

# Southern California Edison



## Implementation Plan

### Residential Energy Advisor

**First Filing Date: mm/dd/yyyy**

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# 1. Program Budget and Savings Information

## 1. Program and/or Sub-Program Name

Residential Energy Advisor  
 Home Performance Plus (*Public facing name*)

## 2. Program and/or Sub-Program ID Number

SCE\_Res\_Equity\_001          Residential Energy Advisor (Resource)  
 SCE\_Res\_Equity\_002          Residential Energy Advisor (Non-Resource)

## 3. Program and/or Sub-Program Budget Table

Non-Resource				
Program Budget Cost	2023	2024	2025	Total
Administration Costs	\$ 37,998	\$ 148,589	\$ 127,559	\$ 314,146
Marketing/Outreach	\$ 42,220	\$ 66,039	\$ 54,685	\$ 162,944
Incentive/Rebate	\$ -	\$ -	\$ -	\$ -
Direct Implementation	\$ 341,984	\$ 1,436,358	\$ 1,640,556	\$ 3,418,898
<b>Total</b>	<b>\$ 422,202</b>	<b>\$ 1,650,986</b>	<b>\$ 1,822,800</b>	<b>\$ 3,895,988</b>

Resource				
Program Budget Cost	2023	2024	2025	Total
Administration Costs	\$ 11,345	\$ 113,448	\$ 113,472	\$ 238,265
Marketing/Outreach	\$ 19,204	\$ 61,069	\$ 64,734	\$ 145,007
Incentive/Rebate	\$ 415,521	\$ 2,202,037	\$ 2,964,129	\$ 5,581,687
Direct Implementation	\$ 196,346	\$ 959,959	\$ 1,260,292	\$ 2,416,597
<b>Total</b>	<b>\$ 642,416</b>	<b>\$ 3,336,513</b>	<b>\$ 4,402,627</b>	<b>\$ 8,381,556</b>

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

Non-Resource			
Delivery Period Year	Targeted Customer Marketing and Community Engagement Projects	Customer Energy Advisements	Customer Energy Case Management
2023	4	913	91
2024	4	3654	457
2025	3	3655	579
<b>Total</b>	<b>11</b>	<b>8222</b>	<b>1127</b>

<b>Resource</b>				
<b>Energy Savings</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>Total</b>
<b>Gross Demand Reduction (kW)</b>	45	152	190	387
<b>Net Demand Reduction (kW)</b>	18	51	64	133
<b>Gross Energy Savings (kWh)</b>	181,886	953,692	1,196,386	2,331,964
<b>Net Energy Savings (kWh)</b>	160,857	776,912	974,526	1,912,295

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

	<b>2023</b>	<b>2024</b>	<b>2025</b>
<b>TRC</b>	0.17	0.21	0.23

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

	<b>2023</b>	<b>2024</b>	<b>2025</b>
<b>PAC</b>	0.17	0.23	0.24

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

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

8. **Market Sector**

<b>SCE Business Plan Sector</b>	<b>Yes</b>
Residential	<input checked="" type="checkbox"/>
Commercial	<input 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 checked="" 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 checked="" type="checkbox"/>
Incentive	<input checked="" type="checkbox"/>
Finance	<input type="checkbox"/>
Audit	<input checked="" type="checkbox"/>
Technical Assistance	<input type="checkbox"/>
Other	<input type="checkbox"/>

**Campaign Goals and Timeline:**

The Residential Energy Advisor program is a new, innovative Equity Program that offers energy efficiency rebates and services targeted specifically to Hard-to-Reach (HTR) residential customers, including moderate income households, renters, and those residing within disadvantaged and underserved communities (DAC) in support of California Public Utilities Commission (CPUC) Environmental and Social Justice (ESJ) Action Plan 2.0 <sup>1</sup>goals. The Program specifically supports following goals under the ESJ Action Plan:

- Increase investment in clean energy resources to benefit ESJ communities<sup>2</sup>, especially to improve local air quality and public health: This is achieved through offering electrification

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<sup>1</sup> <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/news-and-outreach/documents/news-office/key-issues/esj/esj-action-plan-v2jw.pdf>

<sup>2</sup> “predominantly communities of color or low-income communities that are underrepresented in the policy setting or decision-making process, subject to a disproportionate impact from one or more environmental hazards, and are likely to experience disparate implementation of environmental regulations and socioeconomic investments in their communities.” p. 2 of the ESJ Action Plan.

incentives and access to Energy Advisors for assistance in making improvements to the indoor space.

- Increase climate resiliency in ESJ communities: This is achieved through offering energy efficiency incentives and assessments, coupled with the Energy Advisor service, to better educate customers in selecting products that can adapt to load capacity conditions in the market.
- Promote high road career paths and economic opportunity for residents of ESJ communities: This will be achieved through engagement with local contractors in the DACs. Helping these contractors grow their business will open more careers in the community.

Single family detached homes and up to four-unit buildings within the Southern California Edison (SCE) service territory and targeted DAC territories will qualify. The Program will be active from September 2023 through December 2025.

## 2. Implementation Plan Narrative

### 1. Program Description

The Residential Energy Advisor (REA) program (“Program”) is an Equity program that leverages Non-Resource and Resource elements to support CPUC ESJ Action Plan 2.0 goals of increased investment in clean energy resources to benefit ESJ communities, especially to improve 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 Hard to Reach (HTR) residential customers, including moderate income households, renters, and those residing within disadvantaged (DAC) and underserved communities. These communities will be identified as the top 25% scoring census tracts according to CalEnviroScreen, as well as census tracts with a high density of residents who speak a language other than English or rent their homes. The Implementer will focus customer marketing and community efforts where customers are less likely to participate in or have awareness of energy efficiency.

The activities to support the Non-Resource contract will focus on targeting HTR and DAC communities, in home customer education, Energy Advisor services, coordinating community outreach events and Trade Ally online learning opportunities. The Resource contract will focus on the development of a Trade Ally Network, Trade Ally marketing materials, and incentives for Energy Efficiency Upgrades.

Coordinated omnichannel 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. Analytics will reveal additional and specific attributes about customer marketing channel preferences and demographic information that will help shape messaging and the deployment of highly targeted campaigns. The Implementer may conduct more focused targeting in the form of direct outreach to customers with a high potential for program benefit.

The Implementer will offer in-home customer visits that will educate the customer on energy efficiency opportunities in their home, including behavioral changes that could achieve immediate savings. The REA program will offer free home assessments. The assessment will gather information on insulation levels, HVAC and water heating systems, light bulbs and fixtures, major appliances, and other data needed to identify energy efficiency opportunities and calculate measure savings potential. During the assessment, no cost direct install measures, such as faucet aerators, will be installed. Following the assessment, a summary report, including measure recommendations and energy savings estimates will be provided to the customer. In addition, the customer will learn about the non-energy benefits of energy efficiency, such as improved air quality, reduced pollution and other relevant health and safety topics.

After the in-home visit, the customer will have access to ongoing energy advising from the program that will support the customer in taking next steps in their energy efficiency journey. The Energy Advisor will make it easy for households to work with a participating contractor in the program’s Trade Ally Network, identify and apply for additional incentives or grants that can help further reduce the cost of the project, and plan for future upgrades.

The Trade Ally Network will be recruited with the prospect of higher incentives and marketing support to improve the business case for serving customers in disadvantaged and underserved communities. By helping create growth opportunities for contractors in disadvantaged and underserved communities, the program will increase access to energy efficiency through a skilled energy efficiency workforce for SCE

customers in service territories meeting CPUC definitions of HTR and DAC. The Trade Ally Network is expected to build trust with SCE's disadvantaged, underserved and hard-to-reach customers, as a result of the training, resources, and support the Trade Ally Network will receive from the program. This will increase customer receptivity and adoption of energy efficiency, creating a virtuous cycle of interaction between the customers, Trade Ally Network, and Energy Efficiency programs.

Partnering leveraging existing Trade Ally Networks and partnerships developed through Comfortably CA, Golden State Rebates, and the Technology for Clean Heating Equipment (TECH) initiative, the Implementer will conduct targeted outreach to Trade Allies who participate in these Programs and have a base-level understanding of energy efficiency and fuel substitution. Using phone, email, and face-to-face outreach methods, the Implementer will initially engage with Trade Allies that operate in the target areas, presenting the benefits of joining the Trade Ally Network: rebates, marketing support, and resources to aid in selling energy efficiency and fuel substitution measures.

Interested Trade Allies will be required to complete a Program enrollment application via the Trade Ally Portal. The enrollment application will gather the Trade Ally's business and licensing information and insurance coverages as required by the Trade Ally Participation Agreement. Upon completion of the enrollment application and the Trade Ally Participation Agreement, the Trade Ally must complete a set of web-based required trainings related to the Program, rebate application submission, and quality expectations. Once application and training are completed, the Trade Ally will then become "Active" in the Program and will be listed as an Approved Participant on the Program website.

