

Southern California Edison





DRAFT

Implementation Plan

Comprehensive Refrigeration Energy Savings and Training

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1. Program Overview

The Comprehensive Refrigeration Energy Savings and Training (CREST) program is a versatile, Resource Acquisition program developed to provide no-cost benefits to Southern California Edison (SCE) Commercial customers with energy-intensive refrigeration, process cooling, and HVAC systems. CREST will work with SCE customers to identify and advance energy efficiency projects and provide access to generous incentives and financing options. The Program will also promote and support changeouts to low Global Warming Potential (GWP) refrigerants, and electrification projects.

2. Program Budget and Savings

Table 1: Program Budget and Savings

	Program Budget and Savings	Information
1	Program Name	Comprehensive Refrigeration Energy Savings and Training (CREST)
2	Program ID number	Not issued yet
3	Program Implementer	Cascade Energy LLC
4	Portfolio Administrator	Southern California Edison
5	Program Implementer Type (IOU Core, Third-Party Solicited, REN/CCA)	Third-Party
6	Portfolio Segment (Resource Acquisition, Equity, Market Support, or Codes and Standards) ¹	Resource Acquisition
7	Total Program Budget	\$6,511,030
8	Program Budget by Year	2025: \$300,000 2026: \$379,301 2027: \$1,209,486 2028: \$1,806,154 2029: \$1,936,006 2030: \$880,084
9	Program Duration (Start Date - End Date)	1/28/2025 - 12/31/2030

¹ D.21-05-031 Ordering Paragraph 2.



	Program Budget and Savings	Information
10	Total System Benefit (TSB) (Total Program TSB and TSB by Program Year)	2025: \$0 2026: \$675,628 2027: \$1,948,984 2028: \$2,215,028 2029: \$2,375,873 2030: \$0 Total TSB: \$7,215,513
11	KW (First Year, Net, Gross)	2025: 0 2026: Gross 159 Net 150 2027: Gross 265 Net 240 2028: Gross 265 Net 240 2029: Gross 265 Net 240 2030: 0
12	KWh (Lifecycle, First Year, Net, Gross)	2025: 0 2026: <i>Gross</i> 1,225,875 <i>Net</i> 1,120,721 2027: <i>Gross</i> 1,929,330 <i>Net</i> 1,744,165 2028: <i>Gross</i> 1,929,330 <i>Net</i> 1,744,165 2029: <i>Gross</i> 1,929,330 <i>Net</i> 1,744,165 2030: 0
13	Therms (Lifecycle, First Year, Net, Gross)	N/A
14	Program Cost Effectiveness: Total Resource Cost (TRC): (Total TRC and TRC by Year)	2025: 0 2026: 1.43 2027: 1.30 2028: 1.13 2029: 1.16 2030: 0 Total TRC: 1.25
15	Program Cost Effectiveness: Program Administrator Cost (PAC): (Total PAC and PAC by Year)	2025: 0 2026: 1.71 2027: 1.58 2028: 1.23 2029: 1.23 2030: 0 Total PAC: 1.05



	Program Budget and Savings	Information
16	Market Sector(s) (i.e., residential, commercial, industrial, agricultural, public or cross-cutting) If multi-sector, provide estimated % of the total budget for each sector)	Commercial
17	Program Type (i.e., Non-resource, Resource)	Resource
18	Delivery Type(s) (i.e., Upstream-Manufactured, Midstream- Distributor, Midstream-Retail, Downstream, Downstream - Direct Install, ² Codes & Standards) ³	Downstream
19	Intervention Strategies (e.g., Strategic Energy Management (SEM), Market Access Program (MAP), Direct Install, Incentive, Finance, Audit, Technical Assistance, Advocacy, Training, Marketing and Outreach, etc.)	Incentive, Finance, Audit, Technical Assistance
20	M&V Methods (e.g., Deemed, Custom, NMEC – Population, NMEC – Site, SEM M&V, Randomized Controlled Trial (RCT), Other (if applicable, describe Other M&V method))	NMEC – Site, Deemed, Custom

3. Implementation Plan Narrative

3.1 Program Description

Cascade Energy, LLC will deliver CREST to Commercial Customers with energy-intensive refrigeration, process cooling, and HVAC systems in SCE service territory. CREST will primarily leverage site-level normalized metered energy consumption (NMEC) to facilitate savings claims. The Program will capture savings from a variety of behavioral, retro-commissioning, and operational (BRO) and capital measures through site-level NMEC. To ensure high total systems benefits (TSB) for CREST, Cascade will offer technical support and attractive incentives to encourage capital project implementation and will promote and support change-outs to low Global Warming Potential (low-GWP) refrigerants and electrification (fuel substitution) projects. Cascade will also offer training opportunities through CREST designed to engage Customers while supporting workforce development and improving measure effective useful life (EUL).

