

Southern California Edison



Implementation Plan

Commercial Behavioral Program

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Table of Contents

1.	Program Budget and Savings Information.....	3
1.	Program and/or Sub-Program Name	3
2.	Program and/or Sub-Program ID Number	3
3.	Program and/or Sub-Program Budget Table	3
4.	Program and/or Sub-Program Gross Impacts Table.....	3
5.	Program and/or Sub-Program Cost-Effectiveness (TRC)	3
6.	Program and/or Sub-Program Cost-Effectiveness (PAC)	3
7.	Type of Program and/or Sub-Program Implementer	4
8.	Market Sector	4
9.	Program and/or Sub-Program Type.....	4
10.	Market Channels and Intervention Strategies.....	4
11.	Campaign Goals and Timeline	5
2.	Implementation Plan Narrative	6
1.	Program Description.....	6
2.	Program Delivery and Customer Services	6
3.	Program Design and Best Practices.....	6
4.	Innovation.....	7
5.	Metrics	8
6.	For Programs Claiming To-Code Savings	8
7.	Pilots	9
8.	Workforce Education & Training (WE&T)	9
9.	Workforce Standards	9
10.	Disadvantaged Worker Plan:	9
11.	Additional Information	9
3.	Supporting Documents	10
1.	Program Manuals and Program Rules	10
2.	Program Theory and Program Logic Model	10
3.	Process Flow Chart.....	12
4.	Incentive Tables, Workpapers, Software Tools	12
5.	Quantitative Program Targets.....	13
6.	Diagram of Program	13
7.	Evaluation, Measurement, and Verification (EM&V):	13
8.	Normalized Metered Energy Consumption (NMEC):	14
	APPENDIX. List of Acronyms and Abbreviations.....	15

1. Program Budget and Savings Information

1. Program and/or Sub-Program Name

Commercial Behavioral Program

2. Program and/or Sub-Program ID Number

SCE_3P_2020RCI_003

3. Program and/or Sub-Program Budget Table

	2021	2022	2023	2024	2025	Total
Administration	\$0	\$0	\$88,594	\$84,658	\$0	\$173,252
Marketing	\$0	\$0	\$66,967	\$66,172	\$0	\$133,139
Direct Implementation	\$0	\$0	\$2,059,295	\$1,965,627	\$1,598,984	\$5,623,906
Incentive	\$0	\$0	\$200,000	\$200,000	\$200,000	\$600,000
Total	\$0	\$0	\$2,414,856	\$2,316,457	\$1,798,984	\$6,530,297

4. Program and/or Sub-Program Gross Impacts Table

	2021	2022	2023	2024	2025	Total
Gross kWh	0	0	20,079,123	17,799,076	11,767,984	49,646,184
Gross kW	0	0	10,170	9,015	5,961	25,146

5. Program and/or Sub-Program Cost-Effectiveness (TRC)

Delivery Period Year	Expected TRC Ratio
2021	N/A
2022	N/A
2023	1.74
2024	1.84
2025	1.83

6. Program and/or Sub-Program Cost-Effectiveness (PAC)

Delivery Period Year	Expected PAC Ratio
2021	N/A
2022	N/A
2023	1.60
2024	1.69
2025	1.64

7. **Type of Program and/or Sub-Program Implementer**

Program Implementer	
PA-delivered	<input type="checkbox"/>
Third Party-Delivered	<input checked="" type="checkbox"/>
Partnership	<input type="checkbox"/>

8. **Market Sector**

SCE Business Plan Sector	Yes
Residential	<input type="checkbox"/>
Commercial	<input checked="" type="checkbox"/>
Industrial	<input type="checkbox"/>
Agricultural	<input type="checkbox"/>
Public	<input type="checkbox"/>
Cross-Cutting	<input type="checkbox"/>

9. **Program and/or Sub-Program Type**

Program Type	
Resource	<input checked="" type="checkbox"/>
Non-Resource	<input type="checkbox"/>