## **2. Program Delivery and Customer Services**

The Implementer will deliver savings through free Home Energy Assessments and direct installs, Energy Advising, and have access to measure incentives for building shell, HVAC, fuel substitution and hot water equipment upgrades. Through the Program website, Home Energy Assessments, Energy Advisors and Trade Allies, customers will gain access to the Program services and resources that will improve awareness of energy saving opportunities, along with their energy and non-energy benefits, while at the same time offering tools to undertake progressively more impactful measures. Energy Advisor's will also provide customer service support to address incoming customer inquiries. Customer segmenting analytics will identify underserved communities (HTR and DAC), informing marketing and outreach conducted with local community-based organizations that will drive customers to the Program. The key services that will be provided by the Implementer are:

- Home Energy Assessments and direct installations
- Energy Advising,
- Trade Ally Contractor Network
- Increased measure incentives

### **Home Energy Assessments and Direct Installs**

The Implementer will utilize CalEnviroScreen and Experian data to identify and target specific geographic areas and disadvantaged communities with low implementation rates and offer customers a no-cost in-home energy assessment and direct install package. This method has proven to be an effective strategy for driving higher participation rates, and makes programs relevant to local residents, encouraging word-of-mouth referrals among neighbors and friends. Direct installation of LED lamps and



water saving measures, including faucet aerators and showerheads, will drive immediate energy savings for the Program. These in-home assessments and installations will be done in partnership with Faith Comm Inc (FCI)Management. FCI Management is local to the region and the partnership will allow for a reduction in barriers such as language and distrust.

The Home Energy Assessment will document information about the home and energy savings potential via the Implementer's Field Tool and produce an Energy Assessment Report for the customer; the information will also be added to the Implementer's database for future customer targeting. In addition to the face-to-face interaction and advice delivered during the in-home assessment, the customer will be introduced to their Energy Advisor who will follow-up with the customer to discuss additional energy saving opportunities and program offerings.

### **Energy Advising**

Energy Advisors fill a gap in current market offerings and allow for long term customer relationships. As a free, objective, unbiased third-party, the Energy Advisor acts as a facilitator, educator, and advocate for homeowners pursuing energy efficiency upgrades. Equipped with the new Program's suite of tools, such as flexible incentives, online tools and Trade Ally Network, the Energy Advisor will help address unique barriers of HTR and disadvantaged households to increase market penetration. Interactions with Energy Advisors will take place via phone and the Implementer's customer resource management system will record the customer journey. Energy Advisors will:

- Provide individualized and ongoing assistance to homeowners and renters
- Educate homeowners and renters about energy efficiency benefits including reduced energy bills, improved indoor air quality, comfort and health benefits
- Serve as a single point of contact for all efficiency questions and/or projects
- Provide support with selecting a Participating Contractor, scheduling estimates and reviewing bids
- Help customers understand energy and audit reports
- Help drive participation in available financing options
- Educate homeowners and renters on complementary program offerings
- Help homeowners who receive Home Energy Assessments take the next step in selecting a contractor

Central to the Program is that each customer will have an assigned Energy Advisor, who will develop a relationship of trust with the customer, thereby significantly improving the likelihood of program participation and other efficiency behaviors following initial participation.

The Energy Advisor will be available as a first point of contact for leads generated through Home Energy Assessments or the Program website. During the initial contact, the Advisor will provide basic energy efficiency and other non-energy benefit education to the customer. During this interaction, the customer will be screened for potential participation in any of the core Program offerings. The Energy Advisor will also provide information about available financing options.

If the homeowner proceeds with an energy efficiency upgrade, the Energy Advisor may act as a customer advocate to (1) interface with the Participating Contractor, financing partner, and incentive program administrator; (2) provide incentive application assistance; and (3) perform other functions that facilitate

the process for the customer. Following the energy efficiency upgrade, the Energy Advisor will continue to act as a source of information, conflict resolution, and support for the customer. Importantly, the Energy Advisor leverages their relationship with the customer to encourage and increase post-upgrade efficiency behavior. The Energy Advisor provides a full-service customer support experience designed to increase project uptake, provide education and guidance to homeowners, serve as a trusted third-party advocate, and support the customer through the upgrade process.

### **Trade Ally Contractor Network**

The Implementer will engage in focused recruitment of Trade Allies who serve HTR and DAC communities, the Trade Ally Network will be recruited with the prospect of higher incentives and marketing support to improve the business case for serving customers in those communities. The Implementer will support the network with workforce development activities to help train installers on incentivized measures and program expectations and by providing access to an online training portal that provides access to free relevant training. Trade Allies will be supported by a SCE branded standard online portal to submit incentive applications and manage their participation. The Trade Ally online portal will support the following:

- Trade Ally Registration
- Customer eligibility verification
- Incentive application submission
- Tracking of incentives submitted by trade allies.

### **Measure Incentives**

Incentives will be paid for the installation of eligible energy efficiency measures if the customer works with a Trade Ally. Eligible measures fall into these categories:

- Operation & Maintenance
- Building Shell
- HVAC and DHW Equipment Upgrades
- Fuel Substitution

Trade Allies will have the ability to submit a rebate application for single or multiple eligible measures via a customized online portal that facilitates a streamlined user experience.

## **3. Program Design and Best Practices**

The Program was designed to address known residential market barriers for HTR and DACs. The key market barriers and best practice solutions to address these barriers are described below.

### **• Identifying Target Markets**

To identify the Program's target market within the service territory, the Implementer will utilize analytics to create multi perspective reporting with CalEnviroScreen and Experian datasets. This tool will allow the Implementer to identify the top 25% scoring census tracts according to CalEnviroScreen, HTR residential customers, including moderate income households, renters, those who speak a first language other than English, and those residing within disadvantaged and

underserved communities. The datasets will be visualized in an interactive data visualization software product developed by Microsoft with a primary focus on business intelligence (Power BI) to represent qualifying customers within the service territory, the demographics of the qualifying customers, marketing tendencies represented by mosaic indices, and housing characteristics.

- **Lack of customer knowledge on energy efficiency products, programs, and benefits; Language barriers in select demographics leading to additional credibility and/or awareness concerns**

The Implementer will leverage collaborations with community-based organizations to plan community engagement activities that promote education, awareness and trust. The Program's offerings will focus on educating participants on both energy and non-energy benefits of energy efficiency upgrades by providing:

- An engaging website with content that leverages existing and new material and allows the customer to self-educate on different measure energy efficiency benefits and non-energy benefits of implementing upgrades
  - In-home coaching and opportunity identification focused on customer education and engagement with resulting assessment report
  - Dedicated Energy Advisors trained to effectively communicate short and long- term EE benefits and to act as a customer advocate
  - Individualized contractor training and mentoring that increases EE benefit awareness and ensures consistent program messaging
  - Energy use analysis and customer demonstrations to help customers further understand the value of EE improvements
  - Targeted messaging and outreach based on customer home and meter data that promotes measure adoption and associated benefits
  - Providing education that acknowledges participants' competing financial priorities, encouraging behavioral changes for further bill reduction
  - Translate marketing and education materials into applicable languages to show commitment to serving in their comfort zone
  - Translate marketing website into applicable languages to ease customer's initial journey
- **Workforce barriers that include lack of education about efficient measures and disbelief in their effectiveness; Difficulty finding qualified technicians**

The Implementer will target within the local communities to identify contractors who have existing relationships with the targeted customer mosaics and enroll these contractors as Trade Allies. Program onboarding training will be provided as the Implementer increases the pool of available Trade Allies, ensuring all contractors are equipped with tools to confirm participant eligibility, apply for incentives, and have access to educational resources.

To drive greater market penetration, it is imperative that Trade Allies understand and can communicate the benefits of energy efficiency. Lessons learned from other programs show that it may be helpful to actively educate Trade Allies about what is required of them and help them effectively sell upgrades to customers. With the majority of customers reporting that contractors first made them aware of the program, it is clear that Trade Allies need to be able to communicate Program and measure benefits to customers. To address this, the Implementer will continue deploying individualized support and assistance to Trade Allies with a focus on energy efficiency benefits and the value of the Program to their business model. The Implementer will also offer continuing

education to the Trade Allies through the online Trade Ally portal, including providing opportunities to earn continuing education units (CEUs) for maintaining certifications. The Implementer will develop simple marketing resources for the Participating Contractors designed for customers with less awareness of Program operations and energy efficient measures.

- **Complex Nature of Tenant-Owner Relationships**

While tenants are typically the population that could most benefit from energy efficient housing to reduce their monthly expenses, they are not inclined to invest in their rental homes to reduce energy consumption because they are not the owner. On the other hand, the property owners of rental buildings typically don't pay the energy bills and so have little incentive to invest in making them more efficient. Getting landlords to improve the energy efficiency of their buildings is a well-known challenge and provides a significant barrier for a targeted program to overcome.

