's EE portfolio including Equity programs.
- Amend contracts and create new agreements that mitigate risks.

#### **Priority 3: Accelerate Clean Power and Electrification**

- Promote greenhouse gas (GHG) emission reductions and load shedding on the grid.
- Sustain long-term energy savings as measured by TSB.

#### **Priority 4: Remove Market Barriers**

- Advocate for policies and regulations that simplify programs and provide stability for SCE's customers and implementers.
- Encourage bidder diversification and equitable outcomes for Disadvantaged Communities (DACs).

#### **Programs Reaching New Market Participants**

SCE continues to take an active role in soliciting and administering new programs that have proven to be successful and promote cost-effectiveness for SCE's ratepayers. For example, SCE's Legacy Strategic Energy Management (SEM) Program met program targets and retained existing cohorts<sup>5</sup> consistently year-over-year. After seven years of successful implementation, SCE transitioned to offer SEM programs utilizing the third-party program design and delivery model. In 2024, SCE expanded its SEM delivery with the execution of four new SEM contract agreements to be delivered by two third-party implementers. Execution of these contracts resulted in four new SEM programs available to SCE customers across three local sectors. The Commercial SEM contracts have total budgets of \$39.3 million, while Agriculture and Industrial SEM contracts have total budgets of \$25.1 million. Following the SEM programs anticipate \$59.6 million TSB in commercial and \$140.5 million industrial and agricultural TSB over the next five years.

#### **Performance Results**

Each year, SCE's EE team strives to save customers money, to achieve SCE's CPUCapproved savings goals and improve cost-effectiveness. At the end of 2023, the CPUC shifted from energy and demand savings goals to TSB which impacts how PAs will report energy savings starting program year 2024. Even with the new shift from savings to TSB, SCE achieved

<sup>&</sup>lt;sup>5</sup> "Cohort" and "cohort-type" are described in the current *California SEM Design Guide*.



CPUC-approved goals in 2024 and begun to ramp up delivery of its third-party programs. Throughout 2024, SCE has worked to assist third-party implementers to improve their delivery. SCE is focusing on strategic implementation to assist, where it is able, in delivering savings that build upon prior administrative efforts dedicated to program launch. As a result of these efforts, SCE ultimately exceeded both its TSB and Codes and Standards (C&S) kilowatt-hour (kWh) energy savings and kilowatt (kW) demand reductions goals, achieving 140%, 114%, and 134%, respectively. SCE's Resource Acquisition (RA) segment Total Resource Cost (TRC), excluding C&S, came in above target of 1.0 at 1.05 and exceeded (by 72%) the previous year's performance of 0.61. SCE, in conjunction with other PAs, continues to transform the EE market by delivering strong, innovative and cost-effective programs to its customers.

C&S continues to contribute significantly to the overall EE portfolio savings, with \$1.058 billion TSB, 1,225 Gigawatt-hours (GWh) and 249.8 Megawatts (MW) reductions. Overall, TSB results, including C&S, have increased compared to last year's results. Additionally, when looked at with C&S, the portfolio is cost-effective with a TRC of 1.39.

Overall, SCE achieved its 2024 EE goals by supporting the achievement of third-party program milestones, yielding cost-effective energy portfolio savings, seeking to drive performance of third-party implementers, and helping customers lower energy bills. However, as SCE has noted in its comments to Rulemaking (R.) 25-04-010, the Commission must consider pursuing cost-effectiveness reforms that better support long-term value and electrification and providing greater flexibility in meeting EE goals given ongoing and constantly changing market realities.

#### Highlights of 2024 and Strategic Plan Accomplishments:

- Focus on Affordability. SCE takes an active role in designing and/or partnering with third-party implementers to deliver EE programs. Given the complex and dynamic nature of the EE market, SCE and third-party implementers may renegotiate agreements to support program implementation. In 2024, SCE and third-party implementers executed eleven contract amendments to better support program delivery. External factors, including market conditions and challenges with maintaining cost-effectiveness, may require ending a contract earlier than anticipated. In 2024, SCE terminated two contracts for the Comprehensive Industrial Program and Comprehensive Multifamily Program.
- Customer Outreach Efforts. In 2024, SCE account representatives began facilitating customer introductions for third-party implementers who opted for SCE account representative support. Additionally, SCE developed ten bulk email outreach customer communications (48% open email rate), which heavily promoted EE programs and reached over 720,000 customers. The communications included information about lighting, funding resources, Heating Ventilation and Air Conditioning (HVAC), refrigeration, motors and drives, advanced controls, and proper equipment selection. Overall, this outreach increased customer awareness of EE opportunities and availability of EE programs and resources.
- **Customer-Centric Design and Stabilized Implementer Experience.** Third-party program implementers continue to collaborate with SCE to develop customer-centric



designed measures. For example, implementers added the Boiler and Rod Beam Pump Variable Frequency Drive (VFD) measures for water agencies and the Lifecycle Refrigerant Management and Smart Fan Controller measures for residential programs.

- Sustaining a Holistic Approach to Residential EE. The Home Energy Advisor (HEA) Program sent 1.25 million SCE customers Home Energy Reports (HERs). SCE's legacy Residential Direct Installation (Res DI) Program is a top five resource acquisition program (excluding C&S) contributing 7% (or \$10.3 million) toward TSB. To ensure the multifamily sector is served, the Multifamily Residential Direct Install (MFRDI) Program is targeted to launch in 2025 to offer multifamily housing customers free installations of comprehensive EE measures.
- Diversifying Customer Market Coverage. EE outreach efforts focused on targeting niche customers that need unique EE solutions and measures. The Statewide Water Infrastructure and System Efficiency (SW WISE<sup>TM</sup>) Program trains, equips and educates Trade Allies (TAs) within the water and wastewater market segments. The SW WISE third-party implementer joined forces with Regional Energy Networks (RENs) to leverage opportunities to expand and diversify the program's outreach efforts to smaller customer segments within SCE's Public sector.
- Success with EE Heat Pump Water Heaters (HPWH). Identifying niche opportunities that maximize energy savings at the lowest cost to SCE ratepayers is important. In 2024, SCE promoted electrification through HPWH measures and worked more closely with a third-party implementer to increase TSB delivery from strong HPWH adoption. Thereafter, the implementer delivered 225 percent of original contract expectations.<sup>6</sup>
- Introducing Population NMEC Programs. In 2024 SCE completed the full solicitation process, which included requests for proposals (RFP), contract negotiations and execution of two new Market Access Program (MAP) agreements. With the CPUC's approval of AL 5455-E<sup>7</sup> on February 11, 2025, SCE launched its third-party implemented Population Normalized Meter Energy Consumption (NMEC) Market Access Program. The two new MAP programs primarily serve the commercial sector and cover some public and residential segments. The programs are

<sup>&</sup>lt;sup>6</sup> SCE's Total System Benefit (TSB) goal achievement relies significantly on the Large Heat Pump Water Heater (HPWH), Commercial and Multifamily, Fuel Substitution measure package (SWWH028). The TSB for HPWH equipment is calculated using the Commission's Cost-Effectiveness Tool (CET), consistent with the PY 2024 methodology set forth in the Measure Package and the Energy Division's April 28, 2025, *Revised Guidance for Large Commercial Heat Pump Water Heater, Commercial and Multifamily, Fuel Substitution Measure Package SWWH028 for Capacity and Energy Savings Claims* (Revised Guidance). Consistent with the Revised Guidance, the PY 2025 savings claims for HPWH equipment will differ from PY 2024. These changes will be reflected in the PY 2025 Annual Report to be filed in 2026.

<sup>&</sup>lt;sup>7</sup> AL 5455-E, for Approval of Energy Efficiency (EE) Third-Party Solicitation for Two Contracts for Local Market Access Programs.



forecasted to deliver around \$46 million Total System Benefit to the SCE portfolio over the next three years.

Sustaining Success with Codes and Standards. SCE's C&S Team achieved • significant milestones, notably contributing to the adoption of the 2025 Title 24 Building Code and CALGreen Code. These codes are expected to deliver substantial energy savings, with the 2025 Title 24 Building Code alone expected to install 500,000 heat pumps, save 313 GWh of electricity and reduce peak demand by 59 MW.<sup>8</sup> Additionally, the statewide team supported the implementation of new U.S. Department of Energy (DOE) EE appliance standards. The South Coast Air Quality Management District's (SCAOMD's) new water heater rules, which SCE helped promote, will transition residential and commercial buildings to zero-emission water heaters, significantly reducing nitrogen oxide (NOx) emissions.<sup>9</sup> SCE also played a pivotal role in developing calgreeninfo.com, a comprehensive resource for understanding and complying with California's green building standards. The team conducted over 140 C&S compliance improvement classes, trained over 3,000 attendees, and facilitated the adoption of Reach Codes in the cities of Goleta and Santa Monica. These accomplishments underscore SCE's commitment to advancing EE and sustainability through robust C&S initiatives.

## **Program Descriptions, Strategies and Outcomes**

SCE remains committed to EE in serving over 15 million people across its 50,000 square mile service area in central, coastal, and southern California. Through statewide, local SCE and third-party implemented programs, SCE delivers EE solutions to homes, businesses, agriculture, industry, local governments, schools and colleges, water agencies, and other public organizations. SCE's Annual Report provides program descriptions, specific outcomes, and forward-looking program strategies. SCE's EE statewide, delivered, and third-party implemented programs are grouped by:

- Statewide Programs
- Market Sector
  - Residential
  - Commercial
  - Industrial
  - Agricultural
  - Public
  - Cross-Cutting

<sup>&</sup>lt;sup>8</sup> California Energy Codes & Standards, 2025 Cycle Impacts *available at* https://title24stakeholders.com/2025-cycle-impacts/.

<sup>&</sup>lt;sup>9</sup> SCAQMD Press release *available at* https://www.aqmd.gov/docs/default-source/news-archive/2024/1146-2-June-7-2024.pdf.



#### • Other Programs and Activities

SCE's EE Residential resource acquisition sector achieved \$31.2 million TSB with most of the savings coming from the Residential Direct Install (Res DI) Program and Home Energy Advisor (HEA) Program. The Commercial sector programs achieved \$98.8 million TSB with the Comprehensive Commercial Program contributing to the majority of savings from the sector. The Industrial, Agricultural, Public, and Cross-Cutting sectors combined achieve \$18.1 million TSB. CPUC encourages all PA portfolios to be balanced and to perform. Looking ahead, SCE will continue to prioritize diversifying TSB contributions across its portfolio.

Page Number (Links)	Market Sector	Program	TRC	TSB	Percent of TSB	
27	Commercial	Comprehensive Commercial Program	1.16	\$63,807,248	43%	
N/A	Commercial	*Midstream Commercial Water Heating	*3.60	*\$25,177,948	17%	
30	Industrial	Legacy Strategic Energy Management Program	5.80	\$10,430,678	7%	
22	Residential	Residential Direct Install Program	0.61	\$10,276,498	7%	
21	Residential	Home Energy Advisor Program	0.99	\$8,547,443	6%	
* SCE's savings and resource cost-effectiveness contribution to a Statewide Program led by Southern California Gas (SoCalGas) company.						

#### **Top Five Resource Acquisition Programs TSB Contribution (Excluding C&S)**

Program descriptions and specific details about SCE's top five resource acquisition EE programs can be found within this Report. SCE's portfolio budgets and recorded actuals by sector are available on the California Energy Data and Reporting System (CEDARS). <sup>10</sup>

<sup>&</sup>lt;sup>10</sup> California Energy Data and Reporting System (CEDARS), *available at* https://cedars.cpuc.ca.gov.



# **Statewide Programs**

The CPUC established Statewide Programs and the associated Lead Investor-Owned Utilities (IOUs) in 2018. Since then, program initiatives, budgets and Lead Program Administrator (LPA) roles have grown. The IOUs meet regularly to coordinate the development of Statewide Program implementation, outreach and budget administration activities that allow IOUs to successfully administer statewide programs in compliance with Commission guidance. SCE provides funding to LPAs for those Statewide Programs for which SCE is not the designated lead and receives an agreed-upon proportional system benefit from shared Statewide Program initiatives through the CPUC's CEDARS reporting system. Lead IOU Administrators and their respective Statewide Programs are listed below.

Program Category				
Plug Load and Appliance	*SDG&E			
HVAC (Upstream Residential, Upstream Commercial)	SDG&E			
New Construction (Residential)	PG&E			
New Construction (Non-Residential)	PG&E			
Codes & Standards (Building Codes Advocacy)	PG&E			
Codes & Standards (Appliance Standards Advocacy)	PG&E			
Codes & Standards (National Advocacy)	PG&E			
Workforce Education & Training (Career Connections)	PG&E			
Workforce Education & Training (Career Workforce Readiness)	PG&E			
Institutional Partnerships (State of California, California Department of Corrections)	PG&E			
Emerging Technologies (Electric)	SCE			
Institutional Partnerships (University of California, California State University)	SCE			
Water/Wastewater Pumping Program	SCE			
Emerging Technologies (Gas)	SoCalGas			
Foodservice Point of Sale	SoCalGas			
Midstream Commercial Water Heating	SoCalGas			
* SCE's administration of the Plug Load Appliance (PLA) program is currently anticipated to begin in PY2026.				

#### Lead Program Administrators for Statewide Programs

SCE is the LPA for the following Statewide Programs:

- Water/Wastewater Pumping, also known as Statewide Water Infrastructure & System Efficiency (SW WISE<sup>TM</sup>) Program
- Institutional Partnerships, also known as Statewide Higher Education Efficiency Performance (HEEP) Program, and



• Emerging Technologies (Electric), also known as Statewide Electric Emerging Technologies Program (SWEETP).

# Statewide Water Infrastructure & System Efficiency (SW WISETM) Program

#### **Program Description (SCE\_SW\_WP)**

#### **Implementer:** Lincus, Inc.

The Statewide Water Infrastructure and System Efficiency Program (SW WISE<sup>TM</sup>) provides EE solutions for water production, distribution, treatment systems, and oil field clearwater pumping within the service areas of SCE, Pacific Gas & Electric Company (PG&E), Southern California Gas Company (SoCalGas), and San Diego Gas & Electric Company (SDG&E). It serves various customers, including water agencies, private water companies, wastewater agencies, special districts, local government agencies, investor-owned water utilities, and oil field water-pumping customers.

The SW WISE<sup>™</sup> Program's primary objectives are:

- Energy Engineering Services and Project Support: The program provides energy engineering services, project support, and incentives/rebates to facilitate customer installations of EE measures. Concurrently, the program trains customers on the benefits of these projects, both EE and non-EE, and offers monitoring and inspection support to ensure successful installation and savings delivery.
- **Training and Equipping Trade Allies:** The program equips Trade Allies (TAs) in the water and wastewater segments to recommend more efficient processes and technologies to their customers. This includes supporting project implementation through various stages of development, such as marketing to targeted groups, identifying potential measures via program-developed energy assessments, verifying measures post-installation, and providing financial incentives/rebates.

#### **Strategies and Outcomes**

SW WISE installed two Calculated and seven Deemed pump overhaul and Variable Speed Drive (VSD) measure projects in 2024. Please refer to "T-3 Program Data" of each IOU's Annual Report for a summary of PY2024 SW WISE program performance.

- **Deemed Measure Package Updates:** SCE's Quality Assurance and Quality Control (QA/QC) Team worked with the program implementer to initiate updates to three Deemed measure packages based on trade professional feedback. These updates focused on removing barriers to measure adoption. In addition, the program also added a new Boiler measure to its program offerings.
- Outreach Strategy Development: The third-party implementer developed an outreach strategy with Southern California Regional Energy Networks (SoCalREN) and SCE account representatives to promote the program and support joint project implementation. SCE and the implementer continue to collaborate regularly on program implementation activities, project validations, and account representative outreach in support of statewide efforts.



• **Oil and Gas Expansion Approval.** The program successfully secured approval from all IOUs for an Oil and Gas Expansion in 2024. These measures expand the adoption of the Variable Frequency Drive (VFD) for the Rod Beam Pump.

# **Statewide Higher Education Efficiency Performance Program (HEEP)**

#### Program Description (SCE\_SW\_IP\_Colleges)

#### **Implementer:** CLEAResult Consulting, Inc.

The Higher Education Efficiency Performance (HEEP) Program combines traditional EE programs with Strategic Energy Management (SEM) to support energy action plans for higher education customers within the service areas of SCE, PG&E, SoCalGas, and SDG&E. Specifically, HEEP targets the Higher Education sector, serving the University of California (UC), California State University (CSU), and California Community Colleges (CCC). The program requires a multi-year commitment to training, energy analysis, and Measurement and Verification (M&V) activities.

HEEP's primary objectives include:

- Achieving Deep Energy Savings and Performance: The program aims to meet the goals and objectives of the California IOU Business Plan by achieving deep energy savings and performance through a comprehensive delivery design that provides technical support to establish a foundation for potential future capital projects, which will yield deeper savings. It employs two main strategies to deliver savings: from individual measures using a Deemed, Custom, or NEMC approach, and from participants engaging in an SEM cohort.
- Introducing Clean Energy Opportunities: The program seeks to introduce Higher Education participants to additional clean energy opportunities, including water efficiency, Demand Response (DR), renewable energy, project financing, and carbon emissions mitigation.

#### **Strategies and Outcomes**

As of December 31, 2024, the SW HEEP Program had 23 unique participants enrolled. For 2024, the program submitted and received approval for eight final reports in alignment with the *SEM Design Guide* requirements. The program also completed one Deemed project in 2024. Please refer to "T-3 Program Data" of each IOU's Annual Report for a summary of PY2024 SW HEEP program performance.

• Successful Execution of Amendment: The program executed its first amendment to adjust terms to better support program delivery. An Advice Letter was filed (5311-E and 5311-E-A)<sup>11</sup> for the HEEP Program and approved by the Energy Division (ED), which shifted program delivery to include greater savings leveraging the SEM calculation methodology.

<sup>&</sup>lt;sup>11</sup> AL-5311-E/5311-E-A: Request for Approval of Amendment No. 1 to the Statewide Higher Education Energy Efficiency Third Party Agreement with CLEAResult Consulting, Inc. (September 6, 2024)



- **Data-Sharing Protocols Established:** SCE developed and implemented data-sharing protocols, enabling the monthly sharing of customer data with the program implementer, starting in July 2024 in alignment with D.23-02-002.<sup>12</sup>
- **Ongoing Program Improvement:** SCE and CLEAResult continued to discuss market and regulatory barriers, program implementation, recruiting activities to improve program delivery in 2025. The Clean Energy Optimization Pilot (CEOP) program ramp-down in September 2024 is leading to new opportunities for potential savings in 2025 and beyond.