10. **Market Channels and Intervention Strategies**

Market Channels	
Upstream	<input type="checkbox"/>
Midstream	<input type="checkbox"/>
Downstream	<input checked="" type="checkbox"/>
Intervention Strategies	
Direct Install	<input type="checkbox"/>
Incentive	<input type="checkbox"/>

Market Channels	
Finance	<input type="checkbox"/>
Audit	<input type="checkbox"/>
Technical Assistance	<input type="checkbox"/>
Other	<input checked="" type="checkbox"/>

11. Campaign Goals and Timeline

The primary goals for the three-year program are to achieve the savings targets cost-effectively by providing behavioral interventions to small and medium commercial customers with an approved RCT M&V methodology. Key milestones for 2022-2025 are listed in the table below. In 2021, the goals are to begin the necessary program set-up activities in order to launch the program in late 2022. The primary activities in 2021 will be initiating the IT set-up process and developing a procedural workpaper for a commercial behavioral business energy report measure

Goal/Milestone	Estimated Completion Date
Submit Commercial Behavioral Workpaper for Cal TF Review	September 30, 2021
Submit Commercial Behavioral Workpaper for CPUC Approval	January 14, 2022
Data Transfer Complete from SCE to 3 rd Party Implementer	May 20, 2022
Program M&V Plan Submitted for Approval	June 25, 2022
Business Energy Report Configuration Complete	July 1, 2022
Program M&V Plan Approved	July 10, 2022
3 rd Party Vendor Data Integration Complete	July 20, 2022
Upload Program Manual to CEDARS	August 1, 2022
Business Energy Report Samples Approved	August 1, 2022
3 rd Party Implementer Finalizes Treatment and Control Groups	August 15, 2022
Launch Business Energy Reports to Customer Treatment Group	September 1, 2022
Program Savings Expected to begin after program treatment ramp-up period	March 1, 2023
Additional Treatment Wave Added to Program	January 3, 2024
Additional Treatment Wave Added to Program	January 2, 2025

2. Implementation Plan Narrative

1. Program Description

The Commercial Behavioral Program will drive adoption of behavioral changes in small and mid-size commercial customers through personalized Business Energy Reports (BERs), Energy Advisor support, and rewards. The program includes an initial treatment group of 80,000 small and medium commercial (SMB) customers across SCE's service territory. These customers will receive customized bi-monthly BERs delivered using paper and email channels giving them feedback on their energy use and recommending low-cost or no-cost ways to save energy. Additionally, the program will involve an ongoing targeted outbound coaching campaign by Energy Advisors. This campaign will serve to reinforce the BERs by having data-driven conversations with SCE's customers about their lighting, HVAC, refrigeration, office equipment, cooking, water heating, and other business-related electric end-uses. The program will also include a rewards component that motivates action and ultimately drives business energy savings.

In 2021, the program will focus on conducting necessary activities to prepare for launch to commercial customers in late 2022. This will consist of developing a procedural workpaper for a commercial behavioral business energy report measure and IT setup.

2. Program Delivery and Customer Services

The Commercial Behavioral Program is a downstream program that relies on a behavioral measure in the form of print and email BERs supported by Energy Advisor coaching of selected small and mid-size commercial customers. The reports will provide feedback on their consumption, how their energy use has changed over time, and customized recommendations to save energy. This intervention overcomes the difficulty in cost-effectively reaching small and mid-size commercial customers with traditional EE offerings due to the diversity and number of customers in this segment. Behavioral interventions provide a low-cost way to reach a large number of customers to influence their behavior to save energy. Energy Advisors will support customers via phone and email channels, and small rewards will be offered to nudge customers to engage and provide feedback.

In 2021, only program startup activities will be conducted to prepare for launch, including initiating the data transfer process and developing a measure workpaper. There will be no program delivery or customer services in 2021.

3. Program Design and Best Practices

The program design will be finalized as part of the planning activities in 2021. Best practices from previous behavioral and other types of small commercial programs will be employed in order to: 1) establish the data feed that enables Business Energy Report messaging to customers, and 2) develop the M&V Plan.