The Implementer will support renters in accessing resources that address common tenant and owner concerns and articulate responsible parties relative to measure types. Through Home Energy Assessments and Outreach Projects, the Program will encourage behavioral and operational savings. The Implementer will help overcome the landlord-tenant barrier through the Energy Advisor as a third-party facilitator, representing the relevant project benefits and Program incentives to both tenant and landlord and target measures with significant, rapid bill savings. In addition, the Energy Advisor will help obtain owner consent and navigate various lease arrangements and align costs and incentives with tenant and owner interests.

#### 4. **Innovation**

The Implementer will combine traditional energy efficiency direct install programs with data driven outreach to target high saving potential customers as well as ongoing customer energy advising to improve conversion to high impact retrofits. Most direct install programs struggle to re-engage the customers after the initial home visit. The Implementer's Energy Advisor model makes it the Program's mission to guide that customer further toward deeper energy savings opportunities.

The Implementer's outreach and support to Trade Allies also opens a second participation pathway for customers who did not first receive a home energy assessment from the Program. Trade Allies will be allowed to submit qualifying project independently, giving the Implementer the capability to reach a broader set of HTR customers and increasing the chances of successfully meeting Program goals.

The Implementer will deploy the following innovations to improve access to and increase uptake of energy efficiency and clean energy:

- Data-driven targeting efforts will be focused on underserved customers and communities with the high potential for significant system benefits using data driven targeting techniques. The Implementer will coordinate with community-based organizations serving these targeted communities to raise awareness and build trust.
- Incentives on targeted energy saving measure installation, with a focus on electrification. Incentives on targeted measures will provide increased project conversion for projects with more persistent savings. Measures have been selected to achieve lasting benefits for customers, aiming for an average measure life of nine years.
- Trade Ally concierge. Customers will benefit from the Program's Trade Ally Network and Program assistance matching them with a best-fit contractor.

- Local workforce development. The Implementer will engage in focused recruitment of Trade Allies who serve HTR and DAC communities. The Implementer will support the Trade Ally Network with online learning courses and training on program offerings to ensure installers are educated and trained on incentivized measures and Program expectations.
- Integrated Demand Side Management (IDSM) technical assistance. Customers will receive free energy education to start customers on their energy management journey with a focus on support IDSM with Demand Response integration and Time of Use rate support.

## 5. Metrics

In summary, the metrics to be tracked for the Program are shown below:

<b>Metrics</b>	
<b>Resource and Non-Resource</b>	
Capturing energy Savings	First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) for Single Family and Multifamily Customers separately
Disadvantaged Communities and Hard to Reach Markets	First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) in disadvantaged communities and in hard-to-reach markets
Cost per Unit Saved	Levelized cost of energy efficiency per kWh, therm and kW (using both TRC and PAC)
Greenhouse Gas Emissions	Greenhouse gasses (MT CO <sub>2</sub> eq) Net kWh savings, reported on an annual basis
Depth of interventions	Average savings per participant Energy savings per project Energy savings per square foot
Penetration of energy efficiency programs in the eligible market	Percent of participation relative to eligible population: Participation in disadvantaged communities Participation by customers defined as “hard-to-reach”
Energy intensity	Average energy use intensity of single-family homes (average usage per household – not adjusted) Average energy use intensity of multifamily buildings (average usage per square foot – not adjusted and average energy use intensity of multifamily units, including in-unit accounts)
Customers/Households/Buildings Served	Total equity-targeted households served by Program Single Family – equity market support (ex: education, information, training, technical support, etc.) Single family – equity resource acquisition (ex: energy saving action, etc. ) Multifamily Households– equity resource acquisition (ex: energy saving action, etc.) Total equity-targeted buildings served by Program Multifamily Buildings– equity resource acquisition (ex: energy saving action, etc.) Percent of benchmarked multi-family properties relative to the eligible population

<b>Metrics</b>	
<b>Non-Resource</b>	
Contractors/Workers Served	Total number of contractors/workers served by Program Total number of contractors and/or workers that are disadvantaged workers or otherwise underrepresented, who are directly involved in implementing Equity Segment programs Total number of companies/non-profits that are Diverse Business Enterprises (DBE) or otherwise underrepresented (e.g., BIPOC-owned) with contracts to implement program
Bill Savings	Estimated first-year bill savings in total dollars for program participants
Community Engagement	Community engagement activities during program design and to identify community needs and solutions Community engagement activities during program implementation Community engagement activities during program assessment
Energy, Climate, and Non-Energy Benefits	Health – “non-energy benefits” in “counts of participants receiving this benefit” until we can monetize. Reporting at least one of: Indoor air quality, Outdoor air quality (e.g., reduction in emissions from gas combustion appliances that vent to nearby outdoor air), Reduction in interior contaminants/biologics, other health-related benefits as determined through the course of implementation Comfort - “non-energy benefits” in “counts of participants receiving this benefit” until we can monetize. Reporting at least one of: reduced drafts, quieter interior, managed interior temp, other comfort-related benefits as determined through the course of implementation Safety – “non-energy benefits” in “counts of participants receiving this benefit” until we can monetize. Reporting at least one of: improved safety of appliances, other safety-related benefits as determined through the course of implementation

**6. For Programs Claiming To-Code Savings**

The to-code savings potential mainly resides in all the non-code compliant equipment installed by customers due to financial restrictions, a lack of a readily available and qualified workforce serving their community, and lack of awareness of energy efficiency benefits. The to-code potential resides both in the non-code compliant HVAC equipment and associated controls as well as water heating equipment present in the residential building types, and geographical locations included in the Program scope. Typical barriers that prevent code-compliant equipment replacements are:

- Lower upfront capital costs of lesser efficient equipment
- Unaware of utility program incentives
- Unaware of code requirements
- Lack of awareness of energy efficiency benefits and associated total cost of ownership of high efficiency alternatives

- Lack of available and qualified workforce serving the customer’s community.

Natural equipment turnover will not occur in this market primarily due to cost, but also lack of access to expertise. Program interventions that would effectively accelerate equipment turnover are:

- Free home assessments to identify opportunities
- Direct Install Measures
- Enhanced incentives for equipment replacements
- Marketing, outreach, and community engagement about program benefits and the benefits of energy efficiency
- Messaging on the non-energy benefits of measures, including improved air quality, longer equipment life, and reduce maintenance
- Workforce education and training to improve access to qualified contractors

## 7. **Pilots**

Not Applicable

## 8. **Workforce Education & Training (WE&T)**<sup>3</sup>

The Implementer will work collaboratively alongside WE&T programs by informing Trade Allies of potential opportunities, as well as examining the potential for candidates from WE&T programs to find a fit with Trade Allies in the Program. The Implementer will examine current WE&T programs to see if the current training is producing the skills sets required to implement the program. Should there be a fit, the Implementer will reach out to the WE&T program to determine if there are any viable candidates. Another part of the Program’s Trade Ally onboarding process will be to educate them about specific Program requirements and inform them of WE&T program products they can use to bolster and broaden their skillsets.

## 9. **Workforce Standards**<sup>4</sup>

Given that this is a residential program, Workforce Standards (D.18-10-008) do not apply. However, contractors performing work under the Program will be required to comply with all applicable codes and licensing requirements. These requirements include:

- Active CSLB license relative to the measure(s) being installed, where required (C-20, C-36, etc.)
- Commercial General liability, Business Auto Liability, Worker’s Compensation coverages

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<sup>3</sup> D.18-05-041, Page 20-21 and Ordering Paragraph 7.

<sup>4</sup> D.18-10-008, Ordering Paragraph 1-2 and Attachment B, Section A-B, Page B-1.

## 10. Disadvantaged Worker Plan<sup>5</sup>

The Implementer will track the participation of Disadvantaged Workers among Trade Allies using the digital platform. Each Trade Ally's record in the platform will include a field to record the number of Disadvantaged Workers they employ. Implementer will annually survey Trade Allies to enumerate and report on workers employed who meet the Disadvantaged Worker criteria.

Through the Program's online training resource, Trade Allies employing Disadvantaged Workers will have improved access to training on career-building skillsets through convenient web-based courses.

## 11. Additional Information

### Quality Assurance Procedures

The Implementer will review all submissions for quality assurance. Key components of the Quality Assurance Process are:

- Provide clearly stated specifications by measure for work to be completed
- Train participating customers, trade allies, and utility staff on the specifications
  - Energy Advisors will educate customers on energy efficient operations and program offerings
  - Trade Allies will be educated during on boarding, have access to program requirements via the Program Manual and Trade Ally Portal.
- Teach Trade Allies how this approach can improve their quality and increase profitability
- Secure formal commitment from customers through a Participation Agreement to adhere to specifications.
- Review and provide input on each Trade Ally's own internal QC process.

Automated review of key fields, such as customer and product eligibility, are included as part of the online submission process. Additionally, each submission is manually reviewed for free ridership, fraud prevention and duplicate detection. Duplicate detection within the program will be achieved by internal processing which requires the review of customer's past program participation. Fields reviewed may include site address, model number, serial number (if available), quantity, and installation date.