Commercial Customers with energy-intensive refrigeration, process cooling, and HVAC systems face many challenges as greenhouse gas (GHG) emissions reduction becomes an increasingly important priority. CREST is designed to address these challenges by providing the training, coaching, technical support, and incentives these target customers need to help them make real progress towards goals and requirements, both internal and external. Cascade's outreach approach will highlight CREST as a no-cost

² https://cedars.sound-data.com/deer-resources/deemed-measure-packages/guidance/.

³ Database for Energy Efficiency Resources (DEER) 2026 Delivery Types.



tool that SCE customers can plug into as a more holistic decarbonization and energy management strategy.

The following table summarizes the primary Program objectives and planned CREST approaches to ensure success.

Program Objectives	Approaches
High TSB	 Pursue deeper, more comprehensive energy-saving capital projects Encourage electrification (fuel substitution) projects and change- outs to low-GWP refrigerants that provide high TSB in addition to energy efficiency
Cost-Effective Program	 Leverage Cascade's existing Customer connections for recruitment Conduct scoping audits to verify Customer suitability for CREST and minimize costly wasted effort Use NMEC to capture savings from a variety of BRO and capital measures Offer a second year of Program support to select Customers with more energy-saving opportunities
High Customer Engagement and Satisfaction	 Offer no-cost training opportunities customized to topics important to target Customers Provide GazeboTM — Cascade's energy performance software platform — to Customers for an easy and motivating way to visualize their progress Offer a full suite of support to address target Customer pain points Expedite the project approval process as much as possible Offer attractive and motivating incentives
Decarbonization	 Support Customers' decarbonization goals with a comprehensive solution Encourage change-outs to low-GWP refrigerants and fuel substitution projects

3.2 <u>Performance Tracking</u>

The Program will monitor and track key performance indicators (KPIs) monthly and quarterly to ensure program performance, consistent customer satisfaction, responsible program administration, and to allow corrective actions as needed.

Table 2: Key Performance Indicators



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КРІ	Description	Measurement	KPI Source	Reporting Frequency	Purpose of KPI
Project Pipeline Target (TSB)	A comparison of net life cycle TSB associated with future project pipeline in relation to the net life cycle TSB expected under Agreement	Numeric value of the total net TSB tracked in the program pipeline	Progress Report	Monthly	Track progress towards achieving overall program TSB goals
Total System Benefit (TSB in Dollars)	Total System Benefit achieved	Dollars	Progress Report	Monthly	Track progress towards achieving overall program savings goals
Schedule Adherence	Expected Total System Benefit vs. Actual Total System Benefit; Expected TRC Ratio* vs. Annual TRC Ratio* *TRC no admin	Expected performance vs. actual performance	In accordance with contracted timelines for various deliverables	Monthly	Track progress towards achieving overall program savings goals
Cost Management (Levelized cost)	[Incentive/non- incentive] spend based on paid [incentive/non- incentive] spend vs. forecasted [incentive/non- incentive] spend	Expected performance vs. actual performance	Progress Report	Monthly	Track progress towards achieving overall program savings goals
Customer Satisfaction Rating	Measurement of Implementer's ability to respond to customer needs, number of	Report of overall customer satisfaction rating	Customer surveys	As requested by SCE	Reflects ability to deliver Program at a high level of



	complaints, resolution of complaint, flexibility, reporting accuracy and timeliness				customer satisfaction
Safety Ratings	Maintain ISNetworld (ISN) grade of B or better	ISN grade	ISNetworld	Annually	Validate adherence to maintaining a culture of workplace safety
Disadvantaged Communities	Customers in DACs served by the Program	Number of customers who received program services or incentives that reside in an area that meets the CPUC criteria for a DAC.	Direct Install and Incentive Application Data	Monthly	Tracking the participation rate in DACs
Sustainability Ratings	Evaluates the Implementer against environmental and sustainability practices and metrics.				Demonstrates Implementer's commitment to sustainability

3.3 Program Delivery and Customer Services

CREST will serve Commercial Customers with energy-intensive refrigeration, process cooling, and HVAC systems across SCE's service territory. These customer segments are prevalent throughout SCE service territory and includes concentrations of refrigerated warehouses at the Ports of Los Angeles and Long Beach and along State Route 60 through the Inland Empire. We have broken this target Customer base into the following categories:

• **Refrigerated Warehousing and Storage:** Most customers in these market segments are categorized as NAICS 493120 (Refrigerated Warehousing and Storage) or NAICS 424xxx (Merchant Wholesalers, Nondurable Goods). While refrigerated storage is the common factor





within this segment, it can include a variety of end uses, such as cold storage, distribution centers, and food processing.