Once launched in late 2022, the Commercial Behavioral Program will provide relevant insights in an actionable package with personalized energy-saving recommendations that business owners can put into effect immediately.

SMB customers have varying knowledge and experience with energy efficiency (EE) and the programs available to them. SMB customers are largely unsure how to turn their energy data into

actionable insights that can save energy and money in their business. BERs provide these insights in a clear, concise, and actionable package with personalized energy-saving recommendations that business owners can put into effect immediately. The BERs also provide the perfect channel to promote other SCE opportunities and can educate SMB customers on the value that energy efficiency and demand response programs provide to their businesses.

SMB customers frequently cite time as their scarcest resource with finances being a close second. These customers have limited ability to spend time learning about EE and which EE actions are right for their business. The program combines the actionable insights available in the BERs with one-on-one coaching by Energy Advisors to give customers the right information to reduce the hassle of navigating the complex EE landscape. The program reaches customers through multiple channels to make information easy to access and drive continuous engagement, including direct mail, email, and phone.

Because SMBs generally do not have a person dedicated to managing energy issues, it can be difficult to speak directly with a decision-maker about implementing energy-saving projects. The program overcomes this barrier by taking customer data provided by SCE and using it to expand two-way communication with the customer. The BERs will prompt customers to provide information back to the program to ensure future reports are delivered to the right person for each business customer. Specifically, the program will collect email addresses to ensure we deliver digital reports to the inbox of SMB decision-makers to drive energy-saving actions.

SMBs have a wide range of business activities, hours of operation, and equipment types, making it challenging to provide relevant energy information to all SMB customers. The program will use targeted analytics to tailor communications based on individual SMB characteristics and disaggregated energy use to drive deeper savings.

4. **Innovation**

The innovation design will be finalized as part of the planning activities in 2021 and 2022.

Innovations may include:

- **Drive behavioral savings from SMB customers:** This program design uses a blend of advancements in commercial buildings analytics and data collection and targeted higher-touch tactics to reach this underserved segment.
- **High-touch strategy using Energy Advisors:** Data-driven personalized messaging combined with trained coaches generates greater customer engagement in program activities and low-cost/no-cost energy-saving actions.
- **Ongoing stream of customer feedback:** The program harnesses customer insights from targeted coaching campaigns. This behavioral intervention contributes to overall customer intelligence for cross-marketing, lead generation, and scaling to other DSM opportunity areas.
- **Rewards market strategy to incent customer action and drive loyalty:** The program incorporates rewards for businesses to earn and redeem gift cards or other forms of value. In turn, businesses can promote their energy savings progress to build loyalty with their community and customers.

5. Metrics

The Commercial Behavioral Program will have several Key Performance Indicators (KPIs) integrated into the program to measure and track program success. These KPIs will be the primary assessment of the program's performance once launched. The majority of the KPIs will be tracked monthly or quarterly throughout the three-year cycle. Additional portfolio and sector-level metrics will also be tracked and reported. Metrics will include:

Category	Metric/Indicator	Description
Program Performance	Energy Savings (kWh, kW)	Net annual and lifecycle energy savings achieved vs forecasted
Program Performance	Customers Treated and Reports Sent	Number of customers with active accounts in treatment group waves; Actual number of reports sent to customers by paper and email channels
Program Performance	TRC Calculation	TRC actual vs. forecasted
Program Performance	TRC ratio / Levelized cost	[Incentive/non-incentive] spend based on paid [incentive/non-incentive] spend vs. forecasted [incentive/non-incentive] spend
Program Performance	Customer Satisfaction and Service	Resolution of complaints or inquiries and timeliness of resolution; Overall program customer satisfaction rating of 80% or higher
Program Performance	Hard to Reach and Disadvantaged Communities	Percentage of customers in hard to reach or disadvantaged communities
Implementer Administrative Performance	Program Data Quality	Home energy reports are sent to treatment group customers and not sent to control group customers; Correct personalized data display on customer reports
Marketing Performance	Unsubscribes or opt outs	The average unsubscribe rate across direct mail and email campaigns
Marketing Performance	Open Rates	Email open rates
Supply Chain	Diverse Business Enterprises (DBE) Spend	To date DBE spending as percent of total spend / DBE % commitment compared to goal
Sector Level	Greenhouse Gas Emissions	MT CO ₂ eq Net kWh savings
Sector Level	Depth of interventions	Average savings per participant

6. For Programs Claiming To-Code Savings

This section is not applicable to the Program.