If a flaw is detected, Implementer will reach out to the partner or Trade Ally for resolution. In addition to reviewing invoices and submitted data for every measure, the Implementer will also conduct post-installation inspections of a sampling of projects. The first 5 projects of each new Trade Ally will be inspected, with a total of at least 10% of total program projects inspected annually. The Implementer will also require inspections on all projects that exceed 200% of the median per project incentive payment. The Implementer will regularly track and communicate policy changes to Trade Allies via Announcement pages on the Trade Ally Portal.

Throughout Program implementation, the Implementer will closely monitor regulatory proceedings and staff activities to ensure that the Program staff and participating Trade Allies are aware of code updates, rules changes and DEER updates. If a situation arises where a Trade Ally behaves in a manner that jeopardizes the Program, a three-step remediation process will be implemented. Trade Allies can be dismissed from participating in the Program at any time and any incident will be judged on its severity,

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<sup>5</sup> D.18-10-008, Attachment B, Section D, page B-9.



negligence, and damages caused. The following protocol will be followed for incidents not deemed as ground for immediate dismissal:

- **Step One:** The Program representative will fill out an incident report and the Trade Ally will be brought in for a meeting to discuss the incident and follow up remediation work needed. The meeting will also serve as notification that any further incidents will place the trade ally on probation and necessitate a corrective action plan.
- **Step Two:** After a second incident, the Trade Ally will be placed on probation. To move back to good standing, the Trade Ally must provide a corrective action plan on how to remedy the course of action leading to the incident(s). A mandatory part of all corrective action plans is a retraining of Program rules, procedure, software and/or installation that was first offered when the Trade Ally joined the Program. Any incident while on probation is grounds for permanent dismissal from the Program. The corrective action plan must then be reviewed and approved prior to continuing participation under probation.
- **Step Three:** If it is determined the Trade Ally will be dismissed from the Program, then the voluntary/non-voluntary removal from Program protocol will be followed. This includes a signed document verifying the Trade Ally's withdrawal from the Program as well as an in-person meeting where all Program materials (e.g. marketing, badges) will be turned in. The Trade Ally will be removed from any Program listings and will no longer receive referrals from the Program.

The Implementer's systems will be utilized for documenting and tracking any escalations and follow up interactions with Trade Allies. If any Trade Ally is put on probation or dismissed from the program, the SCE will be made aware of this action through written notification and through the course of regular Program reporting.

### **Disadvantaged Communities Marketing Strategies and Marketing Spend**

Due to the Equity based nature of the Program, focused market analytics to target outreach towards residential customers including homeowners and renters within DACs will be utilized, with high potential for savings and beneficial electrification. Marketing activities that may effectively improve access to energy efficiency technologies include:

- Targeted email campaigns
- Program portal content support
- Targeted recruitment of Trade Allies
- Equipping Partners and Trade Allies with program collateral and promotional items
- Recruitment and collaboration with CBOs such as churches and community centers
- Local media buys
- Digital marketing, including hyper-local social media ads aimed at local residential in targeted communities.

These marketing activities are expected to cost approximately \$256,110 over the life of the Program and will advance the Program's support of CPUC ESJ Action Plan 2.0 goals.

### **Hard-to-Reach Customers Marketing Strategies and Marketing Spend**

Another initiative to advance the Equity based nature of the Program, similar marketing strategies, tactics, and tools to identify and target HTR customers for marketing and outreach will be employed, as will be

used targeting Disadvantaged Communities. However, many HTR customers will require additional efforts to address language and landlord-tenant barriers.

Program marketing collateral will be translated into Spanish, and up to one additional predominate language determined by further analysis of the targeted communities. Messaging of Program collateral will be tailored to ensure is culturally and linguistically relevant for targeted communities.

Outreach efforts aimed at residential landlords/property owners will raise awareness of program offerings that will reduce energy costs for tenants and also improve their properties.

These activities are expected to cost approximately \$64,029 over the life of the Program and will advance the Program's support of CPUC ESJ Action Plan 2.0 goals.

### **Underserved Community Marketing Strategies and Marketing Spend**

Since the Program will use focused market analytics to target outreach towards defined disadvantaged communities, there will be significant overlap in marketing and outreach conducted with underserved communities, which is included in the DAC definition along with the most disadvantaged 25 percent according to CalEnviroScreen and aligns with the Equity goals of the program. Marketing activities that will reach Underserved Communities will include:

- Recruitment and collaboration with Community Based Organizations (CBOs) such as churches and community centers.
- Local media buys
- Digital marketing, including hyper-local social media ads aimed at local residents in targeted communities.

The Implementer will not be targeting marketing activities to Underserved Communities outside of those that overlap with Disadvantaged Communities. As such, the Implementer does not anticipate allocating any additional funding to activities targeting Underserved Communities that aren't already accounted for in the Disadvantaged Communities Marketing and spend noted above.

### 3. Supporting Documents

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

#### 1. Program Manuals and Program Rules

#	Information Required	Short Description
1	<b>Eligible Measures or measure eligibility, if applicable</b>	Induction Cooktop – Fuel Substitution Heat Pump Clothes Dryer – Fuel Substitution Ductless Heat Pump – Fuel Substitution Heat Pump – Fuel Substitution Heat Pump Central Air Conditioner Duct Sealing Duct Replacement Heat Pump Water Heater – Fuel Substitution Heat Pump Water Heater Wall Insulation Attic Insulation Faucet Aerator Low Flow Showerhead
2	<b>Customer Eligibility Requirements</b>	Customers must maintain a qualifying residential Southern California Edison account. Customers must reside within a community identified as Hard to Reach (HTR) residential customers, including moderate income households, renters, and those residing within disadvantaged and underserved communities (DAC) per the top 25% scoring census tracts according CalEnviroscreen, as well as census tracts with a high density of residents who speak a language other than English or rent their homes. Homes must be Single Family or Multi-Family up to 4 units per foundation.
3	<b>Contractor Eligibility Requirements</b>	To become a Trade Ally, Contractors must complete the following: <ul style="list-style-type: none"> <li>• Hold and maintain appropriate licenses required by the State of California Contractors State License Board to perform the class and type of work required, and if applicable, ensure that any subcontractors meet the same requirement</li> <li>• Hold and maintain general commercial liability insurance coverage with a single limit of \$1,000,000 or higher per event</li> <li>• Hold and maintain worker’s compensation insurance with a single limit of \$1,000,000 or higher per event</li> <li>• Hold and maintain automotive liability insurance with a single limit of \$1,000,000 or higher per event</li> </ul>

#	Information Required	Short Description
		<ul style="list-style-type: none"> <li>• Submit a signed Trade Ally Participation Agreement to the Program</li> <li>• Complete the Program’s Participating Contractor training</li> </ul>
4	<b>Participating Contractors, Manufacturers, Retailers, Distributors, and Partners</b>	Not applicable, as Program is downstream.
5	<b>Additional Services</b>	The Program will be offering in-home Energy Assessments and Assessment Reports, Energy Advising services, direct installation of showerheads and aerators, organizing projects with Community Based Organizations, and targeted marketing.
6	<b>Audits</b>	<ul style="list-style-type: none"> <li>• In-home Energy Assessments will be provided to qualifying customers at no cost to the customer.</li> <li>• During the in-home Energy Assessment, direct installation of low flow showerheads and aerators will be offered, and an Assessment Report provided.</li> <li>• The Program’s subcontractor, Faith Comm Inc (FCI) will be performing the Energy Assessments</li> </ul>
7	<b>Sub-Program Quality Assurance Provisions</b>	<ul style="list-style-type: none"> <li>• Contractors must hold and maintain appropriate licenses required by the State of California Contractors State License Board to perform the class and type of work required, and if applicable, ensure that any subcontractors meet the same requirement.</li> <li>• All incentive application submissions will receive desktop review during processing.</li> <li>• The first 5 projects of each new Trade Ally will be inspected, with a total of at least 10% of total program projects inspected annually.</li> <li>• The Program will also require inspections on all projects that exceed 200% of the median per project incentive payment.</li> </ul>
8	<b>Other Program Metrics</b>	See <a href="#">Performance Metrics</a>

**2. Program Theory<sup>6</sup> and Program Logic Model<sup>7</sup>**

The Implementer deploys a comprehensive array of strategies and tactics to remove barriers, increase participation, and support persistent resource delivery in ESJ communities. The Implementer will work to

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<sup>6</sup> 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.

<sup>7</sup> 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.

improve access to and increase uptake of energy efficiency by removing workforce barriers and reducing cost hurdles. The Implementer will work to improve awareness and knowledge energy efficiency and clean energy by increasing awareness while also building community trust.

Many HTR customers and those who live in DACs are unaware of the benefits energy efficiency and the programs available to them. The Implementer deploys data-driven targeting marketing and outreach efforts that will be focused on underserved customers and communities. This will ensure that the right message is getting to the intended audience.

However, marketing often isn't effective alone. The Implementer must build and earn trust with customers in order to be successful. To do this, the Implementer and its partners will coordinate with community-based organizations serving these targeted communities to raise awareness and build credibility. In addition, the Implementer will focus on recruitment of local trade allies that are already known, trusted, and respected in their communities.