- Labs, Research Facilities, and Data Centers: Customers in these market segments typically fall under the following NAICS: 541700: Scientific Research and Development; 541380: Testing Laboratories and Services; or 518210 Computing Infrastructure Providers, Data Processing, Web Hosting, and Related Services. These customer segments share high HVAC and process cooling loads and can be good candidates for site-level NMEC. Cascade expects these Customers to be interested in electrification opportunities as well.
- **Grocery and Supercenters:** Customers in these market segments include NAICS 445110 Supermarkets and Other Grocery and 452311 Warehouse Clubs and Supercenters. These customers are good targets for low-GWP refrigerant swap outs and some deemed measures.

CREST will target Customers with 1 to 10 GWh of annual energy use. Cascade does not plan to target customers with less than 1 GWh of annual energy use due to limited savings potential making it more difficult to achieve cost-effective savings.

CREST will target and prioritize high-potential Customers located in Disadvantaged Communities (DACs) for participation. Because refrigerated warehouses are primarily located in DACs, CREST expects to recruit a good percentage of Customers in DACs. To identify high-potential Customers located in DACs, CREST will overlay CalEnviroScreen data with Company-provided customer data. When

CREST works with corporate energy managers for refrigerated warehouse and grocery/supercenter chains, they will prioritize their Customers located in DACs for enrollment.

The Program will drive participation by understanding and addressing customer needs and challenges.

Key aspects of the CREST program are illustrated in Figure 1 and explained in detail below:







Figure 1: CREST Customer Journey

Identify Ideal Participants. The Program will use historic energy data to identify customers with significant energy savings potential both in general and during high-value peak periods. The target customers will have 1 to 8 GWh of annual energy use. These are mid-large customers.

Customer Outreach. The Program will conduct direct outreach via email to eligible customers and will share valuable insights about their energy use that was acquired at the targeting stage. The Program will work with SCE Account Reps to provide customer introductions and request historical interval energy and other Customer Data in alignment with CPUC data-sharing ruling D.23-02-002. This data will be analyzed and used to target the customers likeliest to succeed in CREST. The customers will be invited to attend a training session focused on the topics that are most important to the customer. This outreach approach is called training-initiated engagement, or TIE. TIE attendance aims to:

- 1) get prospects excited about how CREST can help address their pain points and support their decarbonization goals, and
- 2) build trust in CREST's refrigeration, process cooling, and HVAC energy efficiency expertise. Both tactics will facilitate Program enrollment.

Conduct a Scoping Audit. The Program will conduct a half-day up to two day duration site inspection in which equipment and systems are reviewed and energy efficiency opportunities are identified. Scoping audits are recruitment and screening tools aimed at confirming Program fit by determining high-level





energy savings opportunities and suitability for site-level NMEC. Scoping audits will help build trust while confirming eligibility and savings potential, avoiding wasted effort later.

Customer Enrollment. Eligible customers will be asked to commit to CREST by signing an enrollment agreement. The agreement will outline Program rules the customer must follow to receive an incentive, minimizing risk for all parties.

Develop Project Feasibility Study. The Program will create a Project Feasibility Study (PFS) based on the findings at the scoping audit for Company and CPUC approval. The PFS will include a list of low-/no-cost BRO measures and opportunities for capital projects, load shifting, fuel substitution, and refrigerant change-outs. CREST will leverage internal technical expertise and understanding of site-level NMEC measurement and verification (M&V) requirements to expedite the project approval process as much as possible to maintain momentum.

Tune-up and Gazebo. Following PFS approval, Implementer will conduct an on-site tune-up (retrocommissioning event). The Program will work with Customer staff and key vendors to review all relevant systems. All projects will be documented in Gazebo to provide customers a motivating view of their progress. CREST will encourage and help the customers to implement some BRO projects during the tune-up to achieve immediate energy savings and build enthusiasm.

Help Projects Advance. After the tune-up, customers will have four months to implement BRO measures and up to 365 days to implement approved capital projects. The Program will provide support via regular coaching calls to help remove implementation barriers and advance projects. After the projects are implemented, CREST engineers will monitor energy savings during a performance period.

Train Refrigeration Operators. Refrigeration operators and technicians from participating customer sites will be invited to attend a series of virtual educational workshops with their peers, called refrigeration operator coaching (or ROC). Over the course of the workshops, customer staff will learn the energy fundamentals of the systems they operate and common BRO opportunities, build relationships with other operators, share ideas, and earn professional development hour (PDH) credits. ROC workshops will help raise the interest and capabilities of key personnel in energy efficiency while improving measure life through training.

Measure and Verify Energy Savings. The Program will conduct M&V and provide required reporting in alignment with the latest version of the *Rulebook for Programs and Projects based on Normalized Metered Energy Consumption* (NMEC Rulebook). Alignment with the NMEC Rulebook will facilitate faster and smoother savings claims. The Program will make an initial saving claim at the onset of the NMEC performance period (at Initial Savings Report approval) and will make a final true-up savings claim at Final Savings Report (FSR) approval, using 12 months of performance period data.