7. **Pilots**

This section is not applicable to the Program.

8. **Workforce Education & Training (WE&T)**¹

This section is not applicable to the Program, as it does not involve workforce education and training.

9. **Workforce Standards**²

This section is not applicable to the Program. According to D.18-10-008³, the workforce standards are applied to large non-residential projects involving the installation, modification, repair, or maintenance of heating, ventilation and air-conditioning measures, as well as lighting controls. This requirement is not applicable to the proposed program as the program does not involve the installation of physical measures.

10. **Disadvantaged Worker Plan**:⁴

This section is not applicable to the Program, as it does not involve the installation of physical measures.

11. **Additional Information**

No additional information has been requested by any CPUC decision or ruling for the program.

¹ D.18-05-041, Page 20-21 and Ordering Paragraph 7.

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

³ D.18-10-008, Page 2 and Ordering Paragraph 1.

⁴ D.18-10-008, Attachment B, Section D, page B-9.

3. Supporting Documents

Attach all the following documents as PDF-format files to this file:

1. **Program Manuals and Program Rules**

A Program Manual will be developed and uploaded in CEDARS prior to program launch in 2022. The Program Manual will include the required applicable information including eligible measures, customer eligibility requirements, additional services, and program metrics.

2. **Program Theory⁵ and Program Logic Model⁶**

There are a variety of barriers that make reaching SMB customers challenging for utilities. The SMB market is diverse in terms of business activities, hours of operation, equipment types, tenant-landlord relationships, and other factors. Additionally, there are challenges with finding and reaching the decision-maker within each business to influence energy decisions. This downstream program design overcomes these barriers through machine learning analytics, sophisticated data analysis, personalized messaging, and multi-channel communication to SMB customers.

Targeted customers are selected for inclusion in the program by leveraging machine learning analytics that identify SMB customers with a high propensity to save based on business segment and available business characteristics. This targeting will support the data analysis and personalization of the print and email reports through the selection of report modules and the application of next-best-offer analytics. Data analysis and report personalization is one of the key activities of this program and allows the application of behavioral science principles that encourage SMB customers to take energy saving actions. The data analysis activity also supports a targeted outbound calling campaign by providing Energy Advisors with personalized data to provide to selected customers during their interactions. Another important activity we are proposing as part of this program is an initiative to reward SMB customers for completing certain actions such as providing their email address, answering phone survey questions, or participating in the online Business Energy Advisor.

Program Outputs

The customer targeting activity during program setup will result in the creation of a targeted customer list followed by random selection into treatment and control groups. The data analysis, personalization, and report generation activity results in the personalized print and email BERs being delivered to treatment group customers. The output from the targeted outbound calling campaign activity is completed discussions between the Energy Advisors and selected SMB customers. The rewards program activity will result in rewards being provided to customers.

⁵ The expected causal relationships between program goals and program activities in a way that allows the reader to understand why the proposed program activities are expected to result in the accomplishment of the program goals. A well-developed program theory can (and should) also describe the barriers that will be overcome in order to accomplish the goals and clearly describe how the program activities are expected to overcome those barriers. *California Evaluation Framework*, June 2004.

⁶ 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.