Customers need to be informed and supported throughout the Program process. Free home assessments will provide customers with personal connection to the customer and information that is tailored to their home and unique circumstance. Navigating the process of deciding what measures to implement, selecting a contractor, and managing a project is intimidating for many customers. A dedicated Program Energy Advisor is crucial to converting insights and recommendations into completed projects and realized energy savings.

The Implementer will engage in focused recruitment of Trade Allies who serve HTR and DAC communities. The Implementer will support this network with workforce development activities to help ensure a qualified and knowledgeable workforce is available to serve the targeted communities. The Implementer will focus on recruitment of local trade allies that are already known, trusted, and respected in their communities.

Customers will benefit from the Program's Trade Ally Network and Program assistance matching them with a best-fit Trade Ally. The Implementer will engage in focused recruitment of Trade Allies who serve HTR and DAC communities. The Implementer will support this network with enhanced incentives on targeted measures to provide increased project conversion for projects with more persistent savings.

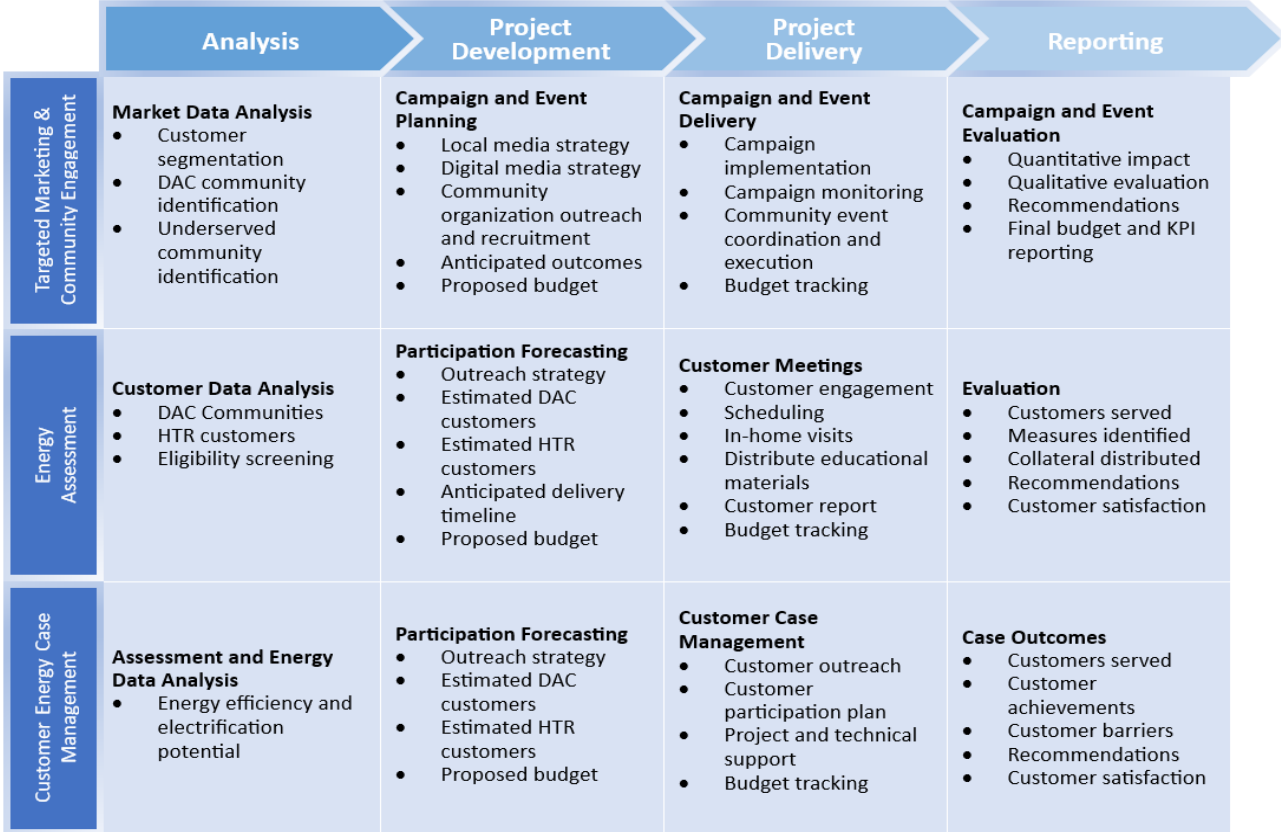
<b>Resource</b>			
<b>Barriers</b>	<b>Lack of information about savings opportunities in the home</b>	<b>Upfront cost of measures</b>	<b>Difficulty finding qualified contractors</b>
Activities	Free home assessment	Free home assessment Enhanced incentives for select measures installed by Trade Allies Layering of incentives from complementary programs	Actively recruit local trade allies that serve DACs  Provide training and workforce development opportunities  Provide enhanced incentives

Output	Savings opportunities and measures identified	Reduced cost to customer to implement measures	Increased availability of qualified contractors serving HTR customers and DACs
Short Term Outcomes	Customer receives information on recommended measures	Customer realizes savings from direct install measures	Contractors enroll as program trade allies
Intermediate Outcomes	HVAC and Water Heating equipment is upgraded with high efficiency technologies		Increased supply of technicians with training and certification to install EE measures
Long Term Outcomes	Gas equipment and appliances are substituted for high efficiency electric alternatives		Increased qualified workforce available to serve DACs and HTR customers

<b>Non-Resource</b>			
<b>Barriers</b>	<b>Lack of knowledge on EE products and benefits</b>	<b>Lack of trust in programs</b>	<b>Lack of authority to make changes in rental housing</b>
Activities	Community-targeted marketing campaigns  In-home customer education  One-on-one case management with a program Energy Advisor	Recruit local nonprofits and CBOs to support program outreach	Marketing and outreach aimed at landlords and property owners  Target measures at rapid bill savings
Output	Increased awareness and knowledge of EE products and associated benefits	Trusted community groups serve as advocates for program	Those with decision making authority have information they need
Short Term Outcomes	Increased interest and participation in EE programs among HTR customers and those residing in DACs	CBO's communicate program benefits to community.	Increased awareness among landlords and property owners regarding program benefits

Intermediate Outcomes	Customers make more efficient choices when choosing to upgrade equipment and make home improvements	Increased trust and interest in program offerings among HTR customers and DACs	Increased participation among HTR renters and renters residing in DACs
Long Term Outcomes	Customers combine resources from complementary programs to increase access to EE and clean energy benefits	CBOs participate in program’s continuous improvement process.	Energy efficiency benefits delivered to HTR renters and renters residing in DACs

**Program Logic Model**



### 3. Process Flow Chart



**Targeting Analytics:** Using CalEnviroscreen, the Implementer will identify the utility customers residing in disadvantaged communities (DACs) for targeted outreach. Additionally, using Census or similar data tools, customers will be identified who speak languages other than English as the primary language in the household.

**Customer Outreach:** Upon developing marketing materials and resources, the Implementer will conduct outreach campaigns to residential customers through:

- Email campaigns
- Direct mail
- Social media
- Community based organizations
- Events
- Participating Trade Ally referrals

Through these efforts, the Implementer will guide customers to reach out to one of our Energy Advisors for guidance in making energy efficiency upgrades to the home, selecting a participating Trade Ally, or scheduling a free in-home assessment.

**In-home Assessments/DI Measures:** Through marketing and outreach efforts, one of the primary calls to action will be to schedule an in-home assessment at no cost to the customer. The assessment will include identifying characteristics and concerns about the home's existing condition. After completing the assessment, the technician will complete a direct-install of the faucet aerators and low flow showerheads. Finally, the customer will be provided a report to outline recommendations to improving the home's energy efficiency and available rebates to help with reducing the cost of measure(s).

**Energy Advisor Case Management:** Customers who receive an in-home assessment or who reach out to the Energy Advisor hotline directly will receive the support of a dedicated Residential Energy Advisor. The Energy Advisor will assist the customer with understanding recommendations to improving the energy efficiency of the home, and provide next steps that the customer can take to achieving their home efficiency goals. These steps include:

- Identifying any comfort, health, and safety concerns that the customer has about the home.
- Locating the Participating Trade Ally listing
- Identifying at least three Trade Allies for getting estimates for measure(s)
- Supporting the customer in reviewing the estimates and making a final decision
- Recommending financing tools as needed



- Identifying and providing resources on layered incentives or other possible financial support for the measure(s)
- Assisting the customer with rebate application tracking

**Trade Ally Selected:** Once the Participating Trade Allies have submitted their estimates to the customer, and the customer has reviewed the estimates for their intended measure(s), the customer will then contract directly with the Trade Ally for the measure(s). The Trade Ally will be responsible for ensuring that the proper permit(s) are pulled, and that any/all Program documentation is completed with the customer.

**Install Measures:** The Trade Ally will install the measure(s) as agreed to in the customer/Trade Ally contract. The Trade Ally will be responsible for ensuring the completion of the required HERS testing and final inspection.