Pay Customer Incentive. The Program will pay customers performance-based incentives in three installments: 1) an initial fixed-fee milestone incentive following the tune-up, 2) a performance incentive for estimated savings following project completion, and 3) a final performance incentive for verified savings following FSR approval. This incentive structure is designed to motivate customers to start the Program, complete projects, and maintain their energy savings.

Offer Year 2 Support. Some Customers may have significant remaining energy-saving opportunities or capital projects still in process following final NMEC M&V. Select customers will be provided an





opportunity to renew participation for an additional year. Projects leading to deeper savings often take more time to implement—an extra year of participation will facilitate additional savings claims for some customers and support customer satisfaction.

3.4 Program Design and Best Practices

CREST was designed to address persistent barriers to the uptake of energy efficiency and decarbonization for Commercial customers. CREST will provide the technical, coaching, and financial support to help customers follow through on cost-effective opportunities.

The following program strategies will be used to address market barriers:



Figure 2: Key Program Strategies

3.5 Innovation

3.5.1 <u>Technology Innovations</u>

Table 3: Technology Innovations

Description	Expected Impact on Savings and/or Participation
Recruitment Insights is a tool that provides additional insight into customer energy use patterns, facilitating customer targeting and customized recommendations. Datasets will be connected in an interactive dashboard, improving targeting from the start and ensuring the first customer contact includes insight specific to their savings opportunities.	Recruitment Insights will enable better customer targeting and engagement. Through energy use analysis, it will also help identify potential project opportunities and be a persuasive recruitment tool for customers who believe there are no remaining cost-effective energy savings opportunities at their sites.





Gazebo [™] , our in-house, cloud based energy	Gazebo [™] will motivate and engage customers to
management and collaboration software, will be	implement projects when they can easily view and
used to manage participant-specific opportunity	report on their progress through a single platform.
registers and develop baseline and performance	
period models. Gazebo has enhanced dashboards	
that enable organizational goal tracking and offer	
a comprehensive portfolio view.	

3.5.2 <u>Marketing Strategy Innovations</u>

Table 4: Marketing Innovations

Description	Expected Impact on Savings and/or Participation
TIE is an outreach approach designed to	TIE is scalable, flexible, and will enable effective
overcome the typical barriers to recruiting larger	recruitment and Program engagement. TIE is also
customers. TIE engages customers in workshops	an opportunity to cost-effectively engage
and provides high-quality, relevant training,	equipment vendors and other stakeholders in
delivered by energy efficiency experts.	CREST.

3.5.3 Delivery Approach Innovations

Table 5: Delivery Approach Innovations

Description	Expected Impact on Savings and/or Participation
ROC (Refrigeration Operator Coaching) is a series of peer-based, hands-on training workshops that CREST will deliver to refrigeration operators and technicians from participating sites. ROC focuses on engaging the individuals who have a direct impact on the performance of energy- intensive refrigeration systems at their sites.	ROC provides operators the knowledge, support, and tools they need to reduce energy use and cost at their sites. ROC will enable better engagement, more energy-saving projects identified and implemented, and sustained savings for already- implemented projects.
Encourage refrigerant change outs. Implementer will support and influence refrigerant change-out projects by offering educational workshops, providing technical support to Customers to implement change-outs, encouraging implementation with an attractive incentive, and when possible bundling these change-out projects with viable energy efficiency	Many target Customers are asking for help in this area. Addressing this pain point for them will encourage CREST enrollment. These projects will boost TSB for CREST when claimed using the Refrigerant Avoided Cost Calculator.



measures through NMEC to claim the additional TSB.	

3.5.4 For Programs Claiming To-Code Savings

CREST may achieve significant levels of to-code savings, primarily through Add-on Equipment projects. Identifying which code-required equipment is not present at a Customer site is a key step in identifying energy efficiency projects. Data from site refrigeration control systems will be leveraged where available to quantify savings potential. By highlighting the energy and cost savings from the addition of code-required equipment, CREST can accelerate adoption of to-code measures. Per guidance in the NMEC Rulebook, savings estimates will not separately quantify or differentiate to-code and above-code portions of the savings.

The following table outlines CREST's plan for claiming Program savings and the basis:

Saving Path	Savings Quantification	Basis	To Code Considerations
Site-level NMEC (BRO or Capital)	Energy Model	Per NMEC Rulebook	CPUC D.16-08-19 allows NMEC to claim existing conditions baseline for all savings including capital projects.
Custom Capital (minor savings anticipated)	Engineering Analysis	Per Statewide Custom Processes	Measures would principally be Add-on Equipment which allows for an existing conditions baseline.
Deemed	Prescriptive Savings	Per Deemed Measure Catalog	Code-related requirements are already accounted for in Measure Packages, and code requirements are adopted as baseline efficiency when they apply to a measure.