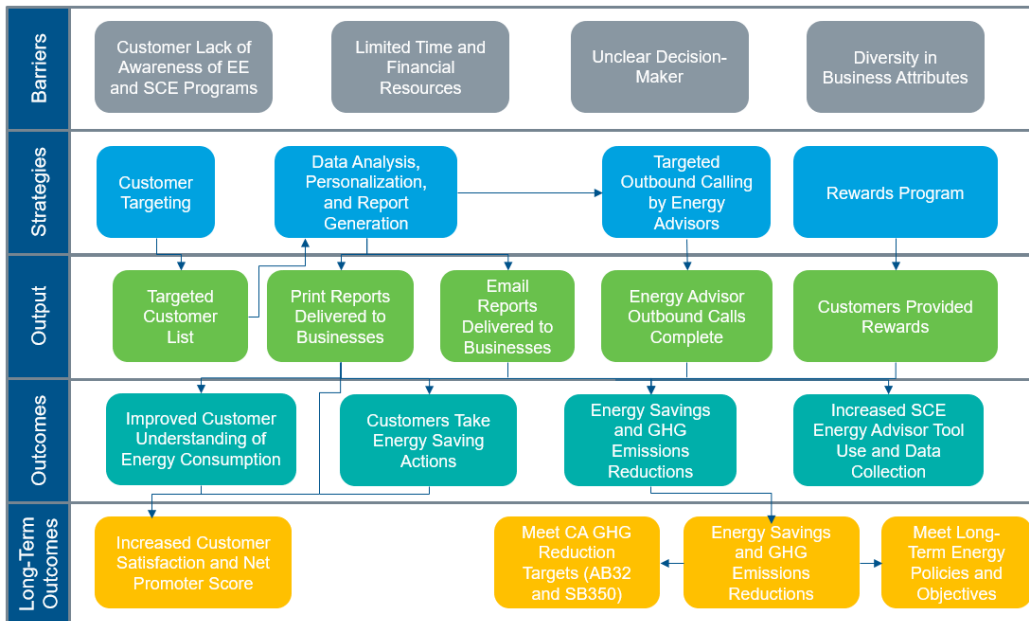
Program Outcomes

The print and email reports, as well as the Energy Advisor conversations with SMB customers, will, in the short term, increase customer understanding of their energy consumption and enable customers to take energy conserving actions, which will lead to short-term energy and demand savings. Further, the reports and Energy Advisor conversations, along with the rewards program, will motivate customers to participate in SCE’s online Business Energy Advisor tool.

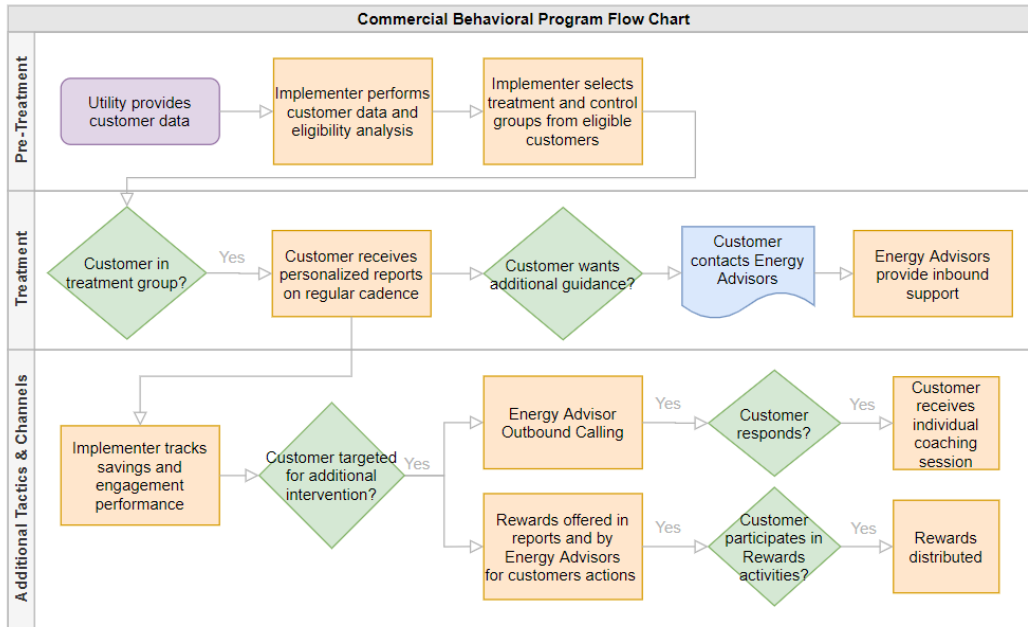
The reports, outbound calling campaign, and rewards program all contribute to several intermediate outcomes, including customers building trust with SCE, improved customer satisfaction, and customers taking advantage of additional SCE commercial EE programs. The program activities enable data collection on SMB customers that can be used for future program targeting and for increased personalization of the BERs. The short-term energy-saving behaviors and medium-term participation in other commercial EE programs lead to persistent energy and demand savings, thereby helping SCE achieve its savings goals.