**Submit Rebate Applications:** After completing the measure(s) installation and necessary final inspections and test-out, the Trade Ally will submit a rebate application to the Rebate Portal. The Rebate Portal is a secure, online electronic submission system that allows the Trade Ally to confirm the eligibility of the customer, submit date for the measures installed, and attach completed documents as required.

**Project QC:** Implementation processing team members will then review the rebate applications within 2 weeks of receipt. The processor will conduct a desktop QC for 100% of submitted projects to ensure that the measures, customer, and installation meet the Program eligibility guidelines. Additionally, a sampling of 5% of submitted projects will have an in-person or virtual QC visit conducted to ensure that the quality of the installation meets Program standards.

**Trade Ally Payment:** Upon successful QC of the application, the Trade Ally or the customer will be paid by check within 2-4 weeks of the application approval. The Trade Ally and customer can agree on having the rebate sent to the Trade Ally, in which case the Trade Ally must discount the contract by the rebate amount. Alternatively, they can agree to have the rebate go directly to the customer if desired.

**Savings Reported:** The implementer will then report savings on measures using the eTRM approved calculations. Eligible measures are shown on the table in Section 4 below.

#### 4. Incentive Tables, Workpapers, Software Tools<sup>8</sup>

The following table describes the measures and incentives available in the Program:

Measure		Incentive Level				Unit Per Measure	URL
		2023 Incentive	2023 Incentive	2023 Incentive	2023 Incentive		
<b>Operations and Maintenance Measures</b>							
Induction Cooktop	Induction cooktop (must replace gas cooktop or gas range)	\$400.00	\$424.00	\$449.44	Each	<a href="https://www.caetrm.com/measure/SWAP013/02/">https://www.caetrm.com/measure/SWAP013/02/</a>	
Heat Pump Dryer	Standard size heat pump clothes dryer, any volt, vented or ventless (must replace gas dryer)	\$400.00	\$424.00	\$449.44	Each	<a href="https://www.caetrm.com/measure/SWAP014/02/">https://www.caetrm.com/measure/SWAP014/02/</a>	

<sup>8</sup> 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.

Faucet Aerator	Faucet, kitchen or lavatory aerator, 1.0 to 1.5 gpm, gas or electric, AOE	\$6.50	\$6.89	\$7.30	Each	<a href="https://www.caetrm.com/measure/SWWH001/03/">https://www.caetrm.com/measure/SWWH001/03/</a>
Low-Flow Showerheads	Efficient showerhead, gas or electric, 1.5 gpm	\$7.00	\$7.42	\$7.87	Each	<a href="https://www.caetrm.com/measure/SWWH002/03/">https://www.caetrm.com/measure/SWWH002/03/</a>
Duct Sealing	Duct seal and test, residential, medium to low (24% to 12%) for SFm/MFm < 2006	\$270.00	\$286.20	\$303.37	Cap-Tons	<a href="https://www.caetrm.com/measure/SWSV001/04/">https://www.caetrm.com/measure/SWSV001/04/</a> <a href="https://www.caetrm.com/measure/SWSV001/05/">https://www.caetrm.com/measure/SWSV001/05/</a>
Duct Replacement	Crossover duct replacement (total leakage reduction 35% to 15%), Return duct retrofit (total leakage reduction 50% to 15%)	\$1,080.00	\$1,144.80	\$1,213.49	Cap-Tons	<a href="https://www.caetrm.com/measure/SWSV013/02/">https://www.caetrm.com/measure/SWSV013/02/</a> <a href="https://www.caetrm.com/measure/SWSV013/03/">https://www.caetrm.com/measure/SWSV013/03/</a>
<b>Building Shell Measures</b>						
Attic Insulation	Ceiling - add R-19 batts on top of vintage-specific existing insulation	\$1.01	\$1.07	\$1.14	Area-ft2	<a href="https://www.caetrm.com/measure/SWBE006/01/">https://www.caetrm.com/measure/SWBE006/01/</a> <a href="https://www.caetrm.com/measure/SWBE006/02/">https://www.caetrm.com/measure/SWBE006/02/</a>
Wall Insulation	Residential wall blow-in R-0 to R-13 insulation	\$1.00	\$1.06	\$1.12	Area-ft2	<a href="https://www.caetrm.com/measure/SWBE007/01/">https://www.caetrm.com/measure/SWBE007/01/</a> <a href="https://www.caetrm.com/measure/SWBE007/02/">https://www.caetrm.com/measure/SWBE007/02/</a>
<b>Water Heating Measures</b>						
Heat Pump Water Heater	HP water heater: 45 to 55 gal (UEF = 3.30) replacing electric storage water heater: 40 gal (UEF = 0.92)	\$1,161.00	\$1,230.66	\$1,161.00	Each	<a href="https://www.caetrm.com/measure/SWWH014/04/">https://www.caetrm.com/measure/SWWH014/04/</a>
Heat Pump Water Heater - Fuel Sub	Heat pump water heater, > 75 gal, UEF = 3.30 replacing storage natural gas water heater, 50 gal, UEF = 0.63, 60 gal, UEF = 0.61, or 75 gal, UEF = 0.59 Heat pump water heater, > 55 to <= 75 gal, UEF = 3.30 replacing storage natural gas water heater, 40 gal, UEF = 0.64, UEF = 0.63, or 60 gal, UEF = 0.61	\$1,350.00	\$1,350.00	\$1,350.00	Each	<a href="https://www.caetrm.com/measure/SWWH025/06/">https://www.caetrm.com/measure/SWWH025/06/</a>

Heating and Cooling Measures						
Split Air Conditioners	Residential SEER2-rated split/pkg AC, 18 - 45 kBtu/hr, SEER2 >= 16.0 (EER2 >= 12.6), NR	\$750.00	\$795.00	\$842.70	Cap-Tons	<a href="https://www.caetrm.com/measure/SWHC049/03/">https://www.caetrm.com/measure/SWHC049/03/</a>
Split Heat Pumps	Residential SEER2-rated split/pkg HP, SEER2 >= 16.0 (EER2 >= 12.6), HSPF2 >= 8.0, NR Residential legacy-rated split/pkg HP, SEER >= 17 (EER >= 13.3), HSPF >= 9.4, NR	\$850.00	\$901.00	\$955.06	Cap-Tons	<a href="https://www.caetrm.com/measure/SWHC049/03/">https://www.caetrm.com/measure/SWHC049/03/</a>
Heat Pump - Fuel Sub	Res DXHP SEER >= 17 and HSPF >= 9.4	\$1,350.00	\$1,431.00	\$1,516.86	Each	<a href="https://www.caetrm.com/measure/SWHC045/01/">https://www.caetrm.com/measure/SWHC045/01/</a>
Ductless Minisplit Heat Pump - Fuel Sub	Ductless mini-split heat pump (SEER 17, HSPF 9.4) replacing window AC and wall furnace, NR	\$1,032.00	\$1,093.92	\$1,159.56	Cap-Tons	<a href="https://www.caetrm.com/measure/SWHC044/02/">https://www.caetrm.com/measure/SWHC044/02/</a>

## 5. Quantitative Program Targets

The following tables provide a high-level overview of quantitative Program targets:  
Non-Resource Deliverables:

- (a) The Deliverables and Deliverable Payment Percentage for each Project is as set forth in the table below:

Deliverables for each Non-Resource Project	Project Plan	Final Report
Deliverable Payment Percentage for each Targeted Customer Marketing and Community Engagement Project	30%	65%
Deliverable Payment Percentage for each Customer Energy Advisement Project	30%	65%
Deliverable Payment Percentage for each Customer Energy Case Management Project	30%	65%

- (b) Deliverable Final Deadline. For all Projects, the Deliverable Final Deadline is ninety (90) days after the Deliverable Deadline for the Final Report.
- (c) Performance Metrics. The Performance Metrics and Performance Metrics Payment Percentage is as set forth set forth in the table below:

Performance Metrics for each Project	Performance Metrics Payment Percentage for each Project
Deliverable Timeliness	5%

- (d) The total number of Expected Projects, by Project Type and Delivery Period Year is as set forth in the table below:

<b>Non-Resource</b>			
<b>Delivery Period Year</b>	<b>Targeted Customer Marketing and Community Engagement Projects</b>	<b>Customer Energy Advisements</b>	<b>Customer Energy Case Management</b>
<b>2023</b>	4	913	91
<b>2024</b>	4	3654	457
<b>2025</b>	3	3655	579
<b>Total</b>	11	7222	1127

Resource Deliverables:

<b>Resource</b>				
<b>Delivery Period Year</b>	<b>Gross Demand Reduction (kW)</b>	<b>Net Demand Reduction (kW)</b>	<b>Gross Energy Savings (kWh)</b>	<b>Net Energy Savings (kWh)</b>
<b>2023</b>	45	18	181,886	160,857
<b>2024</b>	152	51	953,692	776,912
<b>2025</b>	190	64	1,196,386	974,526
<b>Totals</b>	387	133	2,331,964	1,912,295

(a) Expected Gas Savings, Expected Energy Savings, Expected Demand Savings, Savings Price, and Expected TRC Ratio. The Expected Gas Savings, Expected Energy Savings, Expected Demand Savings, Savings Price, and Expected TRC Ratio for each Delivery Period Month of each Delivery Period Year are as set forth below. If the Expected Initial Delivery Date is adjusted in accordance with the Article 8, then each month and each Delivery Period Quarter in the table below shall be adjusted forward to align with the actual Initial Delivery Date, and months at the end of the table that extend beyond the Delivery Period shall be deemed deleted. In no event shall the foregoing adjustment result in an increase in Savings Payments from Buyer to Seller than what would have originally occurred absent such adjustment.