Table 6: Paths for Claiming Program Savings

3.6 <u>Pilots</u>

To support Integrated Demand-Side Management (IDSM) and greenhouse gas (GHG) efforts, CREST may seek out opportunities to partner with pilot programs offered by SCE, the California Energy Commission, and other entities. Cascade is not planning pilot projects within the CREST Program.



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3.7 Workforce Education & Training (WE&T) 4

CREST is a Resource Acquisition program and Workforce Education & Training is not a formal part of this Program.

CREST does plan to offer Refrigeration Operator Coaching (ROC) workshops to refrigeration operators and technicians at customer sites. ROC workshops will help raise the interest and capabilities of key personnel in energy efficiency while improving measure life through training.

3.8 Workforce Standards 5

Workforce Standards are likely applicable for the subset of energy-saving projects that involve installation, modification, and maintenance of HVAC or Lighting systems projects. Customers must use qualified service providers for this work to be eligible to receive a rebate or incentive for the project. In cases where customers elect to receive rebates or incentives for these project types, Cascade will:

- Provide a notice to the customer about the certification requirement being a condition of receiving the rebate or incentive.
- Make a minimum of two good faith attempts to obtain compliance documentation and customer signature.

In cases where customers or contractors fail to show compliance for Lighting or HVAC measures where Workforce Standards apply, they will forfeit any incentive or rebate associated with the measure.

Workforce Standards will be applicable to some CREST Lighting and HVAC projects. For those projects, Cascade will submit the required documentation that aligns with the below requirements:

- A. HVAC Measures: Installation, modification, or maintenance of non-residential HVAC measures with an incentive of \$3,000 or more are required to be installed by workers or technicians that meet one of the following criteria:
 - a. Completed or enrolled in an accredited HVAC apprenticeship, or
 - b. Completed more than five years of work experience at the journey level per California Department of Industrial Relations definition, passed competency tests, and received specific credentialed training, or
 - c. Has a C-20 HVAC contractor license issued by the California Contractor's State Licensing Board.
 - d. This requirement does not apply when the incentive is paid to the manufacturer, distributor, or retailer of HVAC equipment, unless the manufacturer, distributor, or retailer installs or contracts for installation of the equipment.
- B. Advanced Lighting Control Measures:

⁴ D.18-05-041, Page 20-21 and Ordering Paragraph 7.

⁵ D.18-10-008, Ordering Paragraph 1-2 and Attachment B, Section A-B, Page B-1.



- a. Installation of non-residential lighting control measures with an incentive of \$2,000 are required to be installed by technicians who have been certified by the California Advanced Lighting Controls Training Program (CALCTP).
- b. This requirement does not apply to situations in which the incentive is paid directly to the manufacturer, distributor, or retailer of lighting controls unless the manufacturer, distributor, or retailer installs or contracts for installation of the equipment.

3.9 Disadvantaged Worker Plan: 6

CREST is not a Direct Install program, and Cascade's CREST Program staff will not be directly involved in the installation, modification, repair, or maintenance of energy efficiency equipment. These services will be provided by customer staff or vendors hired by the customer, with guidance and recommendations offered by Cascade.

3.10 Market Access Programs:

CREST is a Resource Acquisition program, not a Market Access Program.

3.11 Additional Information

CPUC Decision 21-05-031 directs all Program Administrators to seek cost-effective opportunities to include low-GWP refrigerant measures in their energy efficiency portfolios (see pages 57 - 60, Conclusions of Law paragraph 14, and Ordering Paragraph 16).

\Lambda Cascade Energy*

⁶ D.18-10-008, Attachment B, Section D, page B-9.



Program Manual



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4. Program Manual and Program Rules

1. Program Overview

The Comprehensive Refrigeration Energy Savings and Training (CREST) program was developed to provide no-cost benefits to customers with energy-intensive refrigeration, process cooling, and HVAC systems. CREST will work with customers to identify and advance energy efficiency projects (NMEC, BRO, Deemed) and will provide access to generous incentives and financing options. The Program will also promote and support change-outs to low global warming potential refrigerants and electrification projects.

CREST will target Commercial customers with 1 to 10 GWh of annual energy use in Southern California Edison's (SCE) service territory.

CREST is implemented by Cascade Energy, LLC ("Cascade") under contract to Southern California Edison (SCE). Table 1 shows key dates for the program.

Table 1.	· Key	Program	Dates
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Milestone	Date
Advice Letter Approval	4/1/2025
Begin Program Implementation Activities	6/5/2025
End Program Implementation Activities	12/31/2030

The CREST program involves three key parties:

- **Participant (Applicant):** An eligible Commercial ratepayer who is participating in CREST program.
- Implementer (Cascade Energy): CREST is implemented by Cascade Energy under contract to SCE.
- **Program Administrator (SCE)** At the direction of the California Public Utilities Commission (CPUC), SCE serves its customers with a portfolio of energy efficiency and demand response programs, including third-party programs such as CREST.