# **Statewide Electric Emerging Technologies Program (SWEETP)**

### Program Descriptions (SCE\_SW\_ETP\_Elec)

#### **Implementer:** Cohen Ventures, Inc.

Statewide Electric Emerging Technologies Program (SWEETP), also known as CalNEXT, supports the identification and evaluation of new technologies and delivery mechanisms to meet the evolving needs of California's electric IOUs' EE portfolios. It covers various technologies, including Heating, Ventilation, and Air Conditioning (HVAC), Lighting, Process Loads, Water Heating, Plug Load and Appliances (PLA), and Whole Buildings. The program serves all sectors and includes behavioral, retro-commissioning, and operational (BRO) efficiency.

SWEETP's primary objectives are to:

- Scan, prioritize, and evaluate commercially available, emerging, or underutilized technologies to support increased adoption in IOU EE portfolios
- Share project results to inform stakeholders, support technology transfer, and advance industry understanding
- Incorporate California's decarbonization, Equity, and grid priorities into the prioritization framework, and
- Execute research projects supporting IOU EE portfolios.

#### **Strategies and Activities**

- **Planning and Prioritization:** Engage stakeholders, develop and revise Technology Priority Maps (TPMs) and publish quarterly reports.
- Scanning and Screening: Enhanced published TPMs, communications, and highquality project ideas.
- **Technology Research:** Implement projects based on detailed plans, publish findings, and solicit feedback.
- **Dissemination:** Share project findings through various channels to engage stakeholders.

<sup>&</sup>lt;sup>12</sup> D.23-02-002: Decision Addressing Energy Efficiency Third-Party Processes and Other Issues, issued February 3, 2023.



• **Technology Transfer:** Facilitate the transfer of technologies to IOU portfolios through dedicated meetings and support.

#### **Strategies and Outcomes**

In 2024, SWEETP revised seven TPMs and completed four Scanning and Screening processes (one each quarter). A total of 126 unique projects were submitted by both the partner teams and the public. These projects spanned HVAC, Water Heating, Process Loads, Whole Buildings, and Lighting and PLA. Project submissions were divided among seven program tactics comprised of field demonstrations, lab demonstrations, market characterization studies, measure development, scaled field deployments, tool development, and test standards development. A total of five projects were selected through the Fast Track<sup>13</sup> process based on input from California Technical Forum (Cal TF) and SCE.

In May 2024, SCE executed a contract amendment as the implementer, Cohen Ventures Inc. had not completed certain projects expected to be finished during Delivery Years 2023 and 2024. Since the amendment, the implementer has successfully completed the expected Focused Pilot (FP) in 2024 and aims to complete the remaining tasks during the future Delivery Year.

The TSR projects focused on either overcoming market barriers or further developing commercially market-ready equipment and technologies. From the "Residential High-Efficiency Windows Measure Package Completion" and "Commercial High-Efficiency Windows Measure Package Completion" projects, the implementer continued work from the prior projects and provided measure packages for CPUC review and approval, assisted Cal TF and IOU engineers in answering questions, and moved the measure packages through the review and approval process.

Another TSR project, "120V Induction Stoves with Battery Back-Up," involved installing and monitoring 36 120V induction stoves equipped with an internal battery back-up source in a tribal community. The 120V input voltage design eliminates the need for panel upgrades or converting outlets to 240V. Additionally, the battery back-up feature directly supports communities that are prone to frequent multi-day power outages due to winter storms or Public Safety Power Shutoffs (PSPS), making these great solutions to advance SCE's electrification goals.

The TDR projects focused on further developing the commercial capability of early-stage equipment, technology, or products that are not yet available in the market. For TDR, the "Market Study of Emerging Residential Energy and Automation (REA) Technology" revealed that REA systems offer substantial benefits over conventional energy architectures in new residential construction. Annual energy savings ranged from 18 to 64 percent, with variation attributed to the transmission efficiency of connected Demand-side resources and the adoption of Electric Vehicles (EVs) within the home model. These savings are further enhanced when REA systems shift energy use to off-peak hours, effectively reducing energy costs and mitigating grid demand during peak hours.

Another TDR project, "Residential Multi-Function Heat Pump (MFHP) Laboratory Testing," tested the efficiency and capacity performance of commercially available air-to-air

<sup>&</sup>lt;sup>13</sup> Fast Track projects can be TSR or TDR projects.



MFHPs in environmental chambers across a range of outdoor air conditions to match California climate zones for space heating, space cooling, water heating, and simultaneous space cooling with heat recovery water heating.

Finally, the Focused Pilot aimed to identify market barriers, conduct pilot tests to understand how high-impact technologies can mitigate identified market barriers, and then determine whether such technologies should be transferred into an EE resource program in California. The FP project, "Advanced Motors Channel Partner Support and Measure Package Development," aimed to overcome key barriers to the widespread adoption of advanced motors. Primary barriers included limited manufacturing, technical knowledge (by customers, contractors, and distributors), stocking, market awareness, and a lack of Deemed energy savings methodologies needed to incentivize advanced motors. To address these challenges, the implementer conducted a market characterization study, designed education and outreach materials to increase market awareness, implemented an on-site monitoring program, and gathered data needed to support a deemed measure package proposal for submission to Cal TF.

Go on to the next page



# **Residential Sector**

SCE's Residential EE portfolio employs various strategies and tactics to overcome market barriers and to deliver cost-effective programs and services aligned to support customer needs and the goals of the California Energy Efficiency Strategic Plan (CEESP). The programs in SCE's 2024 Residential portfolio include:

- Comprehensive Manufactured Homes Program
- Disadvantaged Communities Marketing and Outreach Non-Resource Program
- Enervee Marketplace Program
- Home Energy Advisor Program
- Multifamily Residential Direct Install Program
- Residential Direct Install Program
- Residential Energy Advisor Resource and Non-Resource Equity Programs, and
- Residential Pay-for-Performance Program Assembly Bill (AB) 793.

These Residential programs target energy savings and demand reduction by implementing strategies to provide education, awareness, and rebates for viable EE technologies that may help customers afford equipment upgrades. The programs are available to homeowners, renters, multifamily <sup>14</sup> and property owners.

# **Comprehensive Manufactured Homes Program**

#### **Program Description (SCE-13-TP-001)**

The Comprehensive Manufactured Homes Program (CMHP) is a Direct Install (DI) program that provides comprehensive EE measures to manufactured/mobile home residents in collaboration with manufactured/mobile home parks and park managers. The program offers direct installation of energy-efficient products and services in manufactured/mobile home dwellings at no cost to the customer. The Program is designed to enhance the customer's knowledge of EE, increase awareness of EE programs, and drive participation in other EE, Demand Response (DR) and Income-Qualified Programs (IQP).

#### **Strategies and Outcomes**

Starting in 2024, Lifecycle Refrigerant Management and Smart Fan Controllers were incorporated into CMHP as two new offerings to enhance the program's range of services. In addition to the newly added measures, the program continued installation of other EE measures such as Smart Thermostat, Brushless Fan Motor, Duct Seal, and performance of Duct Optimization.

<sup>&</sup>lt;sup>14</sup> SCE defines "multifamily" as a housing classification where separate housing units for residential inhabitants are contained within one building or several buildings within one complex or residential building that houses more than one family at a time. Apartments, condos, townhouses, duplexes, and quadruplexes are examples of Multifamily housing options.



Together, these measures maximize energy savings for this program, but they also are lead-in measures that provide opportunities for customers to participate in other EE portfolio programs. Outreach and marketing initiatives keep mobile home park customers engaged and provide program participation opportunities for new customers. This outreach activity was delivered in-person and virtually. Presentations targeted mobile home park managers and their staff.

In 2024, proactive community engagement, program services and material distribution efforts improved the program's performance significantly. As a result, hundreds of customer leads were generated, and approximately 3,400 installations were completed during the year.

The implementer attended the 2024 Western Manufactured Housing Communities Association Convention & Expo. This gave the implementer an opportunity to establish connections with manufactured park owners and managers.

Collaboration with SCE's Meter Conversion Program continued in 2024. This networking was a strategy aimed at providing solutions around program services to customers that were affected by meter conversion. Program representatives handed out program materials and participated in a Meter Conversion community forum with resident stakeholders about program offerings and enrollment. Partnerships with various mobile home community management companies were established.

#### Disadvantaged Communities Marketing and Outreach Non-Resource Program

#### Program Description (SCE\_Res\_Equity\_003)

#### **Implementer:** Global Energy Services (GES), Inc.

The Disadvantaged Communities Marketing and Outreach (DACMO) Program targets Disadvantaged Communities (DAC), Hard-to-Reach (HTR), and underserved communities to increase residential customers' participation in EE, DR and Electrification programs. DACMO addresses barriers to participation by providing multilingual staff, an advertising campaign targeting language-specific local media, a toll-free hotline, a multilingual website, booths at local community events, social media presence, and strategic partnering with local governments.

DACMO aims to raise EE awareness in disadvantaged and underserved communities which might not participate due to language and financial barriers. Barriers are minimized by bringing program information directly to the customer through community outreach events and placement of door hanger material at their homes. Social media and radio ads are used to communicate program benefits to targeted audiences and to encourage them to take advantage of free Home Energy Advisements (HEAs), which provide helpful energy savings recommendations.

#### **Strategies and Outcomes**

In 2024, the DACMO Program delivered 97 outreach events in local communities and at public events, 663 media ads via local radio and social media, 50K door hangers to customer homes, and 1,030 Home Energy Advisements to residential customers who are seeking to reduce energy usage and bill expense. DACMO achieved 100% of program goals for three of four project types and nearly 80% of goal for the fourth (HEAs), successfully establishing a presence



within DACs. DACMO's presence has significantly raised EE awareness, which improved customer satisfaction within EE rebate and DR programs offered by SCE.

In 2024, the implementer began to apply analytics to understand program opportunities. For example, the implementer is now able to connect with customers when performing Home Energy Advisements and provide energy-savings recommendations for customers' homes. These analytical decisions led to better customer targeting and increased program performance which allowed the implementer to close out the year strong.

# **Enervee Marketplace Program**

#### Program Description (SCE\_3P\_2020RCI\_001)

#### **Implementer: Enervee Corporation**

Enervee's Marketplace Program is an online consumer product Energy Management Technology (EMT) marketplace that provides a web-based platform for SCE's residential customers. The platform provides information on retail prices, product efficiency, operating costs, and savings to help SCE customers compare the total cost of ownership for different products, inclusive of product cost and energy bill savings. The program also offers SCE customers inclusive, low-interest Eco Financing to help overcome financial barriers and purchase energy-efficient products without IOU-ratepayer funded EE rebates.

Eco Financing offers instant online underwriting of long-term loans with minimal credit requirements, enabling customers to purchase energy-efficient products using a \$0-down term loan with an affordable, fixed annual percentage rate (APR) interest. These loans are backed by the California Hub for Energy Efficiency Financing (CHEEF) GoGreen Home Residential Financing Program. Customers have the option to bundle installation and other services into their Eco Financing loan. While customers can choose other payment/financing methods, SCE can only claim savings for eligible measures that are purchased using Eco Financing.

#### **Strategies and Outcomes**

In 2024, Enervee delivered over 200 projects, all of which were Deemed measures, resulting in 0.01 net GWh energy savings. The Marketplace program continued to encounter challenges with market penetration, limited savings from qualifying measures, and purchases made solely using Eco Financing. These challenges continue to limit the program's ability to scale. For 2025, Enervee is focusing on ways to improve the program's scalability.

# **Home Energy Advisor Program**

### **Program Description (SCE-13-SW-001A)**

The Home Energy Advisor (HEA) Program focuses on educating and promoting behavioral changes among residential customers by creating and sending Home Energy Reports (HERs). The program uses a Randomized Control Trial (RCT) method to send HERs that provide a customer's historical energy consumption information and tips for reducing energy usage that may lead to cost savings they can see directly in their energy bill. This program is different from other Energy Advisor programs offering in-person home assessment services, in that HERs are either mailed or emailed to SCE customers. In addition, RCT methods that



analyze and compare customer's energy usage to that of their neighbors with similar-sized residences are unique to this program.

#### **Strategies and Outcomes**

In 2024, Oracle distributed HERs to more than 1.25 million residential customers. This included continuing to offer HERs to customers with Electric Vehicles (EVs) as well as launching new HERs for customers with solar and, separately, for those who speak Spanish. HERs helped customers reduce more than 82 GWh of energy and 15 MW of peak demand.

For 2025, Oracle is expanding the distribution of HERs to approximately 2.3 million residential customers. The HEA program will wind down in 2025, preceding the launch of Oracle's third-party implemented Customer Home Engagement for Energy Reduction (CHEER) Program in mid-2025.

# **Multifamily Residential Direct Install Program**

#### Program Description (SCE\_3P\_2024R\_MF\_001)

#### **Implementer:** Synergy Companies

The Multifamily Residential Direct Install (MFRDI) Program provides direct installation of comprehensive EE measures to Residential Multifamily customers and common areas at no cost. The Program targets specific geographic areas to alleviate energy hardship and electrical system constraints, and to assist lower- to medium-income populations not eligible for income assistance programs. The program enhances EE knowledge and program participation within the Multifamily market segment to motivate them to undertake deeper EE activities and retrofits.

This program defines Multifamily as housing units for residential inhabitants contained within one building or several buildings (within one complex or residential building) that house more than one family at a time, such as apartments, condominiums, townhouses, duplexes, triplexes and quadplexes.

#### **Strategies and Outcomes**

The program received Advice Letter approval in 2024.<sup>15</sup> The program is targeted to launch in the first half of 2025 and will coincide with the sunset of the corresponding legacy residential programs.

### **Residential Direct Install Program**

#### **Program Description (SCE-13-SW-001G)**

The Residential Direct Install (Res DI) Program provides for the direct installation of comprehensive EE measures to residential single-family and multifamily customers at no cost, targeting specific geographic areas to alleviate energy hardship, electrical system constraints, and to assist lower- to medium-income populations not eligible for income assistance programs. The program is designed to enhance the EE knowledge and program participation of the targeted Residential market segments to motivate them to undertake deeper EE activities and retrofits.

<sup>&</sup>lt;sup>15</sup> AL 5377-E, Southern California Edison Company's Advice Letter for Approval of Local Residential Multifamily Energy Efficiency Third Party Contract with Synergy Companies (September 27, 2024).



#### **Strategies and Outcomes**

Building on the momentum from 2023, the program prioritized the multifamily segment while concurrently delivering for the single-family segment. Starting in 2024, Lifecycle Refrigerant Management and Smart Fan Controllers were incorporated into the Res DI program as two new offerings. Adding these measures to the program's measure mix helped enhance the program's comprehensiveness and range of services.

During the year, market demand from the multifamily segment rapidly grew. In Q2 2024, SCE identified additional opportunities, further expanding the program's outreach within the multifamily sector. Leveraging these opportunities was key to meeting market demand and sustaining a higher-than-planned project volume. Installations averaged over 1,900 per month for the second half of the year. Overall, the program completed more than 18,000 installations and surpassed its 2024 True-Up Advice Letter (TUAL) energy savings goals, bringing in energy savings of over 7 Net GWh.

The Res DI Program continued its partnership collaboration efforts with the DR Smart Energy Program (SEP). The Program assisted in enrolling eligible single-family customers into SEP by leveraging Smart Thermostat installations. The Program also made use of a prescreening process that identified SEP-eligible customers. During installation appointments, prescreened customers were educated on the benefits of participating in SEP. Customers who expressed interest and consented to SEP enrollment had their enrollment facilitated by the program implementer.

This partnership continued to illustrate the value of Integrated Demand-Side Management (IDSM), helping to meet grid needs with increased demand response MW capacity and providing cost-effective EE savings by installing Smart Thermostats. Res DI completed close to 3,000 Smart Thermostat installations in single-family homes, and almost 900 of those participants were enrolled in SEP. This resulted in an approximate 34% EE-to-DR enrollment conversion.

This program is scheduled to close at the end of 2025. Currently, there are no plans to extend the program. SCE intends to transition its activities to the newly solicited Residential Energy Solutions program through a phased approach that ensures seamless market coverage for SCE customers. This process is currently underway, effective Q2 2025, following CPUC approval of SCE's Advice Letter 5486-E on April 1, 2025.

#### **Residential Energy Advisor Resource and Non-Resource Equity Programs**

#### **Program Description (SCE\_Res\_Equity\_001 and SCE\_Res\_Equity\_002)**

#### **Implementer:** CLEAResult Consulting, Inc.

The Residential Energy Advisor (REA) programs are Equity programs that leverage nonresource and resource elements to support the CPUC Environmental Social Justice (ESJ) Action Plan 2.0 goals of:

- Increased investment in clean energy resources to benefit ESJ communities
- Improved local air quality and public health
- Increased climate resiliency in ESJ communities, and



• Promoting high-road career paths and economic opportunity for residents of ESJ communities.

The implementer will use market analytics to target outreach and program activities to HTR residential customers, including moderate-income households, renters and those residing within DACs. The non-resource contract will focus on targeting HTR customers and DACs, inhome customer education, Energy Advisor services, coordinating community outreach events and Trade Ally (TA) online learning opportunities. The resource contract will focus on the development of a Trade Ally Network, Trade Ally marketing materials, and customer incentives for EE upgrades. Coordinated multichannel marketing campaigns will raise awareness among the general population within these targeted areas, leveraging local media, digital advertising and social media. In addition, the implementer will coordinate outreach events and community engagement efforts with local Community-Based Organizations (CBOs) such as community centers and churches.

The REA program will offer free Home Energy Assessments. The assessments will gather information on residences' insulation levels, Heating, Ventilation and Air Conditioning (HVAC) and water heating systems, light bulbs and fixtures, major appliances and other data needed to identify EE opportunities and calculate savings potential. This aims to increase customer receptivity and adoption of EE, creating a virtuous cycle of interaction between customers, Trade Ally Networks, and EE programs. By leveraging existing Trade Ally Networks and partnerships developed through Comfortably CA, Golden State Rebates and the Technology and Equipment for Clean Heating (TECH) Initiative, the implementer will conduct targeted outreach to TAs who participate in these programs and have a base-level understanding of EE and fuel substitution.

#### **Strategies and Outcomes**

An amendment to the implementer's third-party agreement became effective May 23, 2024. The amendment moved the Initial Delivery Date (IDD) from Q1 2024 to Q3 2024 and increased the overall program budget. During the year, the implementer submitted 35 resource projects. Of these, 15 projects were approved, and 20 projects did not meet the minimum equity customer eligibility requirements. SCE required the implementer to develop an improved procedure to ensure the REA program submits qualified future projects as well as a performance improvement plan, as they fell short of meeting their goals in 2024. Ultimately, both actions have helped address REA's challenges in 2024 and SCE anticipates improved performance in 2025.