<b><u>Delivery Period Month of each Delivery Period Year</u></b>	<b><u>net therms</u></b>	<b><u>kW</u></b>	<b><u>kWh</u></b>	<b><u>\$/kWh</u></b>	<b><u>Quarter</u></b>	<b><u>TRC Ratio</u></b>	<b><u>Year</u></b>	<b><u>TRC Ratio</u></b>
Jan,2023	-	-	-	\$ -	Q1, 2023	-	2023	0.17
Feb, 2023	-	-	-	\$ -				
Mar, 2023	-	-	-	\$ -				
Apr, 2023	-	-	-	\$ -	Q2, 2023	-		

May, 2023	-	-	-	\$ -				
Jun,2023	-	-	-	\$ -				
Jul,2023	-	-	-	\$ -	Q3, 2023	0.12		
Aug,2023	-	-	-	\$ -				
Sep, 2023	212	2	16,086	\$3.994				
Oct, 2023	425	4	32,171	\$3.994	Q4, 2023	0.22		
Nov, 2023	637	5	48,257	\$3.994				
Dec, 2023	850	7	64,343	\$3.994				
Jan, 2024	219	1	15,538	\$4.295				
Feb, 2024	546	3	38,846	\$4.295	Q1, 2024	0.15		
Mar, 2024	656	3	46,615	\$4.295				
Apr, 2024	656	3	46,615	\$4.295				
May, 2024	765	4	54,384	\$4.295	Q2, 2024	0.17		
Jun,2024	765	4	54,384	\$4.295				
Jul, 2024	983	5	69,922	\$4.295	Q3, 2024	0.24	2024	0.21
Aug,2024	983	5	69,922	\$4.295				
Sep,2024	1,093	5	77,691	\$4.295				
Oct,2024	1,093	5	77,691	\$4.295				
Nov,2024	1,530	7	108,768	\$4.295	Q4, 2024	0.27		
Dec,2024	1,639	8	116,537	\$4.295				
Jan,2025	273	1	19,491	\$4.518	Q1, 2025	0.16	2025	0.23

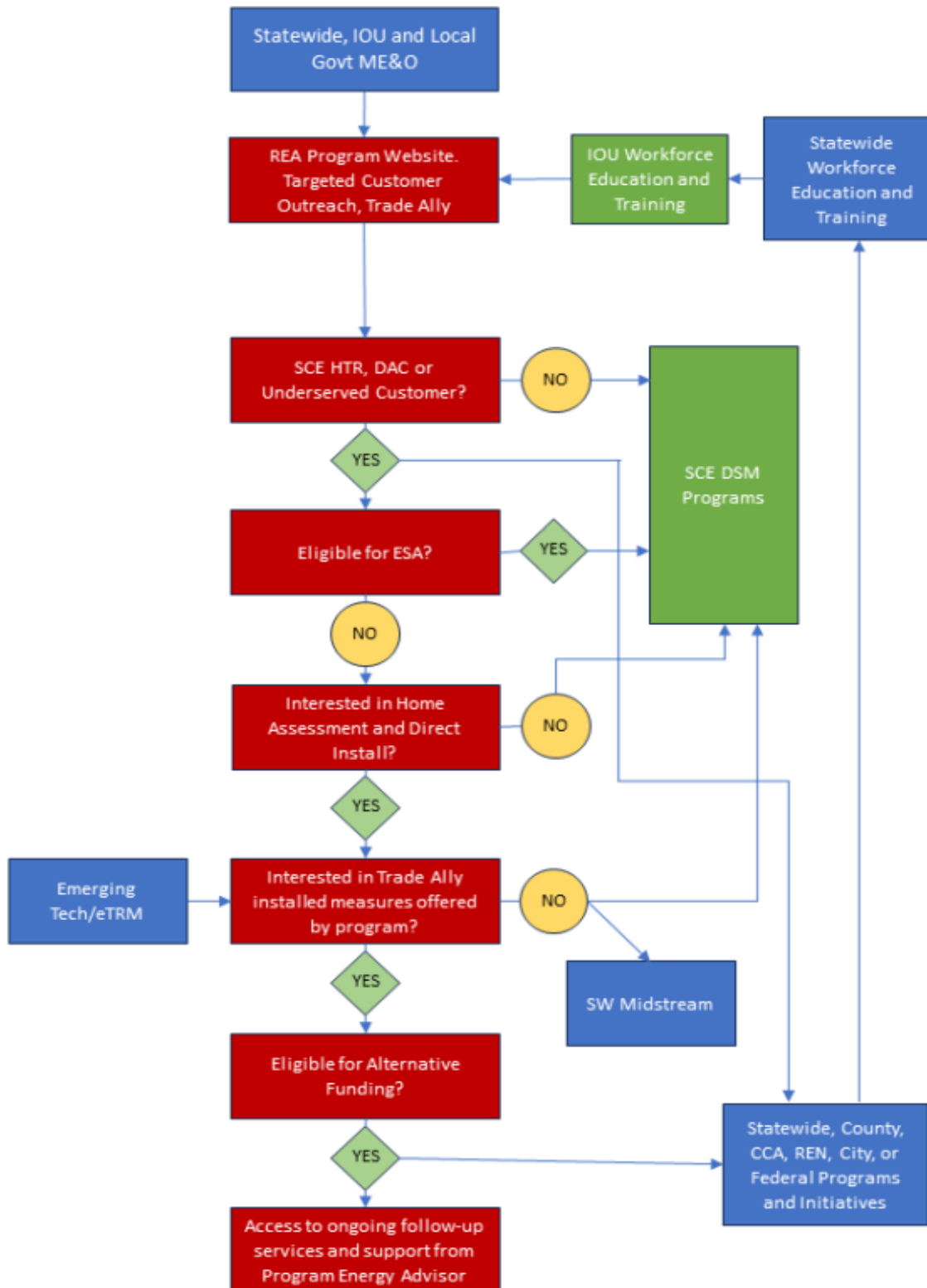
Feb, 2025	683	3	48,726	\$4.518		
Mar, 2025	820	4	58,472	\$4.518		
Apr, 2025	820	4	58,472	\$4.518	Q2, 2025	0.19
May, 2025	956	4	68,217	\$4.518		
Jun, 2025	956	4	68,217	\$4.518		
Jul, 2025	1,229	6	87,707	\$4.518	Q3, 2025	0.26
Aug, 2025	1,229	6	87,707	\$4.518		
Sep, 2025	1,366	6	97,453	\$4.518		
Oct, 2025	1,366	6	97,453	\$4.518	Q4, 2025	0.31
Nov, 2025	1,912	9	136,434	\$4.518		
Dec, 2025	2,049	10	146,179	\$4.518		

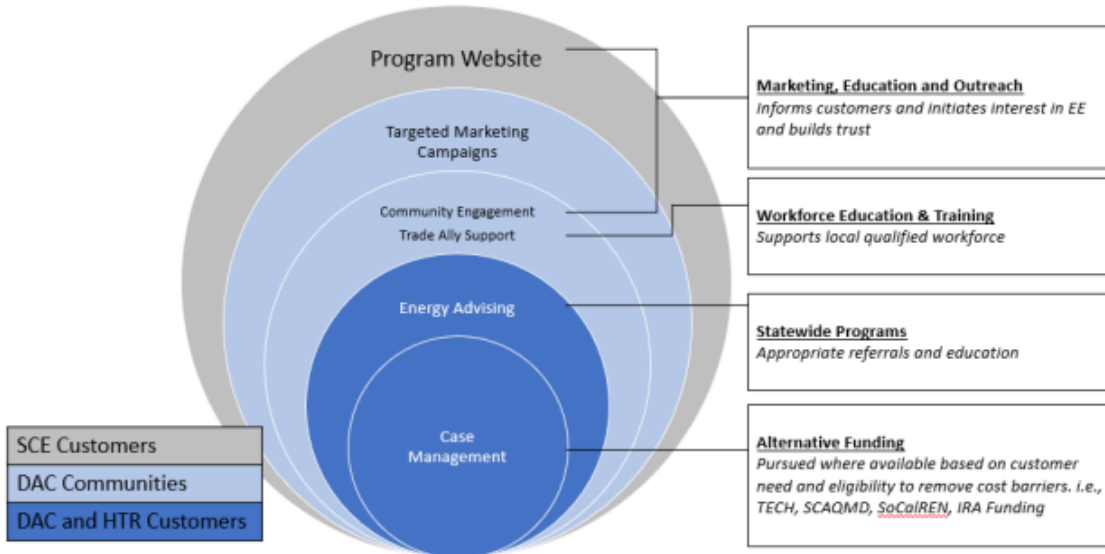
(b) Excess Deliveries.