2. Program Eligibility

<u>Participants</u>

CREST is available to Commercial customers with projects that meet the following eligibility requirements:

- Receive electricity services from within SCE's service territory.
- Must be paying the public purpose program surcharge.
- Must not have claimed savings or incentives for the target measures from any other program as identified in a double dipping report.
- Measures that are part of a project must be new and not previously installed.

• Measures will only be considered that were purchased or installed after the Effective Date and before the Program close date.

Sector	Segment	NAICS	Description of Segment
		Code	
Commercial	Refrigerated Warehousing and Storage	493120	Establishments primarily engaged in operating refrigerated warehousing and storage facilities. The services provided by these establishments include blast freezing, tempering, and modified atmosphere storage services.
Commercial	Merchant Wholesalers, Nondurable Gods	424XXX	Establishments primarily engaged in wholesaling nondurable goods.
Commercial	Scientific Research and Development	541700	Establishments primarily engaged in conducting research for the creation of new or significantly improved products or projects.
Commercial	Testing Laboratories and Services	541380	Establishments primarily engaged in performing physical, chemical, and other analytical testing services.
Commercial	Computing Infrastructure Providers, Data Processing, Web Hosting, and Related Services	518210	Establishments primarily engaged in providing infrastructure for hosting or data processing services.
Commercial	Supermarkets and Other Grocery	445110	Establishments generally known as supermarkets and grocery stores primarily engaged in retailing food.
Commercial	Warehouse Clubs and Supercenters	452311	Establishments generally known as warehouse clubs, superstores, or supercenters, primarily engaged in retailing perishable groceries in combination with general merchandise.

Customers with the following NAICS Codes are eligible for participation in CREST:

Contractors

SCE authorizes Cascade to utilize subcontractors; however, at this time CREST does not plan on utilizing any.

If the Program should elect to add subcontractors, SCE will be alerted within five business days of signing the subcontracting agreement and will provide a copy of the agreement.

3. Additional Services

In addition to securing incentives and providing financing options, CREST will also provide the following additional no-cost services:

- 1) Leverage Gazebo[®] to streamline reporting and standardize savings claims for both modeled and bottom-up calculations
- 2) Train Refrigeration Operators by hosting a series of virtual educational workshops called refrigeration operator coaching (or ROC). Over the course of the workshops, customer staff will learn the energy fundamentals of the systems they operate and common BRO opportunities, build relationships with other operators, share ideas, and earn professional development hour (PDH) credits
- 3) **Provide No-cost Training Opportunities** that are focused on the topics that are the most important to the customer. This specific training is called training-initiated engagement, or TIE.

4. Audits

Audits that will be conducted are outlined in the Normalized Metered Energy Consumption (NMEC) Program M&V Plan.

CREST will also provide on-site inspections and site verification for an appropriate sample of deemed measure claims.

5. **Quality Assurance Procedures**

To ensure compliance and quality for each savings verification path included in the Program, CREST will adhere to high QA/QC standards, the requirements in the latest versions of the CPUC's *Statewide Custom Projects Review Guidance Document* and the NMEC Rulebook.

CREST's QA procedures for each savings verification path follows:

Site-level NMEC

Site-level NMEC will generally use daily energy regression models to claim savings, in accordance with the NMEC Rulebook. Weekly or monthly regression models may also be used if necessary. Cascade's energy modeling leads will interface with SCE and CPUC reviewers through all required approval processes. CREST will perform both a pre- and post- site inspection for all Customers participating in NMEC to document setpoints and equipment in accordance with CPUC requirements. Data collected from these inspection visits will be shared with internal and external project reviewers.

CREST will additionally take the following QA/QC steps to ensure NMEC savings claims are accurate and reliable:

- Clearly document any pre-planned projects and existing barriers to implementation to satisfy influence requirements and avoid any double-dipping of Program savings claims. Cascade will collect available data from other programs as well as the Customer's internal efforts and document the influence CREST personnel brought to eliminate project barriers.
- Verify Customer data through typical engineering data analysis methods. This includes looking for abnormalities, assessing correlation to energy usage based on understanding of the energy driver, and looking for missing or inaccurate data. Implementer will discuss and document any issues with Customer staff and resolve the issue.
- Use quality checks to assess data integrity at multiple stages. Cascade will ensure that appropriate project data is being entered, used, and tracked. Technical QC will be completed by a team member that was not involved in the project to ensure fresh eyes are assessing the information and procedures used.
- Review each energy model for technical accuracy. The reviewer—a qualified in-house engineer—and the model developer will collaborate until the final model is deemed acceptable.
- If issues arise with savings claims, Cascade will complete corrective actions following SCEs review and again following CPUC review to satisfy the requirements of the ex-ante review process. At each stage in the review process, Implementer will resubmit the corrected models and reports if needed.