SCE worked closely with the implementer to identify barriers focusing on customer engagement, customer location and eligibility requirements. HVAC and fuel substitution measures were installed, and these EE measure types yielded positive results by reducing energy consumption and gas dependency. The implementer's targeted marketing efforts focused on customer eligibility requirements, measures, and rebates within DACs. CLEAResult has advised SCE of additional TA involvement, committing to boost program participation by engaging customers with strategic outreach and marketing campaigns to target program goals in 2025.

The implementer increased collaborations with its TAs, which helped boost program participation. SCE continues to work closely with the implementer exploring customer engagement strategies and targeted marketing campaigns in 2025.



# **Residential Pay-for-Performance Program**

#### **Program Description (SCE-13-TP-024)**

In 2017, California AB 793 and the associated CPUC Resolution E-4820<sup>16</sup> mandated that all California IOUs develop and implement incentive programs to EMTs to residential and Small and Medium-sized Business (SMB) customers. EMTs include products, services, or software that allow customers to better understand and manage electricity and/or natural gas consumption in their homes or places of business.

#### **Strategies and Outcomes**

- Offered rebates for EMT products such as Home Area Network (HAN) devices and Smart Thermostats (which remain available through SCE.com).
- Reported metrics. For details, see *Appendix A*.

<sup>&</sup>lt;sup>16</sup> Resolution E-4820: Request for Approval of Pacific Gas and Electric, San Diego Gas & Electric, Southern California Edison and Southern California Gas' Assembly Bill 793 (AB 793) Advice Letters (ALs), issued April 7, 2017.



# **Commercial Sector**

SCE's Commercial Sector EE programs offer technical support (such as facility audits, calculations, and design assistance) and rebates and incentives to provide Demand-Side Management (DSM) solutions that help commercial customers save energy and money. Targeted segments include distribution warehouses, office buildings, hotels, motels, restaurants, food service, schools, universities and colleges, hospitals, high-tech facilities, biotechnology facilities, retail facilities, and smaller customers with similar buying characteristics.

The Commercial sector program portfolio includes:

- Commercial Behavioral Program
- Commercial Energy Advisor Program
- Comprehensive Commercial Energy Efficiency Program (CEEP)
- Resource Innovations Small Medium Business Equity (Simplified Savings) Program
- SPARKe Strategic Energy Management (SEM) Program
- Strategic Energy Management (SEM) Program

# **Commercial Behavioral Program**

### Program Description (SCE\_3P\_2020RCI\_003)

#### **Implementer: ICF Resources, LLC**

The Commercial Behavioral Program sought to promote the adoption of behavioral changes in small and mid-size commercial customers through personalized Business Energy Reports (BERs), Energy Advisor support and rewards. The program Measure Package (workpaper) for BERs was approved in early 2023.

#### **Strategies and Outcomes**

SCE and ICF encountered challenges around higher costs to launch and implement the program in 2024. The program was originally designed to deliver customized BERs to Small and Medium-sized Business (SMB) customers across SCE's service area with feedback regarding their energy usage and low-cost or no-cost recommendations to save energy. However, due to higher costs, the program is projected to not be cost-effective. As a result, SCE and ICF are terminating the program.

# **Commercial Energy Advisor Program**

### **Program Description (SCE-13-SW-002A)**

The Commercial Energy Advisor Program included one component in 2024, Building Benchmarking, which aligns with AB 802<sup>17</sup> and with California Energy Commission (CEC)

<sup>&</sup>lt;sup>17</sup> AB 802 (2015) creates a "benchmarking and disclosure program" to enable owners of commercial and multifamily buildings above 50,000 square feet to understand their buildings' energy consumption.



benchmarking regulations. This program provides whole-building energy usage data to customers.

#### **Strategies and Outcomes**

In 2024, SCE provided the CEC with monthly aggregated whole-building energy usage data for approximately 25 SCE-owned buildings that are 50,000 sq. ft. or larger. Reporting will continue on an annual basis.

# **Comprehensive Commercial Energy Efficiency Program**

#### Program Description (SCE\_3P\_2020RCI\_005)

#### **Implementer:** Willdan Energy Solutions

The Comprehensive Commercial Energy Efficiency Program (CEEP) is a comprehensive program that utilizes a downstream delivery methodology. It is offered only to SCE commercial customers. Deemed, Custom Calculated, and NMEC measures are offered to commercial customers classified under the following North American Industry Classification System (NAICS) code segments: Lodging, Restaurants, Grocery Stores, Warehouses, Refrigerated Warehouses, Retail, Technology, Offices, and Miscellaneous.

#### **Strategies and Outcomes**

In 2024, Willdan Energy Solutions forecasted that they would significantly surpass their Total System Benefit (TSB) goal by year-end.<sup>18</sup> SCE and Willdan amended the program agreement to allow Willdan to, among other things, deliver and be paid for up to 250 percent of the original 2024 TSB expected deliveries. This increased the program budget from \$28.4M to \$71M in 2024. SCE submitted the amendment in Advice Letter 5367-E<sup>19</sup>, and the Energy Division approved the Advice Letter on September 30, 2024. As projected, CEEP exceeded its 2024 TSB (\$63.8 million delivered vs. a \$28.4 million original goal). CEEP delivered a Total Resource Cost (TRC) of 1.16.

CEEP delivered 90% Deemed and 10% Custom Calculated projects for approximately 396 projects, of which 71% were Heat Pump Water Heaters (HPWH). Most of the program savings came from hotels, motels, commercial office buildings and grocery stores. Willdan Energy Solutions took further steps to educate and train installers throughout the supply chain pipeline within the EE marketplace. The 2025 strategy focuses on increasing the variety of measures and increasing the market segment mix.

<sup>&</sup>lt;sup>18</sup> The TSB for HPWH equipment is calculated using the Commission's Cost- Effectiveness Tool (CET), consistent with the PY 2024 methodology set forth in the Measure Package and the Energy Division's April 28, 2025, *Revised Guidance for Large Commercial Heat Pump Water Heater, Commercial and Multifamily, Fuel Substitution Measure Package SWWH028 for Capacity and Energy Savings Claims* (Revised Guidance).

<sup>&</sup>lt;sup>19</sup> AL 5367-E, Request for Approval of Amendment No. 8 to Residential, Commercial, and Industrial Energy Efficiency Third Party Contract for Comprehensive Commercial Program (accepted Sept. 30, 2024).



# Small Medium Business Equity (Simplified Savings) Program

#### Program Description (SCE\_SMB\_Equity\_001)

#### **Implementer:** Resource Innovations, Inc.

Resource Innovations' Small Medium Business Equity Program (also termed Simplified Savings) Program aims to deliver meaningful energy bill savings to SCE's Small and Medium Business (SMB) customers that operate in Disadvantaged Communities (DAC) and underserved and/or Hard-to-Reach (HTR) customers. The Program will achieve this through local partnerships with Trade Allies (TAs) as well as Community-Based Organizations (CBOs) for customer outreach, and will offer services such as energy education, bill analysis, free Direct Install (DI) measures, and incentives for higher impact energy-saving measures (referred to as Post-DI measures). The Program focuses on non-residential SCE customers with a monthly maximum demand of <200 kW. Customers can select their TA by searching for contractors that match their desired criteria (such as languages spoken, diverse ownership, Better Business Bureau ratings and/or customer reviews).

Simplified Savings offers free (or discounted) EE measures to SMBs located in DACs that face language and financial barriers. Financial and cultural barriers frequently prevent customers from participating in SCE's EE programs. These obstacles are addressed by directly delivering marketing to customers through CBOs and TAs. Resource Innovations is also deploying an Equity plan that encourages these communities to take advantage of EE industry training programs that would lead to employment opportunities. The program includes workforce development as a non-resource project, aiming to empower community members with skills and opportunities needed for sustainable employment in the energy sector.

#### **Strategies and Outcomes**

SCE and Resource Innovations amended the effective delivery start date of the program from January to September 2024. Since then, the program has delivered 1,354 net kWh but did not reach the program's 7,290 kWh energy savings target. The implementer is proactively contracting additional resources to enhance program outreach efforts, ensuring that more customers become aware of EE rebates available to them. Additionally, SCE examined program barriers and will continue to work with the implementer to improve program performance. One strategy was for the implementer to work with TAs and CBOs to address challenges faced with customer outreach. This collaborative effort has increased customer interest in the program toward the end of 2024 and is expected to translate into project deliveries in 2025.

SCE performed a deep dive with the implementer to improve the program's success. Ultimately, modifying the start date gave the implementer an opportunity to begin additional marketing activities, initiate contact with potential TAs, and submit project data to SCE to meet some of their program's milestone requirements. The implementer performed Energy Advisements with each participant to identify additional opportunities for increased energy savings by offering beneficial Deemed measures. The program concluded the year with three installed resource projects, focusing on non-resource measures that benefited commercial customers located in disadvantaged communities.



# SPARKe Strategic Energy Management (SEM) Program - Commercial

#### Program Description (SCE\_3P\_SEM\_003)

#### **Implementer:** Cascade Energy

The SPARKe Commercial Strategic Energy Management (SEM) Program will deliver the program framework detailed in the most recently published *California SEM Design Guide* and *California SEM Measurement and Verification (M&V) Guide* to commercial customers with annual energy usage greater than 2M kWh in SCE's service territory over a series of three, twoyear cycles.

SPARKe includes innovative delivery approaches beyond the *California SEM Design Guide* and *California SEM M&V Guide*, such as new customer targeting approaches, tailored delivery to cost-effectively serve more customers, resources to help customers make the business case for and to implement more projects, and supplemental technical, coaching and financial support for decarbonization and electrification projects.

#### **Strategies and Outcomes**

The SPARKe Commercial SEM Program focused on program launch and recruitment activities in 2024. Their first cohort is expected to launch in the third quarter of 2025.

## Strategic Energy Management (SEM) Program - Commercial

#### Program Description (SCE\_3P\_SEM\_001)

#### **Implementer:** CLEAResult Consulting, Inc.

The Local Commercial SEM Program goes beyond traditional EE programs by implementing SEM, a holistic, whole-facility approach that uses Normalized Metered Energy Consumption (NMEC) with a dynamic baseline model to determine energy savings from all program activities at the facility, including capital projects, Deemed and Custom Calculated retrofits, maintenance and operation, and retro-commissioning projects. The SEM program for the Commercial sector requires a multi-year customer commitment to participate in multiple cohort-type training workshops, individual or cohort energy analyses and M&V activities based on characteristics of the facility's specific operations.

The Local Commercial SEM program targets customers across the Commercial sector and delivers savings to diverse building types owned by public/private entities. Examples include hospitals and healthcare facilities, large office buildings, hotels and resorts, data centers, retail, and warehouses.

#### **Strategies and Outcomes**

The program launched in the last half of 2024, focusing primarily on recruiting customers. CLEAResult is engaging in SEM curriculum for enrolled customers and developing their customer pipeline to deliver savings in future years.



# **Industrial Sector**

SCE's Industrial sector EE programs work with industry stakeholders to promote integrated energy management solutions to industrial end-use customers, such as manufacturing, textiles, refineries and wastewater treatment plants. The programs are designed to overcome the traditional market barriers to EE while also advancing distributed generation (DG) and Demand Response (DR) opportunities.

The Industrial program portfolio includes:

- Legacy Strategic Energy Management (SEM) Program
- SPARKe Strategic Energy Management (SEM)
- Strategic Energy Management Program (SEM) and,

# Legacy Strategic Energy Management (SEM) Program

#### **Program Description (SCE-13-SW-003D)**

The Industrial SEM Program is based on statewide SEM program design and Measurement and Verification (M&V) guidelines developed jointly with the IOUs and the CPUC. The Industrial SEM Program requires a two-year commitment, with potential for renewal. The program is a whole-facility program that comprehensively addresses both electric and gas reduction opportunities within industrial facilities. This program is jointly administered by SCE and Southern California Gas (SoCalGas). The Industrial SEM Program assists facilities in identifying, prioritizing, and implementing energy savings opportunities that they would not have implemented without program support, including reducing energy waste in their behavior and operations as well as pursuing capital projects.

#### **Strategies and Outcomes**

In 2024, a total of four cohorts remained in the program, and the Industrial SEM program continued to exceed energy savings goals. Cohort 1, which is the last gas and electric cohort, completed its final cycle (year six) of the SEM program. In 2024, three participants graduated. Please refer to "T-3 Program Data" of each IOU's Annual Report for a summary of PY2024 Legacy Strategic Energy Management program performance.

As of 2025, the program is closed to new participants and is no longer recruiting new cohorts. The program's focus has shifted to allowing current participants to complete their six-year SEM journey and graduating from the SEM program. In 2025, the Legacy SEM Program is projected to have 15 participants remaining.

# SPARKe Strategic Energy Management (SEM) Program - Industrial

### Program Description (SCE\_3P\_SEM\_004)

#### **Implementer:** Cascade Energy

The SPARKe Industrial SEM Program will deliver the program framework detailed in the most recently published *California SEM Design Guide* and *California SEM M&V Guide* to



Industrial customers with annual energy usage greater than 2M kWh in SCE's service territory over a series of three, two-year cycles.

SPARKe includes innovative delivery approaches beyond the *California SEM Design Guide* and *California SEM M&V Guide* such as new customer targeting approaches, tailored delivery to cost-effectively serve a larger number of customers, resources to help customers make the business case for and to implement more projects, and supplemental technical, coaching, and financial support for decarbonization and electrification projects.

#### **Strategies and Outcomes**

The SPARKe Industrial SEM Program focused on program launch and recruitment activities in 2024. Their first cohort launch was in Q3 of 2024. The program expects to see savings in future years.

## **Strategic Energy Management (SEM) Program - Industrial**

#### **Program Description (SCE\_3P\_SEM\_002)**

#### **Implementer:** CLEAResult Consulting, Inc.

The Local Industrial and Agricultural SEM Program goes beyond traditional EE programs by implementing SEM, a holistic, whole-facility approach that uses Normalized Metered Energy Consumption (NMEC) with a dynamic baseline model to determine energy savings from all program activity at the facility, including capital projects, Custom and Deemed Calculated retrofits, maintenance and operation, and retro-commissioning projects. The SEM program for the Industrial and Agricultural sectors requires a multi-year customer commitment to participate in multiple cohort-type training workshops, individual or cohort energy site analysis and M&V activities based on the characteristics of the facility's specific operations.

The program targets customers across the Industrial and Agricultural sectors and delivers savings to diverse building and site types owned by public or private entities.

#### **Strategies and Outcomes**

The program launched in the last half of 2024 and is focused primarily on recruiting customers. CLEAResult is engaging in SEM curriculum for enrolled customers and developing their customer pipeline to deliver savings in future years.



# **Agriculture Sector**

SCE's Agriculture Sector EE programs offer solutions to help agricultural customers save money and energy, including technical support (facility audits, calculation and design assistance and pump tests), and financial support through Calculated and Deemed incentives and rebates. Targeted segments include dairies, farms, food processing facilities and water pumping facilities.

The Agricultural program portfolio includes:

- Agriculture Energy Efficiency Program
- SPARKe Strategic Energy Management (SEM) Program and,
- Strategic Energy Management (SEM) Program

# **Agriculture Energy Efficiency Program**

#### Program Description (SCE\_3P\_2021AGPUB\_001)

#### **Implementer: ICF Resources**

The Agriculture Energy Efficiency (AgEE) Program is a new program offered in the Agricultural sector, implemented by ICF Resources, LLC. This program succeeds two SCE-implemented programs closed in 2022.

The AgEE Program serves SCE's Agricultural customers by delivering relevant EE solutions that meet the diverse needs of the sector. The Program objective is to increase customer participation and achieve greater savings within the Agricultural sector by maximizing energy savings through customized solutions that provide quantifiable operating cost reductions.

The AgEE Program identifies and works with agriculture customers to help them understand the benefits of implementing energy-saving projects and measures, provides technical and project development assistance as needed, and leverages financing solutions such as On-Bill Financing (OBF). For Disadvantaged Communities (DACs) and Hard-to-Reach (HTR) customers, the program provides higher levels of incentives and technical support to overcome participation barriers.

#### **Strategies and Outcomes**

Overall, AgEE delivered \$3.39 million TSB and 4.92 GWh energy savings during 2024. On July 31, 2024, SCE and the implementer amended their agreement, decreasing budget amounts and extending the program contract dates as well as changing the energy savings targets. This year significant program activities included SCE's proposal of workpapers to the CPUC for a barn fan and indoor horticulture measures, implementer-completed installations of Variable Frequency Drives (VFDs) on agricultural wells and booster pumps, as well as several larger, more efficient agricultural ventilation fan projects.

As the AgEE Program transitions into 2025, SCE has seized opportunities to work with the implementer to augment the program by focusing on robust marketing plans and employing multi-level outreach strategies to improve energy savings and increase customer participation. Looking forward, the program will continue to focus on Deemed upgrades for efficient fans, VFDs, pumps, indoor horticulture light-emitting diodes (LEDs), and some processing equipment.



# **SPARKe Strategic Energy Management Program - Agriculture**

#### Program Description (SCE\_3P\_SEM\_004A)

#### **Implementer: Cascade Energy**

The SPARKe Agricultural SEM Program will deliver the program framework detailed in the most recently published *California SEM Design Guide* and *California SEM Measurement and Verification (M&V) Guide* to Agricultural customers with annual energy usage greater than 2M kWh in SCE's service territory over a series of three, two-year cycles.

SPARKe includes innovative delivery approaches beyond the *California SEM Design Guide* and *California SEM M&V Guide* such as new customer targeting approaches, tailored delivery to cost-effectively serve a larger number of customers, resources to help customers make the business case for and to implement more projects, and supplemental technical, coaching, and financial support for decarbonization and electrification projects.

#### **Strategies and Outcomes**

The SPARKe Agricultural SEM Program focused on program launch and recruitment activities in 2024. Their first cohort launch was in Q3 of 2024. The program expects to see savings in future years.

## **Strategic Energy Management Program - Agriculture**

#### Program Description (SCE\_3P\_SEM\_002A)

#### **Implementer:** CLEAResult Consulting, Inc.

The Local Industrial and Agricultural SEM Program goes beyond traditional EE programs by implementing SEM, a holistic, whole-facility approach that uses Normalized Meter Energy Consumption (NMEC) with a dynamic baseline model to determine energy savings from all program activity at the facility, including capital projects, Custom and Deemed Calculated retrofits, maintenance and operation, and retro-commissioning projects. The SEM program for the Industrial and Agricultural sectors requires a multi-year customer commitment to participate in multiple cohort-type training workshops, individual or cohort energy analyses and site M&V activities based on the characteristics of the facility's specific operations.