- a. For any Delivery Period Month, Implementer may deliver Ex Ante Energy Savings in excess the Expected Energy Savings; provided, for any Delivery Period Year, if Implementer delivers more than one hundred twenty percent (120%) of the aggregate Expected Energy Savings for such Delivery Period Year, which is the sum of all monthly Expected Energy Savings identified in Section 1.03 for such Delivery Period Year (in kWh), then such excess amounts shall be excluded from the Ex Ante Energy Savings and SCE shall be under no obligation to pay for such excess amounts

## 6. Diagram of Program

The following diagram depicts the process in which the Program will coordinate with SCE and other programs and stakeholders offering services within the region as it relates to the customer journey.





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

The Implementer will incorporate data collection, internal performance analysis, and tracking of key performance metrics to mark progress toward Program goals and support continuous improvement over time.

### Data Collection Strategies

The data collection strategies will aim to collect sufficient data to measure the effectiveness of the Program activities and to support reporting on Program metrics. The data to be collected for each of the core Program activities and collection approaches are summarized in the table below.

Activity	Data	Sources/Methods
Marketing & Outreach	<ul style="list-style-type: none"> <li>- Customers acquired, by channel/partner</li> <li>- Spend, by channel/partner</li> </ul>	<ul style="list-style-type: none"> <li>- Customer self-reporting and web analytics</li> <li>- Budget tracking</li> </ul>
Home Visits & Direct Installs	<ul style="list-style-type: none"> <li>- Measures installed</li> <li>- Household characteristics</li> </ul>	<ul style="list-style-type: none"> <li>- Inventory tracking and field inspection</li> <li>- Field assessment reports</li> </ul>
Customers Served	<ul style="list-style-type: none"> <li>- Total equity-targeted households served by Program</li> <li>- Percent of participation relative to eligible population</li> </ul>	<ul style="list-style-type: none"> <li>- Field assessment reports</li> <li>- Incentive applications</li> </ul>
Community Engagement	<ul style="list-style-type: none"> <li>- Community engagement activities/projects completed</li> </ul>	<ul style="list-style-type: none"> <li>- Project proposals</li> </ul>
Contractor Engagement & Development	<ul style="list-style-type: none"> <li>- Trainings completed</li> <li>- Measures installed</li> <li>- QC results</li> </ul>	<ul style="list-style-type: none"> <li>- Contractor enrollment forms</li> <li>- Online training utilization</li> <li>- Incentive applications</li> <li>- Field inspections</li> </ul>



Pay Incentives on Eligible Measures	- Measures installed	- Incentive applications
Bill Savings	- Estimated first-year bill savings in total \$ for equity-targeted program participants	- Field assessment reports - Incentive applications

### Internal Performance Analysis

The Implementer will conduct performance analysis with varying degrees of depth, on a regular cadence. The table below summarizes the internal performance analysis to be conducted on a monthly, quarterly and annual basis.

Frequency	Analysis/Report
Monthly	- Customer acquisition and participation - Budget spend, measure installation and energy savings - Outreach project plans
Quarterly	- Marketing effectiveness by channel/partner - Contractor installation quality, training and development
Annually	- Characteristics of the participating customer population - Targeted customers reached - Program and measure cost-effectiveness

### Performance Metrics

In summary, the metrics to be tracked for the Program are shown in tables:

Metrics	
Resource and Non-Resource	
Capturing energy Savings	First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) for Single Family and Multifamily Customers separately
Disadvantaged Communities and Hard to Reach Markets	First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) in disadvantaged communities and in hard-to-reach markets
Cost per Unit Saved	Levelized cost of energy efficiency per kWh, therm and kW (using both TRC and PAC)
Greenhouse Gas Emissions	Greenhouse gasses (MT CO <sub>2</sub> eq) Net kWh savings, reported on an annual basis
Depth of interventions	Average savings per participant Energy Savings per Project Energy Savings per Square Foot
Penetration of energy efficiency programs in the eligible market	Percent of participation relative to eligible population: Participation in disadvantaged communities Participation by customers defined as “hard-to-reach” and underserved
Energy intensity	Average energy use intensity of single-family homes (average usage per household – not adjusted) Average energy use intensity of multifamily buildings (average usage per square foot – not adjusted and Average energy use intensity of multifamily units, including in-unit accounts)

Customers/Households/Buildings Served	<p>Total equity-targeted households served by Equity Program</p> <p>Single Family – equity market support (ex: education, information, training, technical support, etc.)</p> <p>Single family – equity resource acquisition (ex: energy saving action, etc. )</p> <p>Multifamily Households– equity resource acquisition (ex: energy saving action, etc.)</p> <p>Multifamily Buildings– equity resource acquisition (ex: energy saving action, etc.)</p> <p>Total equity-targeted buildings served by Equity Program</p> <p>Multifamily Households– equity market support (ex: education, information, training, technical support, etc.)</p> <p>Multifamily Buildings– equity market support (ex: education, information, training, technical support, etc.)</p> <p>Percent of benchmarked multi-family properties relative to the eligible population</p> <p>Percent of benchmarking by properties defined as “hard-to-reach”</p>
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<b>Metrics</b>	
Non-Resource	
Contractors/Workers Served	<p>Total # of contractors/workers served by Equity Segment Programs</p> <p>Total # of contractors and/or workers that are disadvantaged workers or otherwise underrepresented, who are directly involved in implementing Equity Segment programs</p> <p>Total # of companies/non-profits who are Diverse Business Enterprises (DBE) or otherwise underrepresented (e.g., BIPOC-owned) with contracts to implement Equity Segment programs</p>
Bill Savings	Estimated first-year bill savings in total \$ for equity-targeted program participants
Community Engagement	<p>Community engagement activities during program design and to identify community needs and solutions</p> <p>Community engagement activities during program implementation</p> <p>Community engagement activities during program assessment</p>
Energy, Climate, and Non Energy Benefits	<p>Health – “non-energy benefits” in “counts of participants receiving this benefit” until we can monetize.</p> <p>Reporting at least one of: Indoor air quality, Outdoor air quality (e.g., reduction in emissions from gas combustion appliances that vent to nearby outdoor air), Reduction in interior contaminants/biologics</p> <p>Comfort - “non-energy benefits” in “counts of participants receiving this benefit” until we can monetize.</p> <p>Reporting at least one of: reduced drafts, quieter interior, managed interior temp</p> <p>Safety – “non-energy benefits” in “counts of participants receiving this benefit” until we can monetize.</p> <p>Reporting at least one of: improved safety of appliances</p>

## APPENDIX. List of Acronyms, Abbreviations, Definitions

Term	Definition
<b>C&amp;S</b>	Codes & Standards
<b>CALCTP</b>	California Advanced Lighting Controls Training Program
<b>CBOs</b>	Community Based Organizations
<b>CEDARS</b>	California Energy Data and Reporting System
<b>CPUC</b>	California Public Utilities Commission
<b>DAC</b>	Disadvantaged Communities
<b>DEER</b>	Database for Energy Efficient Resources
<b>DSM</b>	Demand-Side Management
<b>EE</b>	Energy Efficiency
<b>EE PRG</b>	Energy Efficiency Procurement Review Group
<b>EM&amp;V</b>	Evaluation, Measurement & Verification
<b>ESJ</b>	Environmental and Social Justice
<b>ET</b>	Emerging Technologies
<b>EUL</b>	Effective Useful Life
<b>FSU</b>	Fractional Savings Uncertainty
<b>HTR</b>	Hard-to-Reach
<b>HVAC</b>	Heating, Ventilation, & Air Conditioning
<b>IOU</b>	Investor-Owned Utility
<b>IP</b>	Implementation Plan
<b>kW, kWh</b>	kilowatts, kilowatt-hours
<b>M&amp;V</b>	Measurement & Verification (or, sometimes, Validation)
<b>NMEC</b>	Normalized Metered Energy Consumption
<b>Non-resource</b>	Contract elements focused on payments for deliverables, marketing and outreach and customer education efforts
<b>PA</b>	Program Administrator
<b>PAC</b>	Program Administrator Cost
<b>Participating Contractor</b>	Local, licensed trade contractors who complete a participation agreement, complete Program onboarding training, and agree to abide by the QA/QC and terms and conditions of the Program
<b>Resource</b>	Contract elements focused on payments for savings
<b>RFA</b>	Request for Abstracts
<b>RFP</b>	Request for Proposals
<b>TRC</b>	Total Resource Cost
<b>WE&amp;T</b>	Workforce Education & Training