<u>Custom Capital</u>

Cascade is very familiar with the CPUC's custom project review process. Cascade will interface with SCE and CPUC reviewers through all required approval processes. Cascade's approach to ensure compliance and quality includes the following:

- Following the standard process using approaches specified in the latest version of the *Statewide Custom Project Guidance Document* for claiming savings.
- Using senior engineers experienced with California regulatory policy as internal technical reviewers.
- Performing both a pre- and post-site inspection to document setpoints and equipment in accordance with CPUC requirements.
- Keeping abreast of evolving regulations by:
 - Subscribing to filings, advice letters, and decisions on proceedings that impact energy efficiency.
 - Maintaining industry organization connections (for example, with the California Energy Efficiency Coordinating Committee, the California Energy + Demand Management Council, and the California Technical Forum).

Deemed

CREST will process any deemed measures using the eTRM database for appropriate parameters and package details and will adhere to all requirements of SCE's energy efficiency measure checklists.

5. Program Theory and Program Logic Model⁷



⁷ The graphical representation of the program theory showing the flow between activities, their outputs, and subsequent short-term, intermediate, and long-term outcomes. *California Evaluation Framework*, June 2004.

6. Process Flow Chart

6. Process Flow: Deemed

Stage	Cascade	(Customer		SCE	CPUC
Launch Program	Develop Implementation . Plan			→	Approval	 Approval
Targeting	Analyze customer data to target ideal participants				Provide customer data	
Marketing	Develop co-branded marketing materials				Approval	
	Outreach through industry and customer connections				Introduce program to eligible participants	
Outreach	Design facilitate and				Invite eligible participants to	
	deliver TIE workshops				TIEworkshops	
Enrollment	Communicate eligibility		Sign customer agreement			
(optional)	requirements	→ [(optional)			
Scoping	Conduct scoping audit to		Provide feedback on which			
(optional)	determine savings potential	·	projects they are interested			
	Follow SCE deemed measure	- I	Install measure and submit			
Installation	checklist to verify	— (Customer Authorization Form		Approval	
On-site	Provide site verification for					
Inspection (as	an appropriate sample of					
required)	deemed measure claims					
Customer						
Rebate	Pay customer rebate					

7. Process Flow: Custom

Stage	Cascade		Customer		SCE		CPUC
Launch Program	Develop Implementation Plan			→	Approval		Approval
Targeting	Analyze customer data to target ideal participants	•			Provide customer data		
Marketing	Develop co-branded marketing materials				Approval		
Outreach	Outreach through industry and customer connections Design, facilitate, and deliver TIE workshops				Introduce program to eligible participants Invite eligible participants to TIE workshops		
Enrollment	Facilitate customer enrollment		Sign customer agreement				
Scoping	Conduct scoping audits to determine savings potential		Provide feedback on which projects they are interested in implementing				
Project Feasibility Study (PFS)	Create and submit a PFS based on findings at the scoping audit				Approval		Approval*
Project Implementation Period	Schedule regular calls with participant to help projects advance		Complete identified projects within 12-month implementation period				
M&V (Post- Inspection)	Conduct M&V in alignment with Statewide Custom Project Guidance Document						
Installation Report	Create and submit an Installation Report			•	Approval		Approval*
Customer Incentive	Verify savings, pay performance incentive						

*If selected for CPUC review, follow CPUC Qustom Project Review Process as outlined in Figure 1 of the CPUC Staff Selection and Response Timing Protocol for Energy Efficiency Qustom Project Review

8. <u>Process Flow: Site Level NMEC</u>

Stage	Cascade		Customer		SCE		CPUC
Launch Program	Develop Implementation Plan	_		-	Approval	-	Approval
Targeting	Analyze customer data to target ideal participants	-			Provide customer data		
Marketing	Develop co-branded marketing materials			→	Approval		
Outreach	Outreach through industry and customer connections				Introduce program to eligible participants		
	Design, facilitate, and deliver TIE workshops				TIEworkshops		
Enrollment	Facilitate customer enrollment		Sign customer agreement				
Scoping	Conduct scoping audits to determine savings potential and suitability for NMEC		Provide feedback on which projects they are interested in implementing				
Project Feasibility Study (PFS)	Create and submit a PFS based on findings at the scoping audit			→	Approval		Approval*
Tune-up (Pre- Inspection)	Conduct on-site tune-up to implement BRO measures + other project opportunties						
Installment 1 Customer Incentive	Approve and pay fixed-fee incentive	-	Provide requested data and complete one project				
Project Implementation Period	Schedule regular calls with participant to help projects advance		Complete identified projects within 12-month implementation period				
Installment 2 Customer Incentive	Estimate savings, pay performance incentive at half of the BRO incentive rate, minus Installment 1						
Performance Period	Monitor energy savings during performance period						
Initial Savings Report (ISR)	Create and submit an ISR following project completion			+	Approval		Approval*
M&V (Post- Inspection)	Conduct M&V following performance period in alignment with NMEC Rulebook						
Final Savings Report (FSR)	Create and submit an FSR			*	Approval		Approval*
Installment 3 Customer Incentive	Verify savings, pay performance incentive at the full BRO incentive rate, minus Installment 2						

*If selected for CPUC review, follow CPUC Custom Project Review Process as outlined in Figure 1 of the CPUC Staff Selection and Response Timing Protocol for Energy Efficiency Custom Project Review

7. Measures and Incentives

Incentives for capital, BRO, Deemed, and electrification measures are listed in Table 2.