The Local Industrial and Agricultural SEM program targets customers across Industrial and Agricultural sectors and delivers savings to diverse building and site types owned by public and private entities.

#### **Strategies and Outcomes**

The program launched in the last half of 2024 and is focused primarily on recruiting customers. CLEAResult is engaging in SEM curriculum for enrolled customers and developing their customer pipeline to deliver savings in future years.



# **Public Sector**

The Public sector represents a segment of customers that include public and private universities, tribes, taxpayer-funded or have political mandates that go through a public budgeting and decision-making process. SCE's portfolio of Public Sector EE programs includes:

• CLEAResult Public Energy Performance (PEP) Program.

# **Public Energy Performance (PEP) Program**

#### Program Description (SCE\_3P\_2021AGPUB\_002)

#### **Implementer:** CLEAResult Consulting, Inc.

The CLEAResult Public Energy Performance (PEP) Program combines supported energy action plan implementation with Strategic Energy Management (SEM) and traditional EE delivery methods (Custom, Deemed).

The SEM offering for the Public sector requires a multi-year customer commitment to participate in multiple cohort-type training workshops, individual or cohort energy analyses, and site Measurement and Verification (M&V) activities based on the characteristics of the facility's specific operations. Customers are eligible to participate as an individual entity or in a cohort of multiple organizations that are aligned with the program cycle's start, end and reporting dates. All elements of the program are delivered based on the current *California SEM Design Guide*, and individual customers have the option to participate in cohort-type activities, such as educational modules.

#### **Strategies and Outcomes**

As of December 31, 2024, PEP had 11 unique participants enrolled. In 2024, the program submitted and received approval for 102 final reports in alignment with the *SEM Design Guide* requirements. Please refer to "T-3 Program Data" for a summary of PY2024 program performance.

The program executed its first amendment in 2024 to adjust terms to better support program delivery. Advice Letter 5376-E-A<sup>20</sup> was filed for the PEP program and approved by Energy Division in 2024, which shifted the program delivery channel to include greater savings leveraging the SEM calculation methodology. Public entities indicated a preference for behavioral changes over a preliminary deployment of capital projects. Whole-building SEM opportunities, customer outreach and site audits during 2022 and 2023 built and strengthened the program, establishing a baseline for results in 2024. This year marked the first time SCE had seen substantial energy savings for the PEP Program since its inception.

Additional highlights for the PEP Program included streamlining the project submission process, increasing customer outreach, and enrolling a large casino in 2023, which significantly influenced the program's 2024 savings. Moving forward, PEP will focus on large public school districts and municipalities to generate energy savings.

<sup>&</sup>lt;sup>20</sup> Supplement to Advice 5376-E, Request for Approval of Amendment No.1 to the Local Public Energy Performance Energy Efficiency Third Party Agreement with CLEAResult Consulting, Inc.



# **Cross-Cutting Programs**

"Cross-Cutting" is the term applied to programs that impact ("cut across") multiple sectors. Cross-Cutting programs and initiatives include the following:

- Financing programs, which include:
  - On-Bill Financing (OBF) and Expanded On-Bill Financing
  - New Finance Offerings
- Other Cross-Cutting programs, which include:
  - Comprehensive Energy Efficiency Resource (CEER)
  - Codes and Standards (C&S)
  - Contractor Building Demand Program (CBDP)
  - Energy Efficiency New Program Design Pilots
  - Workforce Education and Training (WE&T) Programs

# **On-Bill Financing (OBF) Program**

#### **Program Description (SCE-13-SW-007A)**

The On-Bill Financing (OBF) Program assists eligible nonresidential customers to finance the purchase and installation of qualified EE measures by providing no-interest, no-fee, utility ratepayer-financed, unsecured EE loans. The loans are repaid through fixed monthly installments on customers' utility bills. OBF is a Statewide program, offered concurrently by the four California IOUs and governed by the CPUC.

#### **Strategies and Outcomes**

In 2024, SCE continued to redesign the operationalization of the OBF program to increase program participation. SCE streamlined its internal processes for expedited loan issuance and made system updates to improve the customer experience. As a result of recent improvements, SCE's OBF volume significantly increased from 2023, issuing over \$3.4 million in loans that supported EE programs. SCE developed internal processes to offer financing to Normalized Meter Energy Consumption (NMEC) and Strategic Energy Management (SEM) projects and established the foundation for a site-specific loan savings calculation to be launched in 2025. SCE explored the potential benefits of an OBF-without-incentive option that would offer financing for measures not currently available through other EE programs. Part of SCE's research included the evaluation of possible energy savings, cost-effectiveness, operationalization requirements, funding needs, IT modifications, and other program elements. As a result of this effort SCE began developing a proposal expected to be filed in 2025 for CPUC approval.



# **Expanded On-Bill Financing (Expanded OBF) Subprogram**

### Description

The Expanded OBF Subprogram is an extension of the existing OBF program that will offer the same type of no-interest, no-fee, utility ratepayer-financed, unsecured EE loans to promote the installation of clean energy projects beyond EE.

#### **Strategies and Outcomes**

SCE's Expanded OBF program has not yet launched. As a result of the CPUC's authorization to expand OBF to other clean-energy technologies beyond EE, SCE filed Advice Letter 5374-E<sup>21</sup> in August 2024 with the list of clean energy technologies SCE would like to include in its initial expansion. This Advice Letter is still pending CPUC approval.

SCE plans to file a Tier 2 Advice Letter in 2025 to set up new balancing accounts that will be technology-agnostic and will cover all the loans under the expanded program. While SCE awaits approval, it is currently developing internal processes to operationalize the Expanded OBF program contingent on approval of the Advice Letters.

In compliance with D.19-03-001<sup>22</sup> OP 4, SCE reports the following details:

- **Default Rates:** The OBF Program had two loan defaults in 2024 totaling \$18,423. The total overall OBF Program default rate remained less than 1 percent of all funded loan amounts since program inception.
- Energy Savings: The OBF Program does not claim energy savings directly. Instead, SCE will continue to report energy savings through the associated EE programs in which OBF customers participate.
- Status of Efforts to Replace Incentives with Loans: SCE funded one OBF loan(s) in 2024 over \$250,000 for \$308,277, for which the customer elected to receive the full loan amount while waiving any additional incentives.
- Degree of Free Ridership, if Any, Associated with EE Projects Financed through the OBF Program: Currently, the degree of free ridership is calculated in the Net-to-Gross (NTG) score for SCE's EE Incentive Programs and not by the OBF program. Additionally, SCE uses several safeguards and controls to avoid free ridership.

# **New Finance Offerings**

#### **Program Description (SCE-13-SW-007C)**

The New Finance Offerings Program, also known as GoGreen Financing, is a program administered by the California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA) and offered with the support of SCE and the other California IOUs to increase customer use of clean energy. The program offers scalable and leveraged financing

<sup>&</sup>lt;sup>21</sup> AL 5374-E and 5374-E-A: Southern California Edison Company's Expansion of On-Bill Financing to Include Clean Energy Technologies, accepted October 23, 2024.

<sup>&</sup>lt;sup>22</sup> D. 19-03-001, Decision Granting Petition for Modification of Decision 09-09-047 Concerning On-Bill Financing, issued March 20, 2019.



products, tests the effectiveness of third-party financing and ratepayer-funded credit enhancements, and tests whether payment via the utility increases debt service performance across market sectors for clean energy-related improvements.

The New Finance Offerings include the following programs and pilots:

- Single Family Loan Program with Credit Enhancements, commercially known as the GoGreen Home Program
- Small Business On-Bill Repayment (OBR) Loan/Lease with Credit Enhancements Pilot Program, commercially known as the GoGreen Business Program, and
- Master-Metered Multifamily OBR Pilot Program, commercially known as the GoGreen Multifamily Program.

#### **Strategies and Outcomes**

SCE continues to collaborate closely with CAEATFA, the other California IOUs and third-party implementers to provide financial, marketing, and implementation support to the New Finance Offerings Program. In 2024, SCE's local marketing campaign yielded excellent results. SCE provided credit enhancements for more than 300 GoGreen Financing loans that totaled over \$8 million and continued to support the program's statewide marketing and local marketing efforts. In addition, SCE worked with CAEATFA and the other IOUs to expand the program by offering financing for measures beyond EE. GoGreen Financing is currently available for solar and storage technologies. It is also available through GoGreen Home microloans (loans up to \$5,000), which are provided by SCE's third-party implementer, Enervee, to purchase energy-efficient appliances in the SCE Marketplace.

## **Comprehensive Energy Efficiency Resource (CEER) Program**

## Program Description (SCE-24-Non-3P-001-Com)

The SCE Comprehensive Energy Efficiency Resource (CEER) Program helps address gaps in SCE's primarily third-party (3P) driven portfolio and is intended to allow for the installation of measures and claiming of project savings that may not otherwise be eligible under current program offerings.

One of the considerations of 3P programs is to deliver cost-effective energy savings and introduce innovative approaches to achieve greater outreach, education, and engagement of customers. As the 3P programs begin to build their pipelines, there will be EE opportunities that may require a simpler and more direct interim approach, which is not covered by current 3P program designs.

SCE's solution is to reintroduce downstream incentives in the form of Calculated and Deemed offerings under a single program. The objective of this program is to ensure that "stranded" customer opportunities are captured. This program is intended to serve all sectors within EE including Residential, Commercial, Industrial, Agriculture and Public. SCE will implement the program in-house and under the existing SCE-led portfolio and will not be contracting with any third parties.



#### **Strategies and Outcomes**

In 2024, after receiving program approval from the CPUC, SCE launched a program webinar informing its stakeholders that the program was active, and the Implementation Plan was posted to CEDARS. Since no projects or applicants have yet entered the program, SCE will continue to monitor and market this program, filling gaps that meet the program's objectives.

## **Codes and Standards**

#### **Program Description**

The Codes and Standards (C&S) Program includes three Statewide advocacy subprograms administered by PG&E and three local subprograms administered by SCE. The three Statewide Advocacy subprograms are:

- State Appliance Standards Advocacy Subprogram
- State Building Codes Advocacy Subprogram, and
- National Codes & Standards Advocacy Subprogram.

These subprograms save energy and reduce greenhouse gas (GHG) emissions on behalf of customers by influencing regulatory bodies such as the California Energy Commission (CEC) and the U.S. Department of Energy (DOE) to strengthen existing EE regulations and develop new EE regulations. SCE, as a non-lead Program Administrator for Advocacy, collaborated and coordinated with PG&E by reviewing Codes and Standards Enhancement (CASE) studies and comment letters as requested by PG&E. Local subprograms Compliance Improvement, Reach Codes, and Planning and Coordination bring together stakeholders to help achieve the state's ambitious decarbonization and flexible demand goals.

The three local C&S subprograms administered by SCE are:

- C&S Compliance Improvement Subprogram: Provides additional tools, resources, and training for awareness and improved compliance with Title 24, Part 6<sup>23</sup> California Building Code, CALGreen Standards, and Title 20 appliance efficiency standards by offering training, webinars, and resources.
- C&S Reach Codes Subprogram: Supports local government Reach Code activities by conducting cost-effectiveness studies and by tracking their activities in addressing climate action plans and adopting Reach Codes.
- C&S Planning and Coordination Subprogram: Supports coordination across internal and external stakeholders (including the CPUC and CEC) and cross-cutting programs to develop planning efforts aimed at state policy goals and grid integration, including the state's GHG reduction, EE, building decarbonization, flexible demand, renewable energy, energy storage, water efficiency, and clean transportation goals.

These subprograms conduct efforts to increase compliance with existing C&S regulations, to ensure that the State of California realizes the energy savings from new Codes and Standards, and to support local governments that include Reach Codes as a climate strategy.

<sup>&</sup>lt;sup>23</sup> Building Energy Efficiency Title 24 Standards.



They also bring together statewide IOUs and external stakeholders to optimize building decarbonization planning and coordination activities in preparation for future codes. As a crosscutting EE program, SCE's C&S Program plans and coordinates with the Emerging Technology Program and other EE programs, the Demand Response Emerging Markets and Technology Program, Transportation Electrification programs, Income Qualified Programs, and SCE's Transmission and Distribution department to optimize collaboration in support of California's ambitious decarbonization and energy goals, while addressing grid harmonization, load and demand flexibility, building resiliency, and preparing for future code changes.

#### **Strategies and Outcomes**

Key initiatives of the C&S Program in 2024 include:

- Training, tools, and resources to support compliance with existing and upcoming codes and standards, and various activities further supporting the all-electric compliance path under 2025 Title 24, Part 6.
- Development of new cost-effectiveness studies to support local government Reach Codes, including tracking local governments' activities in addressing climate action plans and adopting Reach Codes by developing and continuously updating a web-based database.
- Long-term planning and coordination activities, including oversight of the California Building Energy Modeling (CalBEM) consortium,<sup>24</sup> to optimize energy modeling work across California's utilities.
- Planning, collaboration, and coordination of market-readiness activities aimed at identifying and preparing specific industries, stakeholders, and technologies for future code cycles.

In 2025, SCE will be convening discussions across stakeholder groups to determine how the new administration's priorities will affect both California's and the nation's progress toward a cleaner and more reliable energy infrastructure. C&S's role in tracking market trends will enable SCE and other stakeholders to anticipate and take proactive steps to ensure continued progress toward California's statewide goals. Through collaboration and coordinated action, C&S looks forward to working with all key stakeholders to shape a sustainable energy future for California and beyond.

## **Compliance Improvement Subprogram**

## **Program Description (SCE-13-SW-008C)**

The Compliance Improvement (CI) Subprogram helps make customers aware of and comply with building EE and appliance standards and supports local jurisdictions in improving the effectiveness of their energy code compliance review and oversight role. Compliance improvement activities maximize verified, persistent savings from building codes and appliance standards. The CI Subprogram targets market actors throughout the compliance chain, and

<sup>24</sup> CalBEM California Building Energy Modeling, *available at* https://calbem.ibpsa.us. See also *Planning and Coordination Subprogram* in this chapter, below.



provides education, outreach, technical support, and resources to improve compliance with both building standards (Title 24, Part 6) and appliance energy standards (Title 20).

#### **Strategies and Outcomes**

Throughout 2024, the CI Subprogram employed a systematic approach to mobilize the market throughout the building and appliance efficiency supply chains. The three-pronged performance improvement approach addresses the essential elements of behavior change:

- Training to provide the knowledge and skills needed to comply
- Outreach to increase awareness and motivation, and
- Tools and resources to empower people to take the desired actions.

The work accomplished in each area reflects specifically the elements key market actors have indicated they want and need to improve compliance. This effort was completed in close collaboration with the CEC, reviewing CI's tool development, statewide course materials, fact sheets, and other resources for accuracy before they are released to the public.

#### **Education & Training Highlights**

The local subprogram delivered more than 150 training sessions to over 3,000 participants, in addition to the more than 165 live courses with more than 4,500 participants reached by the Statewide training team. Several local programs were delivered in collaboration with the local RENs and the Workforce Education and Training (WE&T) program.

Newly developed CI courses supported the provisions included in the Title 24, Title 20, and CALGreen standards, including:

- A course focused on the newly adopted Embodied Carbon requirements for nonresidential buildings, which became effective in CALGreen in July of 2024.
- A session about how architects and other design professionals can better utilize the Title 24 compliance forms as a design tool throughout the project development process.
- A seminar for builders, architects, and realtors focused on communicating the benefits of electrification and other key Title 24 provisions to their clients.

The Education and Training Team also:

• Expanded the administration of Certified Energy Analyst (CEA) exams <sup>25</sup> (comprehensive certification examinations for energy modelers that incorporate the latest Title 24, Part 6 material) to a pilot program aimed at improving code compliance by delivering third-party support for permit plan check. This initiative was conducted in partnership with the California Association of Building Energy Consultants (CABEC).<sup>26</sup>

 <sup>&</sup>lt;sup>25</sup> CABEC Steps to CEA Certification, *available at* https://cabec.org/cea/steps-to-cea-certification/.
 <sup>26</sup> CABEC website, *available at* https://cabec.org/about/.



- Provided information to market actors through the EnergyCodeAce.com (ECA) YouTube channel, adding a short-form video series called "Small Bites."
- Initiated work on a book of case studies to highlight all-electric building projects in the educational sector, providing detailed energy usage statistics and in-depth interviews with the design teams.

In addition to serving as the gateway to training, tools, and resources, EnergyCodeAce.com also facilitates communication between industry and ECA experts through the "Submit a Question" and the "Q&Ace" features.

## **Tools and Resources Highlights**

- Revamped the ECA website homepage to make navigation easier for new users.
- Logged over 64,000 views of the Reference Ace Tool and over 55,000 projects uploaded to the Virtual Compliance Assistant.
- Managed over 180,000 downloads of fact sheets and trigger sheets.

To expand access to resources by the construction industry, key fact sheets were translated into Spanish-language versions, including:

- Single-family HVAC Additions and Alterations
- Single-family, Multifamily, Hotel and Motel Domestic Water Heating
- MAEDBS 101 (Modernized Appliance Efficiency Database)

#### **Collaboration with Partners**

The CI Subprogram also strengthened strategic partnerships with key industry organizations, such as the following, to provide their members with training and resources targeted specifically to their needs:

- American Institute of Architects (AIA)
- California Building Officials (CALBO)
- California Association of Building Energy Consultants (CABEC)
- Regional Energy Networks (RENs)
- US Green Building Council (USGBC)
- International Code Council (ICC)
- Building Industry Association (BIA), and
- Passive House California (PHCA).

The CI Subprogram maintained a strong presence at industry events and conferences, participating as an exhibitor or participant at over 90 industry events and trade shows for ECA. Participation included session presentations by subject matter experts and providing specialists at exhibit booths to answer attendees' code-related questions.



The CI Subprogram expanded its social media presence in 2024, leveraging multiple platforms to increase awareness about available resources, engage with a broader audience, and to drive more traffic to the ECA website and available training. Content was posted two to three times per week, announcing upcoming events, and highlighting education courses and other notable resources. ECA social media followers grew in 2024 by 70% on LinkedIn and by 27% on Facebook. The program's social media accounts recorded over 640,000 impressions and 6,500 clicks to the program website.

#### **Future Program Strategies**

To improve program effectiveness, the following strategies are planned for the coming year:

- Adding QR codes to outreach material so that digital versions of fact sheets and other resources are more easily accessible
- Integrating video content into social media posts to enhance engagement and drive additional traffic to the program website, and
- Updating major training offerings and online resources to reflect newly adopted 2025 Title 24, Part 6 regulations.