The program outputs will contribute to long-term increases in SCE’s Net Promoter Score (NPS) — the percentage of customers rating their likelihood to recommend the company to a friend or colleague as 9 or 10 — and in long-term energy and demand savings with associated greenhouse gas (GHG) emissions reductions. These savings contribute to meeting long-term California EE policies and GHG reduction targets.

Program Logic Model



3. Process Flow Chart



4. Incentive Tables, Workpapers, Software Tools⁷

Provide a summary table of measures and incentive levels, along with links to the associated workpapers.

#	Measure	Incentive Level	
1	TBD – Commercial Behavioral Business Energy Report		
2			
3			

#	Workpaper Name	Short Description	URL link or location name
1	SWWB00x-01 Commercial Behavioral Procedural Workpaper - in development	Workpaper in development with Cal TF	
2			
3			

⁷ Per D.19-08-009, for fuel substitution measures where the incentive exceeds the Incremental Measure Cost (IMC), the CPUC requires submission of a workpaper addendum using a separate template. Third-party implementers can request the template from their Contract Manager. SCE Program Managers should refer to the E-PPICs Smart Sheet.

ICF will develop a procedural workpaper for a commercial behavioral business energy report measure, in collaboration with Cal TF. The workpaper will be modeled on the Home Energy Reports SWWB004-01 workpaper. The following steps will be taken to develop the workpaper:

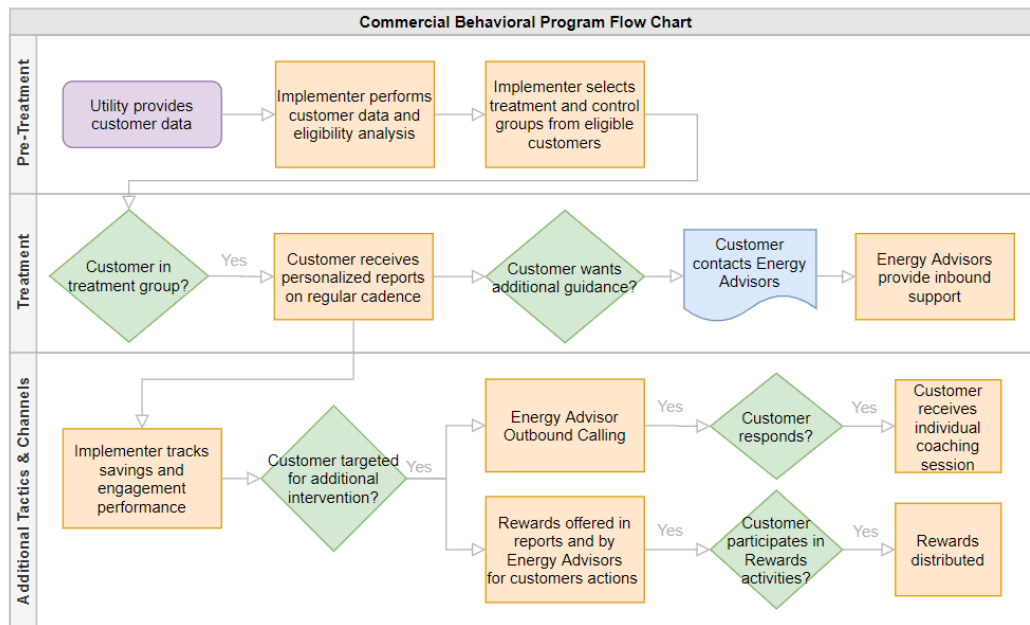
- Measure Screening Phase (2021 Q2)
- Measure Development/Update Plan (2021 Q3)
- Draft Measure Packet (2021 Q3)
- Measure Review and Cal TF Affirmation (2021 Q4)
- Submit Measure for CPUC approval (2022 Q1)