 Table 2: Incentive Table

#	Measure	Incentive Level
1	NMEC BRO (Behavioral, Retro-commissioning, Operational)	\$0.06/kWh
2	NMEC Capital	Up to \$0.30/kWh
3	NMEC Gas-only	Up to \$1.50/th
4	Custom Capital (outside of NMEC)	Up to \$0.28/kWh
5	Electrification (custom)	Up to \$10/th
6	Deemed	Refer Table 3
7	High GWP Refrigerant Swap-Out	Up to \$225/lb

Table 3: Measure Packages

#	Measure Package Name	Short Description	Link 2025	Link 2026	Incentive (Not to Exceed)
1	Floating Head Pressure Controls: SWCR007-04	Floating Head Pressure Controls	eTRM	N/A	\$200 per Cap-Tons
2	Floating Suction Controls: SWCR008-04	Floating Suction Controls	eTRM	eTRM	\$50 per Cap-Tons
3*	Large Heat Pump Water Heater, Commercial and Multifamily, Fuel Substitution: SWWH028-04	Heat Pump Water Heater - Gas to Electric	eTRM	eTRM	\$200 per CapOut-kbtuh
4	Bare Suction Line Insulation: SWCR010-04	Bare Suction Line Insulation	eTRM	eTRM	\$10.00 per Len-ft
5	Efficient Adiabatic Condenser: SWCR022-04	Efficient Adiabatic Condenser	eTRM	N/A	\$17.50 per Cap-Tons
6	Compressor Retrofit, Multiplex: SWCR012-03	Compressor Retrofit, Multiplex	eTRM	N/A	\$200 per Cap-Tons
7*	Heat Pump Water Heater, Commercial: SWWH031-03	Heat Pump Water Heater, Commercial	eTRM	eTRM	\$900 each
8*	Heat Pump Water Heater, Commercial, Fuel Substitution: SWWH027-04	Heat Pump Water Heater, Commercial, Fuel Substitution	eTRM	N/A	\$15,000 each

*Rebate is subject to change pending forthcoming CPUC directive on measure package revision (expected late 2025).

8. Diagram of Program



9. Program Measurement and Verification (M&V)

CREST will use normalized metered energy consumption (NMEC) M&V for refrigerated warehouses with approximately 1 to 10 GWh of annual energy use across all of Southern California Edison's (SCE's) service territory. We are calling this customer size "mid-large."

10.Normalized Metered Energy Consumption (NMEC) Program M&V Plan

Please refer to the attached for the full Normalized Metered Energy Consumption (NMEC) Program M&V Plan.

11.Multi-DER IDSM Pilots Only⁸

Not applicable.

⁸ D.23-06-055, pages 77-80.

12.SEM Programs Only

Not applicable as CREST is not an SEM program.

13.Appendix. List of Acronyms and Abbreviations

Term	Definition		
C&S	Codes & Standards		
CALCTP	California Advanced Lighting Controls Training Program		
CCA	Community Choice Aggregator		
CEDARS	California Energy Data and Reporting System		
CO ₂	Carbon dioxide		
CPUC	California Public Utilities Commission		
DAC	Disadvantaged Communities		
DEER	Database for Energy Efficient Resources		
DER	Distributed Energy Resources		
DSM	Demand-Side Management		
EE	Energy Efficiency		
EE PRG	Energy Efficiency Procurement Review Group		
EM&V	Evaluation, Measurement & Verification		
ET	Emerging Technologies		
eTRM	[California] Electronic Technical Reference Manual		
EUL	Effective Useful Life		
HTR	Hard-to-Reach		
HVAC	Heating, Ventilation, & Air Conditioning		
IDSM	Integrated Demand-Side Management		
IOU	Investor-Owned Utility		
IP	Implementation Plan		
kW, kWh	kilowatts, kilowatt-hours		
M&V	Measurement & Verification (or, sometimes, Validation)		
МАР	Market Access Program		
NAICS	North American Industry Classification System		
NMEC	Normalized Metered Energy Consumption		
РА	Program Administrator		
РАС	Program Administrator Cost		

Term	Definition		
RCT	Randomized Controlled Trial		
REN	Regional Energy Network		
RFA	Request for Abstract		
RFP	Request for Proposal		
SEM	Strategic Energy Management		
TRC	Total Resource Cost		
TSB	Total System Benefit		
WE&T	Workforce Education & Training		