## **Reach Codes Subprogram**

## **Program Description (SCE-13-SW-008D)**

The C&S Reach Codes Subprogram assists local jurisdictions in adopting ordinances that exceed existing Title 24 codes, such as EE, GHG emissions reduction, and grid harmonization requirements. Collectively these are referred to as Reach Codes. These Reach Codes may include new distributed energy resources (DERs), electric vehicle (EV) infrastructure, water conservation measures and other decarbonization efforts.

The primary objective of the program is to facilitate Reach Code adoption by filling resource or expertise gaps in jurisdictions. The subprogram supports the development of these codes by providing technical assistance, research, and analysis to establish performance levels and cost-effectiveness. It also offers model ordinance templates and helps the jurisdiction through the application process for approval by the CEC. By encouraging local governments to adopt and comply with these advanced standards, the subprogram aims to test and refine new codes at a local level before potential statewide adoption, ultimately contributing to California's GHG reduction goals.

#### **Strategies and Outcomes**

The Reach Codes Subprogram supports local jurisdictions in adopting amendments to building codes. Adoption of new Reach Codes are recognized at multiple levels and are most active in the year before a new code cycle begins and during the first half of the year after the code cycle begins. In 2024, adoption of existing and new Reach Codes was slowed due to the



*California Restaurant Association v. City of Berkeley*, No. 21-16278 (9th Cir. 2024) ruling.<sup>27</sup> SCE conducted a survey to better understand the landscape post-*CRA vs. Berkeley*, and 17 out of 27 surveyed jurisdictions still plan to adopt ordinances.

The program's activities include direct technical support and educational initiatives. Technical support involves providing cost-effective studies, model language, checklists, and other resources. Educational efforts include maintaining websites, publishing newsletters, and hosting webinars. In 2024, the program ensured all documents met accessibility requirements for the CEC.

New cost-effectiveness studies were completed in 2024, with updates to reflect recent changes. Popular resources include the Single-Family New Construction summary and the Reach Codes Primer. The program also expanded support for EV infrastructure Reach Codes. Additional support included developing ordinance language, reviewing draft materials, and assisting with outreach efforts. The program continues to update resources for the 2022 code cycle and plans for the 2025 code cycle, ensuring jurisdictions have the necessary tools and guidance to adopt and implement Reach Codes effectively.

The Reach Codes program reduces the difficulty in understanding energy building codes and local ordinances. Explaining these codes helps stakeholders quickly understand and adopt building code amendments. Furthermore, the Cost-Effectiveness (C/E) Explorer tool, whose use increased 28% in 2024, helps staff easily access jurisdiction-specific data for policy options. The tool's capabilities were expanded to support Building Performance Standards (BPS) policies, allowing users to analyze non-residential building stock and create flexible, electrificationencouraging policies.

Despite a slowdown in overall website traffic due to the *CRA vs. Berkeley* ruling<sup>28</sup> and natural code cycle fluctuations, local interest in Reach Codes remained strong. The program's website saw a 5% increase in subscribers, with the homepage and Local Ordinance Map being the most viewed. The map provides interactive, searchable information on adopted ordinances, aiding stakeholders in understanding and implementing Reach Codes.

The program continues to refine user experience and update its resources, including creating an independent site for CALGreen resources. These efforts ensure jurisdictions have the necessary tools and guidance to adopt and implement Reach Codes effectively, supporting the broader goals of decarbonizing the building and transportation sectors.

In 2025, the Reach Codes Subprogram will focus on preparing for the 2025 code cycle, which goes into effect January 1, 2026. Key activities include:

• Developing new cost-effectiveness studies for all occupancy types

<sup>&</sup>lt;sup>27</sup> CRA V. CITY OF BERKELEY, No. 21-16278 (9th Cir. 2024) The Ninth Circuit Court of Appeals denied a petition for rehearing *en banc* of its ruling that the federal Energy Policy and Conservation Act expressly preempts the City of Berkeley's 2019 ordinance prohibiting installation of natural gas piping in newly constructed buildings.

<sup>&</sup>lt;sup>28</sup> *Id*.



- Supporting jurisdictions in adopting ordinances for EV, BPS, embodied carbon, process loads, and water efficiency
- Providing direct support, including guidance, study result interpretation, and ordinance documentation assistance
- Hosting technical webinars on 2025 cost-effectiveness study results
- Maintaining and updating LocalEnergyCodes.com and CALGreenInfo.com
- Expanding the Cost-effectiveness (C/E) Explorer tool for easier policy development and impact estimation
- Collaborating with stakeholders to create model implementation resources
- Developing custom resources for specific jurisdictions
- Publishing a monthly newsletter and "Frontrunner" stories
- Attending and presenting at conferences and events, and
- Expanding social media activity and presence.

## **Planning and Coordination Subprogram**

## **Program Description (SCE-13-SW-008E)**

The C&S Planning and Coordination (P&C) Subprogram helps meet statewide energy and Equity needs while supporting SCE's portfolio planning efforts aimed at meeting its share of state policy goals and facilitating building-grid integration including the state's energy-efficient building decarbonization goals. The P&C Subprogram continues to fulfill the coordination role given to the C&S program in D.12-05-015<sup>29</sup> by helping to integrate and coordinate key initiatives across a range of IOU and non-IOU programs and other utility business units such as Transmission & Distribution (T&D).

This subprogram consists of five matrixed elements:

- Development and advancement of key initiatives within the Decarbonization focus area
- Development and advancement of key initiatives within the Grid Harmonization focus area
- Development and advancement of key initiatives within the Code Harmonization focus area
- Ongoing and focused Strategic P&C, and
- Ongoing and focused Program Coordination.

P&C's three focus areas are:

<sup>&</sup>lt;sup>29</sup> D.12-05-015, Decision Providing Guidance on 2013-2014 Energy Efficiency Portfolios and 2012 Marketing, Education, and Outreach, issued May 18, 2012.



- **Code Harmonization**, which helps communicate and coordinate across different state, national, and local organizations to help align voluntary codes for consistency, promotion of best practices, and cost advantages of economies of scale.
- **Decarbonization**, which addresses efforts to support energy-efficient carbon reduction.
- **Grid Harmonization**, which helps SCE understand and prepare for the impacts of decarbonization and demand flexibility on the grid.

Within these focus areas, P&C conducts two ongoing activities: monitoring and assessment of key decarbonization technologies and markets and identifying any needs or gaps to smooth technology adoption. Below is a table showing how the elements are matrixed.

	Р	&C Focus Areas		
	Decarbonization	Grid Harmonization	Code Harmonization	Ongoing
Strategic Planning and Coordination	long-term focu	dvance key initiat s areas preparedness in ko		• Monitor and assess need for new P&C subprogram focus areas
Program Coordination	• Monitor marke	customer progra ts and data from doption trends that	<ul> <li>Monitor technology adoption</li> </ul>	

## Matrix of P&C Program Elements

## **Strategies and Outcomes**

In 2024, P&C's key initiatives in each focus area are described below. Additionally, P&C published the second annual 2023 SCE P&C Key Initiatives Report on the Energy Transition Coordinating Council (ETCC) website<sup>30</sup> to share the innovative P&C work to advance SCE's, California's, and the nation's progress toward EE, decarbonization, and demand flexibility goals with other California IOUs, agencies, and other external and internal stakeholders.

Code Harmonization: initiatives related to Code Harmonization include the following:

• Zero Flame Spread Study: SCE P&C conducted comprehensive studies and burn tests to develop wildfire-resistant building materials and methods. The research included material analysis, fire testing, and industry engagement, culminating in developing the Parcel Assessment for Wildfire Hardening (PAWH) form. This tool

<sup>&</sup>lt;sup>30</sup> 2023 SCE C&S Planning and Coordination Key Initiatives Report, *available at* https://etccca.com/reports/2023-sce-cs-planning-and-coordination-key-initiatives-report.



provides a standardized method for assessing and improving wildfire resilience while integrating EE benefits.

- **CALGreeninfo.com:** SCE C&S, in collaboration with the California Building Standards Commission (CBSC), the California Division of the State Architect (DSA) and the American Institute of Architects (AIA), launched **calgreeninfo.com**, a new web portal offering a variety of CALGreen resources all in one place. Calgreeninfo.com now serves as a single landing page for CALGreen educational materials relative to embodied carbon reduction, EV charging, and other "green" regulations, with regular updates planned as additional sustainability regulations are developed and adopted.
- **Building Performance Standards:** The C&S team supported jurisdictions that were developing BPS ordinances that included the City of Santa Monica, West Hollywood, the City and County of Los Angeles, and the City of Carson. The P&C team continued work on the scoping of a study to take inventory of all known BPS programs in the U.S., assessing their attributes, and helping to determine their suitability as potential Reach Codes and statewide policy.
- Advancing American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE)/ International Energy Conservation Code (IECC) Standards to Support California's 2045 Goals: By statute, CEC's Title 24 needs to meet or exceed the national codes. This project's objective is to look ahead to identify how SCE P&C can facilitate the evolution of ASHRAE/IECC standards to support California's 2045 decarbonization goals, involving various stakeholders. SCE P&C needs to continually participate in ASHRAE and collaborate with organizations and other market actors to advance codes and improve data collection for labor and building material costs from the perspective of cost-effectiveness analysis and engage with market feasibility studies.

**Decarbonization:** initiatives related to Decarbonization include the following:

• Zero Emission Appliance Regulations to Support the California Air Resources Board (CARB) and South Coast Air Quality Management District (SCAQMD): CARB is advancing zero-emission standards for new space and water heaters, aligning with the 2022 Scoping Plan for Achieving Carbon Neutrality. SCAQMD is also taking steps to improve air quality in its Southern California territory. AQMD Rules 1111<sup>31</sup> and 1121<sup>32</sup> aim to reduce emissions from gas-fired furnaces and water heaters, respectively, by encouraging the transition to zero-emission technologies such as heat pumps. These regulations are integral to efforts to mitigate air pollution and enhance public health across the region. To support CARB and SCAQMD in their efforts in 2024, SCE P&C provided extensive technical assistance, contributing critical research and analysis to help shape these zero-emission appliance rules.

<sup>&</sup>lt;sup>31</sup> Rule 1111: Reduction of NOx Emissions from Natural-Gas-Fired Furnaces

<sup>&</sup>lt;sup>32</sup> Rule 1121: *Reduction of NOx Emissions from Residential Type, Natural-Gas-Fired Water Heaters* Both above Rules were implemented in 1978 and are being amended as of this writing.



- California Environmental Quality Act (CEQA)/Building Electrification (BE) Project Tracker: This database was designed to help the C&S Team identify upcoming large BE and CEQA projects within the SCE territory that will be built to Title 24 solar plus all-electric ready residential new construction requirements and solar and storage commercial new construction requirements that have significant electric distribution grid impacts. Over the course of the past two years, the project has evolved immensely with demonstrated value in supporting SCE's partners in T&D in their grid planning and forecasting efforts.
- **Building Inventory Geospatial (BIG) Database:** Since 2022, the BIG Database project has played a pivotal role in assessing decarbonization opportunities in existing buildings in SCE's service territory. An interim report was published on the ETCC website. This report provides detailed analyses and county-specific results for Los Angeles and Orange counties, summarizing the building inventory, electrification challenges, and energy impacts associated with BE measures. External interest in the BIG database increased significantly in 2024, as more stakeholders, including state agencies and local jurisdictions, began to use the BIG database to inform their BPS, energy efficient building decarbonization, and load flexibility efforts.
- Grid Harmonization: In 2024, P&C continued to collaborate with SCE's internal T&D planning organization. D.23-12-037<sup>33</sup> removed electric line extension allowances for mixed-fuel new construction effective July 1, 2024. Due to P&C's completion of initiatives in 2023 to update the T&D Customer Project Information Sheet (CPIS) and process modifications for tracking customer electrical service requests triggered by BE projects, T&D was well equipped to quickly adapt to the new allowance requirements for all-electric projects, ensuring appropriate assignment to new construction projects. Additionally, P&C informed the Energy Smart Homes Program of the new allowance requirements to improve their marketing and outreach efforts toward prospective builders and all-electric new construction. P&C also integrated key initiative tools, such as the BE/CEQA Project Tracker and BIG Database, with Grid Harmonization initiatives to provide T&D grid planning and load forecasting with information on planned electrification projects and adoption impacts.

**Grid Harmonization:** Additional initiatives related to Grid Harmonization include the following:

- Flexible Demand Potential at a Distribution Line Level: P&C evaluated the current and future potential for flexible load to mitigate peak demand for residential and small commercial customers, by substation, circuit, or feeder project. The methodology applied the approach developed for the 2023 Flexible Load Technical Potential study for SCE's service territory and integrated several data sources and modeling tools to quantify this potential.
- **Bottoms-Up Grid Model Advanced Profiles (BUGMAP) Tool:** The BUGMAP initiative leverages building energy modeling tools to construct a highly granular,

<sup>&</sup>lt;sup>33</sup> D.23-12-037, Decision Eliminating Electric Line Extension Subsidies for Mixed-Fuel New Construction and Setting Reporting Requirements, issued December 21, 2023 (p. 2).



localized grid model. By utilizing detailed building energy simulation data, SCE can perform a bottoms-up evaluation of load impacts on individual circuit infrastructure as Title 24, Title 20, and state and Reach Codes adopt and plan for energy-efficient building decarbonization and demand flexibility. This approach offers a more accurate assessment of how various EE measures, electrification trends, and distributed energy resources affect grid operations at a localized level. In 2024, P&C advanced the first-ever bottoms-up load analysis for a constrained circuit. Building upon the success of the initial analysis, SCE advanced the development of a BUGMAP tool capable of generalizing this approach to any circuit in the grid. The BUGMAP initiative represents a critical advancement in grid modeling, allowing SCE to move beyond traditional top-down forecasting methods toward a more refined, localized, and data-driven approach. By normalizing this new methodology, SCE aims to enhance grid reliability, optimize investment in grid assets, and support California's clean energy transition.

- Zero-Emission Appliance Impacts on the Grid: P&C studied zero-emission appliance impacts on the grid to support the SCAQMD as they consider new emission standards aimed at eliminating nitrogen oxide (NOx) from residential and commercial heating devices. Currently, only electric heating technologies meet these zero NOx standards, with potential future developments in compliant gas-fired options. The study focused on the potential grid impact from increased electricity demand due to the adoption of electric heating, water heating, pool heating, and air conditioning technologies.
- Heat Pump Space Winter Peak Demand: P&C examined methods to eliminate the necessity for strip heat in most applications and assessed the impacts on grid stability and carbon content. The results of this investigation were published in the 2024 American Council for an Energy-Efficient Economy (ACEEE) Summer Study on Energy Efficiency in Buildings conference proceedings in the paper titled "Yes, But It's a Dry Cold: Applicability of Cold Climate Heat Pumps in California" and discussed at an informal session led by P&C. The study concluded that the heating requirements of all but the coldest climates in California could be satisfied by "standard" variable capacity heat pumps without strip heat and the remaining colder climates could be addressed by cold climate heat pumps capable of operating down to approximately -20 degrees Fahrenheit. Furthermore, the need to update the CBECC software to more accurately simulate the energy use of heat pumps with strip heat and possibly impose additional restrictions on the use and control of strip heat if installed were highlighted.

## **Strategic Planning and Coordination**

**Coordinating and Collaborating with SW Implementers through ETCC:** The Energy Transition Summit, organized by SCE P&C and ETCC, evolved from the Emerging Technology Summit to include a broader scope of technology research. Attendees included representatives from California state agencies like CAL FIRE, CARB, and CEC, as well as nonprofit organizations, educational institutions, national laboratories, and utilities. The summit featured two opening panels with leaders from CEC, CARB, U.S. Department of Energy (DOE), Air-



Conditioning, Heating, and Refrigeration Institute (AHRI) and California IOUs, and 32 sessions on topics such as flexible demand, decarbonizing food service, heat pump technologies and resilient buildings.

**California Building Energy Modeling (CalBEM):** CalBEM is a collaborative effort to support California's building energy modeling community. SCE P&C hosts this platform yearly, aiming to address common BEM challenges and promote low-carbon buildings to meet climate goals. In 2024, initiatives focused on streamlining processes, developing education and resources, and advancing capabilities and metrics. The CalBEM 2024 Symposium included discussions on integrating home energy labels with modeling, the convergence of BEM with performance standards, and advancing BEM certifications. Professionals from the National Association of State Energy Officials (NASEO), National Renewable Energy Laboratory (NREL), and CEC shared their insights, providing a comprehensive view of the BEM landscape.

Equitable Decarbonization and Electrification - EPRI Program 204: SCE P&C tracked activities supporting equitable electrification, including TE projects for TE Reach Code development. P&C co-chaired the Electric Power Research Institute (EPRI) P204 program on Advanced Buildings and Communities. SCE began studying 3-D printed homes from Woodbury University and scoped supplemental projects for BPS and a residential heat pump using R-290 refrigerant with a GWP of three.

#### **Program Coordination**

**Market Transformation Coordination:** P&C staff represented the California IOUs on the Market Transformation Advisory Board (MTAB) and attended MTAB meetings and coordination meetings with the Codes and Standards Program, Energy Efficiency Programs, and CalNext staff. The California Market Transformation Program was authorized by D.19-12-021<sup>34</sup> and is being managed and executed by a third-party California Market Transformation Administrator (CalMTA). SCE staff supervised the distribution of funds to CalMTA through PG&E, which serves as the contract administrator.

**Smart Home Upgrade:** In 2024, SCE P&C helped develop a new showcase for the Energy Education Center in Irwindale. The Smart Energy Experience exhibit underwent several exciting updates to showcase the latest trends in a high-performance wall and attic with wildfire-hardening building envelope components that exceed minimum energy code requirements, smart appliances and heat pump appliances, energy storage, and wildfire-hardening building materials. Upgrades included battery controls, real-time and historical battery and photovoltaic activity, a demand response-enabled 120-volt heat pump water heater, a smart electrical panel, and an energy efficient heat pump clothes dryer with accompanying fact sheets and signage for tours.

**Architecture at Zero Design Competition:** In collaboration with the Workforce Education and Training (WE&T) program across the state's IOUs, which led the initiative, the C&S Team provided essential guidance and technical support for the successful planning, launch, and execution of the 2024 Architecture at Zero International Design Competition. The challenge for the 2024 competition was to design a new building on a middle school campus in

<sup>&</sup>lt;sup>34</sup> D.19-12-021: Decision Regarding Frameworks for Energy Efficiency Regional Energy Networks and Market Transformation, issued December 12, 2019.