5. Quantitative Program Targets

See section 1.3-1.6 for program budget and goals. Additional quantitative targets will be identified pending final program design/data provided by SCE and this plan will be updated.

6. Diagram of Program

This program does not require linkages to other areas.



7. Evaluation, Measurement, and Verification (EM&V):

Since there is no program activity to customers in 2021, there will be no savings to evaluate. For 2021, a procedural workpaper for a commercial behavioral business energy report measure will be developed, in collaboration with Cal TF. The SWWB00x-01 Commercial Behavioral Procedural Workpaper will be modeled on the Home Energy Reports SWWB004-01 workpaper. The workpaper will lay out the EM&V methodology including addressing joint savings. Also, as

part of program startup activities, the M&V Plan will be developed and finalized by mid-2022 in advance of the launch to customers in late 2022.

The program will employ a randomized control trial (RCT) experimental design that ensures comparisons of treatment and control groups are valid from a statistical standpoint. Savings are determined through a billing analysis which determines the difference between the treatment and control group average energy use. Decision 10-04-029⁸ established the evaluation, measurement, and verification (EM&V) processes for savings claims of behavior-based programs based on experimental design. To calculate the energy savings, the treatment group will be compared with a randomly selected control group of customers that does not receive interventions using a regression model consistent with behavioral M&V protocols. Savings calculations will be reported monthly and a true-up is performed at each year-end. Joint savings must be removed from the savings calculations. Savings may be verified on a periodic basis by a third-party evaluation firm.

After the program is launched in 2022, program activities will be evaluated throughout the program delivery period in the form of a customer satisfaction survey and Energy Advisor interaction with customers to track program satisfaction. The results will be used to identify any areas for potential improvement.

8. **Normalized Metered Energy Consumption (NMEC):**

This section is not applicable to this program.

⁸ Decision 10-04-029, Page 40-42.

APPENDIX. List of Acronyms and Abbreviations

Term	Definition
AMI	Advanced metering infrastructure
BER	Business Energy Report
C&S	Codes & Standards
CALCTP	California Advanced Lighting Controls Training Program
CEDARS	California Energy Data and Reporting System
CPUC	California Public Utilities Commission
DAC	Disadvantaged Communities
DBE	Disadvantaged Business Enterprise
DEER	Database for Energy Efficient Resources
DSM	Demand-Side Management
EE	Energy Efficiency
EE PRG	Energy Efficiency Procurement Review Group
EM&V	Evaluation, Measurement & Verification
ET	Emerging Technologies
EUL	Effective Useful Life
FSU	Fractional Savings Uncertainty
GHG	Greenhouse Gas Emissions
HER	Home Energy Report
HTR	Hard-to-Reach
HVAC	Heating, Ventilation, & Air Conditioning
IOU	Investor-Owned Utility
IP	Implementation Plan
KPI	Key Performance Indicator
kW, kWh	kilowatts, kilowatt-hours
MT CO₂eq	Metric Ton of Carbon Dioxide Equivalent
M&V	Measurement & Verification (or, sometimes, Validation)
NPS	Net Promoter Score
NMEC	Normalized Metered Energy Consumption
PA	Program Administrator
PAC	Program Administrator Cost
RCT	Randomized Control Trial
RFA	Request for Abstract
RFP	Request for Proposal
SMB	Small and Medium Commercial Business

Term	Definition
TRC	Total Resource Cost
WE&T	Workforce Education & Training