East Los Angeles, California. This new building was intended to replace portable classrooms, with science labs, an art classroom, a maker space, outdoor learning environments, and a teacher workroom. The program required applicants to incorporate principles of decarbonization, Equity, and resilience, demonstrating their design's performance through predictive energy modeling studies with Title 24, Part 6 as a fundamental baseline. The competition received 72 entries: 41 from California, seven from other parts of the United States, and 13 from international participants with awards given at high school, college, and professional levels.

#### **Future Plans**

- Incorporate the database tool to enhance data-driven analysis and strategies to support planning and forecasting of electrification, demand flexibility, and distributed energy resources in new construction and existing buildings.
- Expand and improve the BIG Database to include additional data sources and higher confidence in imputed commercial building data.
- Continue collaborations with ASHRAE and other industry partners to advance building decarbonization and demand flexibility standards and practices.
- Focus on equitable electrification strategies to ensure all customer segments benefit from clean energy solutions.
- Leverage artificial intelligence (AI), machine learning, and energy modeling for improved data analysis and decision-making.
- Collaborate with EE, BE and flexible demand programs to enhance initiatives and effectiveness.
- Focus on integrating flexible load technologies and advanced controls to support customer savings, adoption of energy-efficient building decarbonization, and grid harmonization.

## **Contractor Demand Building Program**

## Program Description (SCE\_MarketSupport\_002)

The Contractor Demand Building Program (CDBP) addresses knowledge gaps related to Heat Pump Water Heaters (HPWH) within California's skilled trade workforce and increases HPWH installations across SCE's service territory. CDBP participants include both contractors and their installers. The program aims to support Disadvantaged Workers (DW), by offering onlocation training to reduce barriers and to increase the adoption of clean technologies.

Simultaneously, the program aligns with California's statewide decarbonization goals by providing participants with a HPWH upon training program completion, helping to encourage the use of knowledge gained immediately following their instructor-led training (ILT). Program participants are required to install the received HPWH following training program completion, helping to reduce carbon emissions throughout the service territory. By offering comprehensive HPWH training, CDBP boosts demand for EE and decarbonization technologies among contractors and their installers. This program will equip participants with the knowledge, skills, and abilities needed to successfully promote, install, and service this technology.



Prior to commencing CDBP ILT, participants enrolled in an eLearning training course introducing them to BE fundamentals. This prerequisite training, offered through SCE's Workforce Education and Training – Integrated Energy Education and Training (WE&T-IEET) program, acquaints participants with the fundamental concepts in fuel substitution and BE. It also provides participants with a foundational understanding of the advantages associated with all-electric buildings and a holistic perspective on statewide decarbonization efforts. This knowledge enables participants to recognize their role within this electrification process and how they can contribute toward achieving California's climate goals.

## **Strategies and Outcomes**

The CDBP successfully launched in July 2024. Significant strides were made in expanding the skilled trade workforce. The CDB program delivered 34 live training sessions across SCE's service territory with a total of 418 contractors completing the training. Completion of SCE's contractor training course qualifies contractors to receive a HPWH voucher. Since the launch of the program in 2024, the focus has been on increasing outreach efforts to meet its 4-year goal of 5,020 trained contractors.

CDBP significantly exceeded SCE's Disadvantaged Workers milestone, surpassing its 40% target by 38 percent. Contractors obtained the necessary knowledge and skills while learning how to install and service HPWHs. Training sessions further reinforced the application of installing HPWH where participants can effectively apply what they learned, installing HPWH in homes. This program has increased the number of trained contractors and has contributed to California's statewide decarbonization goals. As the program evolves, key lessons learned from 2024 will continue to shape the program's outreach, training execution, and contractor engagement.

Concerted marketing efforts with Ferguson, SCE's supplier partner, helped expand program awareness. Contractors who benefited from the training shared their positive experiences with peers and Trade Allies. Increased collaboration with business trade organizations (BTOs) and workforce development groups helped promote this program. Contractors were also encouraged to follow through with their HPWH installations recognizing the importance of completion.

Overall, SCE's promotional and outreach efforts will be key in increasing the visibility in the program which can lead to stronger interest and registration across the service territory. SCE will focus on strategic marketing, promotional and expanded outreach efforts in the upcoming years. Also, working with SCE's supplier partner and strategy team to find the maximum level of program interest, appropriate class location and underrepresented participation contribution mix within its service territory will be vital to achieving goals in the upcoming years.

## **Energy Efficiency New Program Design Pilots**

## Program Description (SCE\_MarketSupport\_001)

The EE New Program Design Pilots Program seeks to test the effectiveness of novel program designs targeted at delivering near-term Total System Benefit (TSB) utilizing existing available EE measures (excluding emerging technology). This program is designed to encourage the creation of innovative ideas and technologies by utilizing the skill, experience, and creativity



of the EE community. Upon selection, each pilot program will run for one year. If these programs prove to be successful based on individual program proposal success metrics, they could be transitioned into larger solicited Third-Party Resource Acquisition or Equity programs.

## **Strategies and Outcomes**

In Q4 2024, SCE received program approval from the CPUC and launched the program in 2025.

## Workforce Education and Training (WE&T) Program

#### **Program Description (SCE-13-SW-010A)**

The Statewide Workforce Education and Training (WE&T) Program is a comprehensive program focused on education, training, and workforce development, funded by and/or coordinated with the Investor-Owned Utilities (IOUs). The WE&T Program consists of one SCE-administered local subprogram, WE&T Integrated Energy Education and Training (IEET), and two statewide subprograms administered by PG&E:

- Statewide WE&T Career Workforce Readiness (CWR), and
- Statewide WE&T Connections<sup>35</sup>

Integrated Energy Education & Training (IEET) is a locally managed subprogram organized around market sectors and ross-cutting segments to facilitate workforce education and training appropriate to achieve energy savings, Demand-Side Management (DSM), and related energy initiatives required of the IOUs.

IEET consists of two main components:

- Collaborations, and
- Technical Upskill Training.

**Collaborations** provide opportunities for SCE to collaborate with other educational providers, addressing the needs of people seeking a post-secondary education with an energy job/career focus. Technical Upskill Training provides upskilling for incumbent workers in energy efficiency related jobs/careers.

**Technical Upskill Training** is the larger component of this subprogram and is delivered through the EECs and the Foodservice Technology Centers (FTC) located in the IOUs' service territories. The Centers provide training to market actors, the workforce, and Disadvantaged Workers (DWs). The Centers have many years of experience in providing WE&T curriculum and related deliverables, such as training courses, seminars, workshops, clean energy technology demonstrations, equipment efficiency testing, Tool Lending Library (TLL), interactive training exhibits and lectures to promote industry trends and developments for advancing SCE EE portfolio objectives. The Centers partner with IOU-administered third parties, local governments, and Community-based Organizations (CBOs) to provide workforce education in Clean Energy

<sup>&</sup>lt;sup>35</sup> Program budgets and forecast comparisons are *available at* https://cedars.cpuc.ca.gov.



Technology, Codes and Standards, HVAC, Energy Savings Assistance (ESA) Programs, as well as other training efforts.

## **Energy Education Centers**

In 2024, the Energy Education Centers (EEC) optimized operations delivering highquality training within a hybrid environment. Focus on efficiency maximized resources and provided a seamless learning experience. By offering instructor-led, in-person, online, and ondemand courses, the EEC empowered the workforce with the knowledge and skills needed for California's clean energy future. Leveraging the on-demand platform increased accessibility, enabling continuous learning and technical upskilling, and demonstrated the EEC's commitment to the evolving needs of the energy industry.

2024 Energy Education Centers Performance							
Goal	Target	Actual					
Collaborations	5	7					
Number of Participants	7,401	30,182*					
Number of Participants – Residential	6,560	24,197					
Number of Participants – Commercial	10,841	5,190					
Percentage of Target Audience Reached	2.0%	2.2%					
Percentage of Disadvantaged Worker43%71.3%Participants (CalEnviroScreen 4.0)43%71.3%							
* Totals are inclusive of the 2024 Food Customer Activities.	lservice Tech	* Totals are inclusive of the 2024 Foodservice Technology Center					

## **Fuel Substitution and Building Electrification**

The Fuel Substitution curriculum includes Building Electrification Fundamentals courses. These courses provide a strong foundation for participants before they branch off into two educational pathways, a Residential and a Nonresidential focus. This approach enables customers to choose classes that address the unique challenges of electrifying different building types. By offering specialized courses, participants gained in-depth knowledge and practical skills relevant to their sectors, effectively navigating the electrification process. These efforts are ongoing to support continuous learning and adoption.

## Heating, Ventilation and Air Conditioning (HVAC)

In 2024, the EEC sustained their comprehensive HVAC education and training programs as part of the IEET Program. These courses provide specialized education and training opportunities across all levels of the HVAC value chain. Through strategic collaborations with industry stakeholders, the EEC identified skill gaps and opportunities for workforce education, supporting the transition to a clean energy economy.



The National Comfort Institute (NCI), a third-party provider, focused on delivering intermediate and advanced-level HVAC performance-based, hands-on certification training designed to provide HVAC professionals with the skills and knowledge necessary to ensure high-quality installations, maintenance, and services that promote EE and sustainability.

2024 NCI Performance Metrics						
Activities	Results					
Total Training Hours	684					
Participants Certified	241					
Continuing Education Units (CEUs) Awarded	1,032					
Percentage of Intermediate or Advanced Level Classes	75%					
Percentage of Disadvantaged Workers Trained	52%					

The Institute of Heating and Air Conditioning Industries (IHACI), a third-party provider, supported the delivery of HVAC Residential and Commercial Quality Installation (QI), Quality Maintenance (QM), and Quality Service (QS) training.

2024 IHACI Performance Metrics						
Activities	Results					
Evening Classes Delivered	74					
NATE <sup>36</sup> Certification Exams Held	2					
Contractors and Technicians Trained	Over 2,300					

The third-party provider, HVACRedu.net, an online and on-demand training organization, delivered the "It's About Q" program throughout SCE's service territory. This program focused on standards-based skills training for quality installation and maintenance of commercial and residential HVAC systems.

2024 HVACRedu.net Performance Metrics						
Activities	Results					
NATE Core, Ready to Work, and Specialty Exams Delivered	362					
NATE Exams Passing Rate	97.3%					
Online Class Modules Completed	19,865					

Several Low Global Warming Potential (GWP) Refrigerants classes were offered to help HVAC contractors lower GHG emissions and meet regulatory requirements. These classes

<sup>&</sup>lt;sup>36</sup> North American Technician Excellence, *at* https://natex.org/.



equipped participants with the knowledge to navigate regulatory changes, consider environmental impacts and adopt practices that reduce the carbon footprint of their operations.

## Integrated Demand-Side Management (IDSM) Activities

The EEC remains committed to promoting Integrated Demand-Side Management (IDSM) principles through their educational seminars and workshops. These training programs seamlessly integrate EE and DR concepts, providing participants with a holistic understanding of energy management practices.

The curriculum covered but was not limited to: HVAC&R Systems, Variable Refrigerant Flow, Programmable Logic Controllers, Heat Pump Retrofits, Title 24 Lighting Code Updates, All-Electric Residential Buildings, Advanced Framing Techniques, Building Envelopes, Demand Response Programs, and Grid-Interactive Controls. This holistic approach empowered attendees to leverage the combined benefits of EE and DR strategies while implementing integrated Demand-Side Management practices.

#### **External Collaborations**

In 2024, the Centers collaborated with multiple CBOs, educational institutions, industry stakeholders, and training organizations to expand the reach of IEET offerings. These collaborations aimed to broaden energy education and workforce development programs, benefiting diverse communities and professionals.

- The Architecture at Zero 2024-25 design competition, sponsored by SCE and other Statewide WE&T IOUs, engaged professionals and students in designing a new building on a middle school campus in East Los Angeles, California, resulting in four collaborations with educational institutions (see page 49).
- The Energize Colleges Program, in collaboration with Strategic Energy Innovations (SEI), established two agreements with community colleges and universities, supporting Climate Corps Fellowships, academic projects, and group training events.
- SCE continued its collaboration with Proteus, Inc., to develop and deliver EE training, empowering Proteus' workforce to reach underserved communities.
- SCE's WE&T Foodservice Technology Center collaborated with the California Restaurant Foundation (CRF) on the Culinary High School Education/Training project, refining the Culinary Capstone Curriculum and providing hands-on training with commercial kitchen equipment.
- The Induction Lending Program (ILP), a collaboration between SCE WE&T and equipment manufacturers, lent commercial-grade induction equipment to both residential and commercial customers, promoting EE and supporting California's decarbonization efforts in the commercial food service sector.

## **Internal Collaborations**

In 2024, SCE delivered several online and in-person seminars to customers throughout its service territory. These seminars covered a wide range of topics including Title 24 energy codes, CALGreen codes, energy modeling software, and ventilation in energy-efficient homes. The



targeted industry sectors for these offerings included plans examiners, building inspectors, energy code compliance building modelers, architects, engineers, building envelope and lighting designers, HVAC technicians, and other trade professionals.

## Mobile Education Unit (MEU) Program

The Mobile Education Unit (MEU) program, a component of the IEET program, focuses on outreach to underserved and HTR rural communities, aiming to educate market actors about the benefits of a cleaner California. It served as a valuable resource, promoting the EECs' classes and the TLL, and ensuring widespread awareness and accessibility to these resources. Through its participation in 184 diverse events, including career fairs, college fairs, home shows, energy conferences, county fairs, and more, the MEU achieved over 20,000 meaningful customer engagements, through which customers joined the EEC mailing list, registered to borrow a tool from TLL, or downloaded the SCE app. The MEU program also created a workforce presentation aimed at high school, community college, trade college and adult schools. This intentional approach targets audiences that can benefit from EEC workshops and programs. The MEU program continues to directly connect with communities that may face barriers to accessing traditional educational channels.

#### **Lending Programs**

The EEC lending programs, including the TLL and Induction Lending Program (ILP), played a vital role in promoting EE and sustainable practices. These programs aim to enable accessibility to essential resources and empower individuals, professionals, and organizations to make informed decisions regarding energy consumption and building performance.

The Induction Lending Program (ILP) completed 40 loans to various groups, including residential customers, commercial customers, community-based organizations (CBOs), and SCE employees. Despite a slight drop in numbers from the 2024 increase of 250%, this decline seems to be an industry-wide trend, as other programs run by CBOs and utilities have also experienced similar decreases. This may be attributed to the emergence of other induction lending programs, with SCE's ILP being consulted by multiple organizations to start their own.

The program continued to expand its outreach through community partnerships with Breathe SoCal, the City of Irvine, and AltaMed, improving accessibility for customers, particularly in HTR and DACs. Additionally, ILP collaborated with Meals in Motion, a nonprofit organization that educates K-12 children and their families on healthy cooking using induction units. Together, they promoted the program at community events and plan to establish a Workforce Education & Training (WE&T) Collaboration in 2025.

## **Foodservice Technology Center Activities**

The Foodservice Technology Center (FTC) plays a pivotal role in promoting electrification and empowering professionals in the commercial food service industry. Through consultations, training programs, collaborations and demonstrations, the FTC advanced sustainable practices and fostered culinary innovation.

The FTC partnered with Commercial Food Equipment Service Association (CFESA) in 2024 to provide Certified Technical training to service technicians. The audience included



service agents, equipment manufacturers, foodservice operators, and vendors who work on foodservice equipment. This six-day course provided certification to the technicians.

Consultations and training conducted by the FTC, guiding significant electrification projects, included training on Induction Residential units for Corona Del Rey & Corona De Oro Affordable housing and remodel of the Santa Monica Thelma Terry kitchen.

The FTC conducted various events throughout the year, engaging with SCE customers and industry professionals to support the adoption of energy-efficient and electric cooking technologies.

2024 Foodservice Technology Center Customer Activities						
Activity Types	Target	Actual				
Equipment Demonstrations	48	270				
Webinars/Seminars/Trainings	37	699*				
Consultations	14	37				
Tours	20	357				
Field Assessments	9	26				
Trade Shows/Events	9	990				
Total 137 2,379						
* Totals are a subset of those given in 2024 Energy Education Centers Performance, above.						

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## **Other Programs and Activities**

This section describes other initiatives, programs, and activities.

## California Analysis Tool for Locational Energy Assessment (CATALENA) Project

Since D 18-05-041<sup>37</sup> became effective, the Commission directed the IOU PAs to:

- Select a lead to oversee the statewide deployment of the California Analysis Tool for Locational Energy Assessment (CATALENA).
- "Reassign responsibility"<sup>38</sup> to the CEC for the development and ongoing management.
- Established accounting mechanisms for the CEC in the tracking and managing of IOU's shared authorized budget.
- Transfer program level data to the CEC.

Currently, efforts with PAs are still on hold pending Commission guidance.

## **Regional Energy Network (REN) Partnerships**

SCE is the fiscal agent for the following four Regional Energy Networks (RENs) in its service territory:

- Southern California Regional Energy Network (SoCalREN)
- Tri-County Regional Energy Network (3C-REN)
- Inland Regional Energy Network (I-REN), and
- Central California Rural Regional Energy Network (CCRREN).

As a fiscal agent, SCE's role is to collect and disburse the RENs' CPUC-approved annual budget. In 2024, REN partnerships and collaboration efforts with the IOUs remained ongoing.

The PAs completed the CPUC-required Joint Cooperation Memoranda (JCM) which was filed 60 days after the Commission's approval of the last of the JCM PAs' True Up and Mid-cycle Advice Letters.

## **Closed Programs**

Programs closed to new enrollments are as follows:

• Comprehensive Multifamily (SCE\_3P\_2020RCI\_004) and Industrial Program (SCE\_3P\_2020RCI\_006)

Willdan's Comprehensive Multifamily program was designed to provide comprehensive EE solutions for all multifamily (MF) customer segments of the

<sup>&</sup>lt;sup>37</sup> D.18-05-041, *Decision Addressing Energy Efficiency Business Plans*, issued June 5, 2018.

<sup>&</sup>lt;sup>38</sup> D.23-02-002, p. 59.



residential sector across SCE's service area. Willdan's Comprehensive Industrial Program supported industrial SCE customers, utilizing a downstream delivery methodology that included Deemed, Calculated (customized), and Normalized Meter Energy Consumption (NMEC) measures.

In 2024, SCE and Willdan ultimately decided to close the Comprehensive Industrial and Multifamily programs, given challenges associated with evolving markets and operating both programs cost-effectively. The CPUC approved the closure of both programs. SCE notified the appropriate service lists about the program closures and hosted its public webinar March 2024. Thereafter, SCE returned collected program performance assurance funds for both programs back to the EE portfolio budget as directed by the Commission in D.23-02-002.<sup>39</sup>

## • Market Access Program (SCE\_SR\_001)

SCE's Market Access Program (MAP), marketed to the public as the Summer Reliability Program (SRP), offered participants performance-based compensation to reduce energy usage during times of high grid stress, with the goal of avoiding rotating outages while minimizing costs to ratepayers. The program assisted commercial and residential customers in purchasing and installing EE measures to reduce electricity demand for summer in 2022 and was extended by the CPUC through March 31, 2024, providing additional demand reductions. This program is now closed to new enrollments.

## **Programs Closed to New Commitments**

Programs closed to new commitments that may have one or more final projects (or program closure activities) pending, include the following:

## Commercial

- Commercial Calculated Energy Efficiency Program
- Savings By Design Program

## Public

• Public Sector Performance-Based Retrofit Program (PSPBR)

<sup>&</sup>lt;sup>39</sup> D.23-02-002, Decision Addressing Energy Efficiency Third-Party Processes and Other Issues, issued February 3, 2023; OP 3.



## **Tables and Appendices**

SCE's Annual Report portfolio results tables are illustrated in *Appendix A*. Program Administrators (PAs) report their portfolio results with Excel spreadsheet developed by the CPUC. This Annual Report tool includes portfolio concepts organized within the spreadsheet. PAs file their spreadsheets with their Annual Report narratives. This spreadsheet includes CPUC-approved embedded calculations such as energy savings, system benefits, metrics, commitments, expenditures, environmental and energy impacts.

*Appendix B* lists the names of active EE programs, sorted by year Program start. The table includes the Program identification number, Program name and start year.

*Appendix C* provides an alphabetical list of common abbreviations, terms and acronyms used within the Annual Report.

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# Appendix A. Annual Report Tables

## Section 1: 2024 Energy Savings

	Total System Benefit <sup>2</sup>	GWh	MW	MMTherms
	Portfolio - Non C&S	Ca	odes & Standards	
2024 Total Installed Portfolio Savings <sup>1</sup>	\$157,655,661	1,225.1	249.8	
Adopted 2024 Target (D.23-08-005 )	\$112,534,778	1,071.2	186.5	
Percentage of goal attainment	140%	114%	134%	
2024-2027 Cumulative Total Installed Portfolio Savings	\$157,655,661	1,225.1	249.8	-
Adopted 2024-2027 Goal (D.23-08-005)	\$500,266,416	3,976.6	682.5	
Progress Towards 4-year Goal	32%	31%	37%	

## Table 1. Net First Year Savings and Goal Attainment

[1] Includes IOUs REN/CCA TSB achievements

[2] SCE's Total System Benefit (TSB) goal achievement relies significantly on the Large Heat Pump Water Heater (HPWH), Commercial and Multifamily, Fuel Substitution measure package (SWWH028). The TSB for HPWH equipment is calculated using the Commission's Cost Effectiveness Tool (CET) consistent with the PY 2024 methodology set forth in the Measure Package and the Energy Division's April 28, 2025, Revised Guidance for Large Commercial Heat Pump Water Heater, Commercial and Multifamily, Fuel Substitution Measure Package SWWH028 for Capacity and Energy Savings claims (Revised Guidance).

## Section 2: Emission Reductions (Environmental Impacts)

All emission reductions and environmental impacts data can be found in the "SCE\_2024\_Annual Report Narratives and Spreadsheets.xlsx" spreadsheet, under tab "T-2 EnvImpacts." The spreadsheet can be accessed on the CPUC's California Energy Data and Reporting System (CEDARS) website at:

https://cedars.cpuc.ca.gov/documents/standalone/list/.

## Section 3: Programs, Expenditures and Cost-Effectiveness

All program data and expenditures can be found in the "SCE\_2024\_Annual Report Narratives and Spreadsheets.xlsx" spreadsheet, under tab "T-3 Program Data." The spreadsheet can be accessed on the CEDARS website at:

## https://cedars.cpuc.ca.gov/documents/standalone/list/.

The following is a description of what each metric means in terms of the overall portfolio's progress in producing net resource benefits for customers. Total TRC Costs shown in the table include the sum of the total administrative costs and the incremental measure or participant cost. The TRC costs also represent the changes to the TRC test made pursuant to  $D.07-09-043.^{40}$ 

• The **Total Resource Cost** (TRC) Test measures the net benefits of a program as a resource versus the participants' costs and program administration costs.

<sup>40</sup> D.07-09-043, Interim Opinion on Phase 1 Issues: Shareholder Risk/Reward Incentive Mechanism for Energy Efficiency Programs, issued September 25, 2007.



- The **Total Resource Net Benefit** (Net RBn) amount is the result of subtracting Total TRC costs from Total Resource Benefits.
- The **Ratepayer Impact Measure** (RIM) Test measures the effect changes in utility revenues and program operating cost have on customer bills or rates. This test indicates the direction and magnitude of the expected change in customer bills or rate levels. SCE has a RIM score of 4.60 including Codes and Standards and 0.89 without Codes and Standards. A benefit-cost ratio above 1.0 indicates that the program will lower rates and customer bills.
- The **Program Administrator Cost** (PAC) Test measures the net benefits of a program as a resource versus the total program costs, including both the program incentive and program administration costs.

## **Section 4: Segment Summary**

Pursuant to D.21-05-031, OP 2, the Commission requested PAs to organize portfolios by segment (Resource Acquisition, Market Support, and Equity). Data can be found in the "SCE\_2024\_Annual Report Narratives and Spreadsheets.xlsx" spreadsheet, under tab "T-4 Segment Summary." The spreadsheet can be accessed on the CEDARS website at https://cedars.cpuc.ca.gov/documents/standalone/list/.

## **Section 5: Bill-Payer Impacts**

Bill impact tables can be found in the "SCE\_2024\_Annual Report Narratives and Spreadsheets.xlsx" spreadsheet, under tab "T-5 Bill Impacts." The spreadsheet can be accessed on the CEDARS website at https://cedars.cpuc.ca.gov/documents/standalone/list/.

This section provides an explanation of the impact of EE activities on customer bills after they have participated in EE programs, compared to their bills without EE program participation.

In 2024, SCE was authorized to collect funds from ratepayers to implement approved EE programs. Customer bills included the authorized collection on January 1, 2024, the date the Program Year (PY) began. Therefore, EE programs increase customer bills "up front," when funds are collected to fund the programs. However, upon implementation, the programs reduce customer energy usage due to improvements in EE and subsequently reduce participants' bills. In the long term, all users will benefit through reductions in the cost of energy.

The following provides a brief explanation of the assumptions used in the calculation:

- The customer bill impacts included in this Report reflect the net impact on bills, accounting for the benefits of the programs.
- The overall impact of SCE's programs is that customer bills will decrease compared to bills without the EE programs.

The following methodology was used to calculate bill impacts resulting from the 2024 EE portfolio:

• The calculation methodology to determine average first-year bill savings uses the total gross energy savings per year multiplied by the average rate denominated in kWh. The product of these values is the total bill savings for all program participants.



• Similarly, the calculation methodology to determine average lifecycle bill savings uses the total lifecycle gross energy savings multiplied by the average rate denominated in kWh. The product of these numbers is the total lifecycle bill savings for all program participants.

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## Section 6: Savings by End Use

The Commission's EE reporting requirements mandate that SCE submit regular reports to the Commission quantifying portfolio accomplishments. One such requirement, reporting portfolio performance of energy savings and demand reduction by end use, is reported on a regular basis as part of SCE's monthly EE Report. The table below illustrates the 2024 results, by end use, of SCE's EE program portfolio.

						Gross							
				Gross G	Wh	MW	Gross M	MTherms	Net	GWh	Net MW	Net MN	/Therms
	TRC	PAC											
Measure End Use Category	Ratio	Ratio	TSB	First Year	Life Cycle	First Year	First Year	Life Cycle	First Year	Life Cycle	First Year	First Year	Life Cycle
Appliance or Plug Load	1.79	43.57	\$ 35,157,673	231.91	2,103.22	48.3	0.0	0.1	71.7	588.7	13.6	0.0	0.0
Building Envelope	0.87	180.62	\$ 120,834,470	93.89	1,676.56	33.3	0.0	0.0	53.7	948.9	20.2	0.0	0.0
Compressed Air	1.40	8.52	\$ 2,669,426	14.71	200.53	1.1	0.0	0.0	4.8	64.0	0.3	0.0	0.0
Commercial Refrigeration	2.93	11.65	\$ 40,613,261	306.00	2,312.45	44.6	0.1	0.4	112.5	897.1	15.3	0.0	0.3
Codes & Standards	3.58	103.25	\$ 78,514,697	723.98	11,622.82	115.7	0.0	0.0	115.8	1,683.4	15.4	0.0	0.0
Food Service	0.91	3.30	\$ 12,129,790	40.86	772.47	70.1	0.0	0.0	11.6	210.0	17.9	0.0	0.0
HVAC	1.24	7.83	\$ 221,529,844	453.38	7,320.78	174.4	0.3	3.7	179.1	2,797.7	63.0	0.3	3.7
Irrigation	0.41	1.65	\$ 25,714	0.09	0.89	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0
Lighting	1.72	104.41	\$ 291,954,632	2,088.36	24,537.30	233.2	(0.0)	(0.0)	586.2	7,511.3	71.7	(0.0)	(0.0)
Non-Savings Measure	0.00	-	\$-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Process Distribution	1.39	3.02	\$ 1,661,569	5.27	50.11	0.4	0.0	0.0	3.0	29.2	0.2	0.0	0.0
Process Drying	0.00	-	\$-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Process Heat	9.38	66.30	\$ 4,774,182	0.20	3.06	0.0	0.0	0.0	0.1	2.2	0.0	0.0	0.0
Process Refrigeration	0.35	262.83	\$ 6,924	0.03	0.38	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Recreation	2.25	117.91	\$ 8,062,916	49.33	468.31	12.3	0.0	0.0	20.9	208.5	4.7	0.0	0.0
Service	0.97	0.98	\$ 8,702,168	78.98	80.05	14.7	0.0	0.0	82.7	83.3	15.4	0.0	0.0
Service and Domestic Cold Water	0.00	-	\$-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Service and Domestic Hot Water	1.91	2.35	\$ 233,278,460	- 37.51	- 380.43	2.0	7.6	76.3	(53.4)	(540.3)	0.7	8.0	80.1
Whole Building	1.58	28.81	\$ 147,271,241	191.06	3,322.28	79.8	0.0	0.1	116.6	1,810.6	40.9	0.0	0.1
TOTAL			\$ 1,207,186,966	4,240.53	54,090.77	829.9	8.0	80.7	1,305.4	16,295.1	279.3	8.4	84.2

## Table 6. Annual Savings by Use Category

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## Section 7: Commitments<sup>41</sup>

The amounts shown in this table include dollar amounts reserved for, and energy savings expected from, projects and/or contracts that SCE entered into during the relevant budget years and that remain to be paid out after 2024. These figures do not include any commitments for Regional Energy Network (REN) funding or Evaluation, Measurement & Verification (EM&V) funding.

#### Table 7. Commitments

Commitments Made in the Past Year with Expected Implementation after December 2017							
	Committed Funds Expected Energy Savings						
2017	\$	GWh	MW	MmTherms			
Resource	\$ -	-	-	-			
Non-Resource	\$ 762,612	-	-	-			
Codes & Standards	\$ -	-	-	-			
SCE Total	\$ 762,612	-	-	-			

Commitments Made in the Past Year with Expected Implementation after December 2018								
	Comn	Committed Funds Expected Energy Savings						
2018		\$	GWh	MW	MmTherms			
Resource	\$	-	-	-	-			
Non-Resource	\$	50,528	-	-	-			
Codes & Standards	\$	-	-	-	-			
SCE Total	\$	50,528	-	-	-			

Commitments Made in the Past Year with Expected Implementation after December 2019							
	Committed Funds Expected Energy Savings						
2019	\$	GWh	MW	MmTherms			
Resource	\$	-	-	-			
Non-Resource	\$ 287,02	0 -	-	-			
Codes & Standards	\$ .	-	-	-			
SCE Total	\$ 287,02	D -	-	-			

Commitments Made in the Past Year with Expected Implementation after December 2020								
	Comn	Committed Funds Expected Energy Savings						
2020		\$	GWh	MW	MmTherms			
Resource	\$	161,251	1.00	-	-			
Non-Resource	\$	99,618	-	-	-			
Codes & Standards	\$	-	-	-	-			
SCE Total	\$	260,869	-	-	-			

Table continues on the next page

<sup>&</sup>lt;sup>41</sup> D.23-06-055, *Application of Pacific Gas and Electric Company for Approval of 2024-2031 Energy Efficiency Business Plan and 2024-2027 Portfolio Plan*, Issued July 3, 2023; OP 7.



## (Table 7, continued)

Commitments Made in the Past Year with Expected Implementation after December 2021							
	Cor	nmitted Funds	Expected Energy Savings				
2021		\$	GWh	MW	MmTherms		
Resource	\$	-	-	-	-		
Non-Resource	\$	1,044,925	-	-	-		
Codes & Standards	\$	143,471	-	-	-		
SCE Total	\$	1,188,396	-	-	-		

Commitments Made in the Past Year with Expected Implementation after December 2022							
	Com	mitted Funds	ls Expected Energy Savings				
2022		\$	GWh	MW	MmTherms		
Resource	\$	78,544	0.35	0.09			
Non-Resource	\$	3,186,838	-	-	-		
Codes & Standards	\$	555,870	-	-	-		
SCE Total	\$	3,821,252	-	-	-		

Commitments Made in the Past Year with Expected Implementation after December 2023							
	Con	nmitted Funds	s Expected Energy Savings				
2023		\$ GWh MW		MW	MmTherms		
Resource	\$	-	-	-	-		
Non-Resource	\$	4,645,524	-	-	-		
Codes & Standards	\$	6,007,907	-	-	-		
SCE Total	\$	10,653,431	-	-	-		

Commitments Made in the Past Year with Expected Implementation after December 2024							
	Con	nmitted Funds	Expected Energy Savings				
2024		\$	GWh	MW	MmTherms		
Resource	\$	-	10.56	1.40	-		
Non-Resource	\$	11,120,450	-	-	-		
Codes & Standards	\$	14,707,095	-	-	-		
SCE Total	\$	25,827,545	-	-	-		

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## **Section 8: Cap and Target Expenditures**

The Cap and Target Expenditures Report table details whether program budgets in each category (Administrative Costs, Marketing and Outreach, Direct Implementation, and EM&V) exceed the percentage caps and targets.

	Energy	Effici			get Expenditure		ort						
		Expenditures <sup>[1] [2][3]</sup>							24-2027 Four-	Cap &	Cap & Target Performance		
Line	Line Budget Category		n-Third-Party alifying Costs	Q	Third-Party ualifying Costs including SW)	т	otal Portfolio	Yea	ar Authorized OU Budget <sup>[4]</sup>	Percent of Budget	Cap %	Target %	
1	Administrative Costs	\$	12,878,179	\$	8,336,924	\$	21,215,103	\$	72,350,811				
2	IOU	s	7,779,907			\$	7,779,907			0.68%	10.0%		
3	Non-PA Third Party & Partnership				8,013,923.61		8,013,924			0.70%		10.0%	
4	PA & Non-PA Target Exempt IOU Programs	\$	5,098,271	s	323,001	\$	5,421,272						
5	Marketing and Outreach Costs	\$	1,536,017	\$	6,815,119	\$	8,351,136	\$	20,401,549				
6	Marketing & Outreach	s	1.536.017	s	6.815.119	\$	8.351.136			0.73%		6.0%	
	Ŭ	Ľ											
7	Direct Implementation Costs	\$	62,083,078	\$	105,298,941	\$	167,382,019	\$	995,051,157				
8	Direct Implementation (Incentives and Rebates)	s	19,440,789	\$	68,286,884	\$	87,727,673						
9	Direct Implementation (Non Incentives and Non Rebates) $^{\left[5\right]\left[6\right]}$	s	17,039,955	s	16,265,805	\$	33,305,760			2.91%		20.0%	
10	Direct Implementation Target Exempt Programs	s	25,602,334	s	20,746,253	\$	46,348,587						
11	EM&V Costs (Investor Owned Utilities & Energy Division) <sup>[6]</sup>	\$	10,710,995			\$	10,710,995	\$	55,255,971	0.94%	4.0%		
12	Total (Excluding ED Portfolio Oversight)	\$	87,208,269	\$	120,450,985	\$	207,659,253						
13	2024 Authorized Budget (excluding ED Portfolio Oversight) <sup>[4]</sup>							\$	1,143,059,488				
14	Third-Party Implementer Contracts (as defined per D.16-08-019, OP 10)			\$	120,473,733	\$	120,473,733	\$	754,298,116	10.54%			
15	ED Portfolio Oversight	\$	-	\$	-	\$		\$	1,990,000				
16	EE-Funded IDSM	\$	-	\$		\$					2.5%		

#### **Table 8. Cap and Target Expenditure Performance**

Includes all Energy Efficiency Program expenditures & incentives incurred & claimed for 2024 except SW Market Transformation & Summer Reliability
 Does not include expenditures for 3C REN, SoCal REN, IREN, and CCR REN
 \$6,846,541 Pensions & Benefits were excluded from the program spent, not funded by the EE Portfolio
 EE Portfolio Budget excludes: Program and EM&V budget for REN Programs; \$6.5M Finance Revolving Loan Program

[5] - Includes Non Incentives vendor payment for SCE-13-SW-001A Residential Energy Advisor, Resource program

[6] - This report is updated with any adjustments made for SCE's 2023 Annual Report

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## **Section 9: Metrics**

A copy of SCE's Metrics can be found in the "SCE AnnualExcel.2024.xlsx" spreadsheet, under tab "T-9 Metrics." The spreadsheet can be accessed on the CEDARS website at https://cedars.cpuc.ca.gov/documents/standalone/list/.

In D.18-05-041,<sup>42</sup> the Commission directed Program Administrators to:

- Report progress toward all metrics and indicators<sup>43</sup> and report metrics and targets, using the updated definition of Disadvantaged Communities (DAC) and Hard-to-Reach (HTR) customers in the Decision, and
- Assess the relative success of implementers' strategies to identify lessons learned and best practices for maximizing the contribution of EE in DACs and include this assessment as part of their metrics in their Annual Reports.<sup>44</sup>

SCE defines and reports HTR and DAC metrics in its Annual Report tables. In 2024, implementers' successes, strategies, lessons learned, and best practices can be found within the following programs:

- Disadvantaged Community Marketing and Outreach Non-Resource Program
- Residential Energy Advisor Non-Resource Equity Program

## Section 10: Local Program & Statewide Program Third-Party Budgets

Reporting on Local Program third-party budgets, Statewide program third-party budgets, Assembly Bill 841 budget, annual budgets, third-party outsourcing compliance, and Statewide budget compliance can be found in the "SCE\_2024\_Annual Report Narratives and Spreadsheets.xlsx" spreadsheet, under tab "T-10 3P Calculation." The spreadsheet can be accessed on the CEDARS website at https://cedars.cpuc.ca.gov/documents/standalone/list/.

Per D.18-01-004,<sup>45</sup> the Commission ordered in 2018 that EE portfolio budgets be contracted to third parties using a phased-in approach. To ensure a smooth transition, CPUC incrementally raised the third-party minimum compliance percentage requirement over several years. In 2022, the CPUC set a minimum requirement of 60%. In 2024, SCE met its 60% third party program requirements threshold by achieving 66%.

<sup>&</sup>lt;sup>42</sup> D.18-05-041, *Decision Addressing Energy Efficiency Business Plans*, issued June 5, 2018.

<sup>&</sup>lt;sup>43</sup> *Id.*, OP 9.

<sup>&</sup>lt;sup>44</sup> *Id.*, OP 11.

<sup>&</sup>lt;sup>45</sup> D18-01-004, *Decision Addressing Third-Party Solicitation Process for Energy Efficiency Programs*, issued January 17, 2018.



Component	2024-2027
Local 3P Programs	\$ 469,362,877.23
Statewide 3P Programs	\$ 287,083,068.10
Total 3P-Qualified Budget	\$ 756,445,945.33
Annual Budget	\$ 1,143,059,488.79
% Third Party Achieved	66%
Requirement	60%
In Compliance (T/F)	TRUE

## Table 10. Third-Party Program Requirements

## **Statewide Third-Party Program Coordination**

To allow for the successful implementation of Statewide programs, all IOUs have engaged in various coordinated efforts. The IOUs have established a coordinated body that meets regularly to coordinate the development of critical infrastructure that will allow the IOUs to implement Statewide programs in compliance with Commission guidance. All meetings and topics of discussion abide by each utility's antitrust policy.

#### **Statewide Third-Party Program Budgets**

On November 15, 2018, PG&E, SCE, SDG&E, and SoCalGas filed a Joint Supplemental Advice Letter regarding the IOUs' proposed mechanism for shared funding of Statewide programs pursuant to OP 24 of D.18-05-041.<sup>46</sup>

In D.18-05-041 OP 24, the Commission also directed the IOUs to include a summary of key findings from the annual report in their respective annual EE portfolio reports to the Commission. Specifically, the summary of key findings details proportional funding amounts for each statewide program area, and highlights any IOU cost-sharing discrepancies, with a focus on the requirement for proportional budget contributions.<sup>47</sup> This information can be accessed on the CEDARS website at https://cedars.cpuc.ca.gov/documents/standalone/list/.

## **Section 11: Third-Party Contracts**

D.18-05-041, OP 17, directed IOUs to track the number and proportion of third parties that forego the option of using utility account representatives. IOUs must include this information in their Annual Reports. In 2024, 94% of third-party vendors used SCE account representatives. For details reference reporting on SCE third-party contract details can be found in the "SCE\_2024\_Annual Report Narratives and Spreadsheets.xlsx" spreadsheet, under tab "T-11 3P Contract Info." The spreadsheet can be accessed on the CEDARS website at https://cedars.cpuc.ca.gov/documents/standalone/list/.

<sup>46</sup> Joint Supplemental Advice Letter, Shared Funding Mechanism Proposal Pursuant to Decision 18-05-041, (SDG&E AL 3268-E-A/2701-G-A; SoCalGas AL 5346-G-A; SCE AL 3861-E-A; and PG&E AL 5373-E-A/4009-G-A).

<sup>&</sup>lt;sup>47</sup> D.18-05-041, *Decision Addressing Energy Efficiency Business Plans*, pp. 86-87.



## **Section 12: SCE Marketplace Metrics**

California Assembly Bill (AB) 793 and the associated CPUC Resolution E-4820 mandated that all California IOUs develop Energy Management Technologies (EMTs). All Marketplace reporting data can be found in the "SCE\_2024\_Annual Report Narratives and Spreadsheets.xlsx" spreadsheet, under tab "T-12 SCE Marketplace Metrics." The spreadsheet can be accessed on the CEDARS website at

https://cedars.cpuc.ca.gov/documents/standalone/list/.

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# **Appendix B. Southern California Edison Programs**

## Table B: Active SCE Energy Efficiency Portfolio Programs

Program ID	Program Name	CPUC- Approved Start Year
SCE_3P_SEM_003	SPARKe Strategic Energy Management (SEM) Program - Commercial	2024
SCE_3P_SEM_004	SPARKe Strategic Energy Management (SEM) Program -Industrial	2024
SCE_3P_SEM_004A	SPARKe Strategic Energy Management (SEM) Program - Agriculture	2024
SCE_3P_SEM_001	Strategic Energy Management (SEM) Program – Commercial	2024
SCE_3P_SEM_002	Strategic Energy Management (SEM) Program -Industrial	2024
SCE_3P_SEM_002A	Strategic Energy Management (SEM) Program – Agriculture	2024
SCE_MarketSupport_002	Energy Efficiency Contractor Demand Building Program	2024
SCE_MarketSupport_001	Energy Efficiency New Program Design Pilots	2024
SCE-24-Non-3P-001-Com	Comprehensive Energy Efficiency Resource Program (CEER)	2024
SCE_3P_2024R_MF_001	Multifamily Residential Direct Install Program	2024
SCE_Res_Equity_002	CLEAResult Residential Energy Advisor Non-Resource Equity Programs	2023
SCE_Res_Equity_001	CLEAResult Residential Energy Advisor Resource Equity Programs	2023
SCE_Res_Equity_003	Disadvantaged Community Marketing and Outreach Non-Resource Program	2023
SCE_SMB_Equity_001	Resource Innovations Small Medium Business Equity (Simplified Savings) Program	2023
SCE_SW_WP	Statewide Water Infrastructure & System Efficiency Program (WISE)	2023
SCE_SW_IP_Colleges	Statewide Higher Education Efficiency Performance Program (HEEP)	2022
SCE_SR_001	Summer Reliability Program (Market Access Program) <sup>48</sup>	2022
SCE_3P_2021AGPUB_001	Agriculture Energy Efficiency Program	2021
SCE_3P_2021AGPUB_002	Public Energy Performance (PEP) Program	2021
SCE_SW_ETP_Elec	Statewide Electric Emerging Technologies Program (SWEETP)	2021
SCE_3P_2020RCI_003	Commercial Behavioral Program	2020
SCE_3P_2020RCI_001	Enervee Marketplace Program	2020
SCE_3P_2020RCI_005	Comprehensive Commercial Energy Efficiency Program	2020
SCE_3P_2020RCI_004	Comprehensive Multifamily Program <sup>49</sup>	2020

<sup>&</sup>lt;sup>48</sup> Program closed to new enrollments during the program year 2024.

<sup>&</sup>lt;sup>49</sup> *Ibid*.



Program ID	Program Name	CPUC- Approved Start Year
SCE_3P_2020RCI_006	Comprehensive Industrial Program <sup>50</sup>	2020
SCE-13-SW-003D	Legacy Strategic Energy Management (SEM) Program	2018
SCE-13-TP-024	Residential Pay for Performance Program - AB793	2017
SCE-13-SW-001G	Residential Direct Install Program	2017
SCE-13-SW-002A	Commercial Energy Advisor Program	2013
SCE-13-SW-008C	Compliance Improvement Subprogram	2013
SCE-13-TP-001	Comprehensive Manufactured Homes Program	2013
SCE-13-SW-001A	Home Energy Advisor Program	2013
SCE-13-SW-007C	New Finance Offerings	2013
SCE-13-SW-007A	On-Bill Financing (OBF) Program	2013
SCE-13-SW-008E	Planning and Coordination Subprogram	2013
SCE-13-SW-008D	Reach Codes Subprogram	2013
SCE-13-SW-010A	Workforce Education & Training (WE&T) Program	2013

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<sup>&</sup>lt;sup>50</sup> *Ibid*.



# **Appendix C. List of Acronyms and Abbreviations**

Acronym or Abbreviation	Explanation					
3C-REN	Tri-County Regional Energy Network					
AB	Assembly Bill					
ACEEE	American Council for an Energy-Efficient Economy					
AHRI	Air Conditioning, Heating and Refrigeration Institute					
AI	Artificial Intelligence					
AIA	American Institute of Architects					
AL	Advice Letter					
APR	Annual Percentage Rate					
ASHRAE	ASHRAE.org, formerly American Society of Heating, Refrigeration, & Air-Conditioning Engineers					
BE	Building Electrification					
BEM	Building Energy Modeling					
BER	Business Energy Report					
BPS	Building Performance Standards					
BRO	Behavioral, Retro-commissioning, and Operational					
ВТО	Business Trade Organization					
BUGMAP	Bottoms-Up Grid Model Advanced Profiles					
C&S	Codes and Standards					
C/E	Cost-Effectiveness					
CABEC	California Association of Building Energy Consultants					
CAEATFA	California Alternative Energy and Advanced Transportation Financing Authority					
CALBO	California Building Officials					
CALGreen	California Green Building Standards Code					
CalMTA	California Market Transformation Administrator					
Cal TF	California Technical Forum					
CARB	California Air Resources Board					
CBDP	Contractor Building Demand Program					
CBECC	California Building Energy Code Compliance					
CBO	Community-Based Organization					
CBSC	California Building Standards Commission					
CCC	California Community Colleges [System]					
CEA	Certified Energy Analyst					
CEC	California Energy Commission					
CED	Customer Engagement Division					
CEDARS	California Energy Data and Reporting System					
CEEP	Commercial Energy Efficiency Program					



Acronym or Abbreviation	Explanation				
CEER	Comprehensive Energy Efficiency Resource				
CEESP	California Energy Efficiency Strategic Plan				
СЕОР	Clean Energy Optimization Pilot				
CEQA	California Environmental Quality Act				
CEU	Continuing Education Unit				
CHEEF	California Hub for Energy Efficiency Financing				
CHEER	Custom Home Engagement for Energy Reduction				
CI	Compliance Improvement [Subprogram]				
CMHP	Comprehensive Manufactured Homes Program				
CO <sub>2</sub>	Carbon dioxide				
CPUC	California Public Utilities Commission				
CRA	California Restaurant Association				
CRF	California Restaurant Foundation				
CSU	California State University [System]				
CWR	[WE&T] Career Workforce Readiness [Program]				
D.	Decision				
DAC, DACs	Disadvantaged Community (ies)				
DACMO	Disadvantaged Community Marketing Outreach				
DER	Distributed Energy Resources				
DG	Distributed Generation				
DI	Direct Install [Program]				
DOE	(U.S.) Department of Energy				
DR	Demand Response				
DSM	Demand-Side Management				
DW	Disadvantaged Worker				
ECA	Energy Code Ace				
ED	[CPUC] Energy Division				
EE	Energy Efficiency				
EEC	Energy Education Center				
EM&V	Evaluation, Measurement & Verification (see also M&V)				
EMT	Energy Management Technology				
EPRI	Electric Power Research Institute				
ESA	Energy Savings Assistance [Program]				
ESJ	Environmental Social Justice				
ETCC	Emerging Technologies Coordinating Council				
EV	Electric Vehicle				
FP	Focused Pilot				
FTC	Foodservice Technology Center				
GES	Global Energy Services				



Acronym or Abbreviation	Explanation				
GHG	Greenhouse Gas				
GW, GWh	Gigawatts, Gigawatt-hours				
GWP	Global Warming Potential				
HEA	Home Energy Advisor [Program], also Home Energy Advisements				
HEEP	Higher Education Efficiency Performance [Program]				
HER	Home Energy Report				
HPWH	Heat Pump Water Heater				
HTR	Hard-to-Reach				
HVAC	Heating, Ventilation and Air Conditioning				
HVAC&R	Heating, Ventilation, Air Conditioning, and Refrigeration				
HVACRedu	HVACRedu.net				
ICC	International Code Council				
IDD	Initial Delivery Date				
IDSM	Integrated Demand-Side Management				
IEET	Integrated Energy Education and Training				
IHACI	Institute of Heating and Air Conditioning Industries				
ILP	Induction (Range) Lending Program				
IOU	Investor-Owned Utility				
IQP	Income-Qualified Program				
I-REN	Inland Regional Energy Network				
JCM	Joint Cooperation Memorandum (or Memoranda)				
kW, kWh	kilowatts, kilowatt-hours				
LED	Light-Emitting Diode				
LPA	Lead Program Administrator(s)				
M&V	Measurement and Verification (see also EM&V)				
MAEDBS	Modernized Appliance Efficiency Database				
MAP	Market Access Program				
MEU	Mobile Education Unit				
MFRDI	Multifamily Residential Direct Install				
MFHP	Multifunction Heat Pump				
MTAB	Market Transformation Advisory Board				
MVA	Megavolt Ampere				
MW, MWh	Megawatts, Megawatt-hours				
NAICS	North American Industry Classification System				
NCI	National Comfort Institute				
Net RBn	Total Resource Net Benefit (or TRC Net Benefit)				
NMEC	Net (or Normalized) Meter (or Metered) Energy Consumption				
NOx	Nitrogen Oxide compounds (where X is the variable oxygen component of the compound)				



Acronym or Abbreviation	Explanation				
NREL	National Renewable Energy Laboratory				
OBF	On-Bill Financing				
OBR	On-Bill Repayment				
ОР	Ordering Paragraph				
P&C	Planning & Coordination [Subprogram]				
PA	Portfolio Administrator, Program Administrator or Public Administrator				
PEP	Public Energy Performance [Program]				
PG&E	Pacific Gas & Electric Company				
РНСА	Passive House California				
PLA	Plug Load Appliances				
PSPS	Public Safety Power Shutoff				
PV	Photovoltaic				
QA	Quality Assurance (often combined with Quality Control, i.e., QA/QC)				
QC	Quality Control (often combined with Quality Assurance, i.e., QA/QC)				
QI	Quality Installation				
QM	Quality Maintenance				
QS	Quality Service				
RA	Resource Acquisition				
RCI	Residential, Commercial, and Industrial				
RCT	Randomized Control Trial				
REA	Residential Energy and Automation, or Residential Energy Advisor (Program)				
REN	Regional Energy Network				
Res DI	Residential Direct Install				
RFP	Request for Proposal				
RIM	Ratepayer Impact Measure				
RNC	Residential New Construction				
S&S	Scanning and Screening				
SB	(1) Senate Bill; (2) Small Business				
SCAQMD	South Coast Air Quality Management District				
SCE	Southern California Edison Company				
SDG&E	San Diego Gas & Electric Company				
SEI	Strategic Energy Innovations				
SEM	Strategic Energy Management [Program]				
SEP	Smart Energy Program				
SMB	Small and Medium-sized Business				
SoCalGas	Southern California Gas Company (aka SCG or The Gas Company)				
SoCalREN	Southern California Regional Energy Network(s)				
SRP	Summer Reliability Program				
SW	Statewide				



Acronym or Abbreviation	Explanation
SW WISE	Statewide Water Infrastructure and System Efficiency (Program)
SWEETP	Statewide Electric Emerging Technologies Program
T&D	Transmission & Distribution
ТА	Trade Allies
TDR	Technology Development Research
ТЕСН	Technology and Equipment for Clean Heating
TLL	Tool Lending Library
TPI	Third-Party Implementer (or Third Party-Implemented)
TPM	Technology Priority Map
TRC	(1) Total Resource Cost; (2) TRC Solutions, a third-party implementer <i>Note: see also Net RBn, above.</i>
TSB	Total System Benefit(s)
TSR	Technology Support Research
TUAL	True Up Advice Letter
UC	University of California
USGBC	U.S. Green Building Council
VCHP	Variable Capacity Heat Pump
VFD	Variable Frequency Drive
VRF	Variable Refrigerant Flow
VSD	Variable Speed Drive
WE&T	Workforce Education & Training
WE&T IEET	WE&T Integrated Energy Education and Training [Subprogram]
WISE	Water Infrastructure & System Efficiency [Program]

Appendix B

Notice of Availability of Southern California Edison Company's Posting of 2024 Energy

**Efficiency Programs Annual Report and Supporting Documents** 

#### **BEFORE THE PUBLIC UTILITIES COMMISSION OF THE**

## STATE OF CALIFORNIA

Order Instituting Rulemaking for Oversight of Energy Efficiency Portfolios, Policies, Programs, and Evaluation.

R.25-04-010

#### NOTICE OF AVAILABILITY OF SOUTHERN CALIFORNIA EDISON COMPANY'S (U 338-E) POSTING OF 2024 ENERGY EFFICIENCY PROGRAMS ANNUAL REPORT AND SUPPORTING DOCUMENTS

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Dated: June 2, 2025

#### **BEFORE THE PUBLIC UTILITIES COMMISSION OF THE**

#### **STATE OF CALIFORNIA**

Order Instituting Rulemaking for Oversight of Energy Efficiency Portfolios, Policies, Programs, and Evaluation.

R.25-04-010

#### NOTICE OF AVAILABILITY OF SOUTHERN CALIFORNIA EDISON COMPANY'S (U 338-E) POSTING OF 2024 ENERGY EFFICIENCY PROGRAMS ANNUAL REPORT AND SUPPORTING DOCUMENTS

Pursuant to the Administrative Law Judge's Ruling Adopting Annual Reporting Requirements for Energy Efficiency and Addressing Related Reporting Issues dated August 8, 2007, Southern California Edison Company (SCE) hereby provides notice to the service list in proceeding R.25-04-010 that the following documents are available for viewing and downloading on the Proposal Evaluation & Proposal Management Application (PEPMA) website within 10 days:

SCE's 2024 Energy Efficiency Annual Report (Annual Report) and supporting documents, including the following appendices, as shown in the table of contents:

- Appendix A Annual Report Tables
- Appendix B Southern California Edison Programs for 2024
- Appendix C List of Acronyms and Abbreviations

Additionally, SCE provides notice to the above-referenced service list that the Annual Report, including Report Tables Section 3, highlights the key activities of the statewide Workforce, Education and Training (WE&T) Program for 2024 in compliance with D.09-09-047<sup>1</sup> OP36.

Respectfully submitted,

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June 2, 2025

<sup>&</sup>lt;sup>1</sup> D.09-09-047, *Decision Approving 2010 to 2012 Energy Efficiency Portfolios and Budgets*, issued October 1, 2009.