

Southern California Edison



DRAFT

Implementation Plan **Contractor Demand Building Program**

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1. Program Budget and Savings Information

1.1 Program and/or Sub-Program Name

Contractor Demand Building Program

1.2 Program and/or Sub-Program ID Number

SCE_MarketSupport_002

1.3 Program and/or Sub-Program Budget Table

Year	Admin	Marketing	Direct Implementation	Incentives	Total Budget
2024	\$257,152	\$127,410	\$680,594	\$1,200,000	\$2,264,886
2025	\$264,910	\$130,980	\$701,372	\$1,236,000	\$2,333,262
2026	\$272,808	\$134,880	\$722,003	\$1,273,080	\$2,402,771
2027	\$281,048	\$138,960	\$744,133	\$1,311,272	\$2,475,413
Total	\$1,075,918	\$531,960	\$2,848,102	\$5,020,352	\$9,476,332

1.4 Program and/or Sub-Program Gross Impacts Table

Not applicable to this program

1.5 Program and/or Sub-Program Cost-Effectiveness (TRC)

Not applicable to this program

1.6 Program and/or Sub-Program Cost-Effectiveness (PAC)

Not applicable to this program

1.7 Type of Program and/or Sub-Program Implementer

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

1.8 Market Sector

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

1.9 Program and/or Sub-Program Type

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

1.10 Market Channels and Intervention Strategies:

Market Channels	
Upstream	<input type="checkbox"/>
Midstream	<input checked="" type="checkbox"/>
Downstream	<input type="checkbox"/>
Intervention Strategies	
Direct Install	<input type="checkbox"/>
Incentive	<input checked="" type="checkbox"/>
Finance	<input type="checkbox"/>
Audit	<input type="checkbox"/>
Technical Assistance	<input type="checkbox"/>
Other: Training	<input checked="" type="checkbox"/>

1.11 Campaign Goals and Timeline

Not applicable to this program

2. Implementation Plan Narrative

2.1 Program Description

The Contractor Demand Building Program (CDBP) aims to address knowledge gaps related to Heat Pump Water Heaters (HPWH) within California's Skilled Trade Workforce and increase HPWH installations across SCE's service territory. The program participant pool includes both contractors and installers. CDBP is intended to support Disadvantaged Workers (DW) by offering on-location training, reducing barriers to the technology's adoption. Simultaneously, the program aligns with California's Statewide Decarbonization Goals by providing participants with a HPWH upon training program completion, helping to encourage the use of knowledge gained immediately following their instructor led training. It is intended that program participants will install the received HPWH in the months following program completion helping to reduce carbon emissions throughout the service territory.

By offering comprehensive HPWH training, CDBP will boost demand for Energy Efficiency (EE) and decarbonization technologies among contractors and tradespeople. This program will equip participants with the knowledge, skills, and abilities (KSA) needed to successfully promote, install, and service this technology. As a prerequisite for the CDBP, participants must complete a separate training course introducing them to Building Electrification fundamentals. This prerequisite training, offered through SCE's Workforce Education & Training – Integrated Energy Education and Training (WE&T-IEET) program, will acquaint participants with fundamental concepts in fuel substitution and building electrification. It will also provide participants with a foundational understanding of the advantages associated with all-electric buildings and a holistic perspective of statewide decarbonization efforts. This knowledge will enable participants to recognize their role within this electrification process and how they can contribute towards California's climate goals. Additionally, this introductory course will set the stage for follow on learning that will take place within CDBP training.

2.2 Program Delivery and Customer Service

The training sessions offered by this program will be conducted in-person and on-location across SCE's service territory and as needed, this program will also utilize SCE's Energy Education Centers (EEC) in Irwindale and Tulare as additional program delivery venues. CDBP's training course will ensure that participants who successfully complete the curriculum will have acquired the KSAs required to safely install and service HPWH equipment. The intent of offering localized training is to increase accessibility for and participation from DWs throughout the SCE territory providing them the KSAs needed to support surrounding communities. Upon completion of the training, participants will receive a voucher to claim a no cost HPWH unit, enabling them to apply and assess their newly acquired knowledge through installation and equipment testing, it will be communicated to program participants that HPWH Unit installation is expected at a future work location.

A. Training and Curriculum

The training portion of the program will consist of a single-day session, supported by SCE Staff, and led by vendors with expertise in residential HPWH quality installation and maintenance (QI/QM). This comprehensive course will provide contractors with the knowledge and skills needed to be a driving force in CA's decarbonization efforts. The training session will cover topics including an introduction to HPWH technology, applications, QI/QM best practices, and methods for calculating the short and long-term financial impacts of adopting HPWH technologies. The training portion of the program will also include knowledge checks to be completed before, during, and after the program's completion. This will help gauge knowledge gained and ensure that participants are obtaining and retaining the information needed.

B. Supplier Collaboration and Voucher Distribution

SCE will collaborate with suppliers to provide participants with vouchers that can be redeemed for a no-cost HPWH at training completion. Through these efforts, SCE will make sure equipment is available for program participants streamlining the process for equipment procurement and ensuring the reduction of any potential supply chain limitations or bottlenecks. Readily available HPWH equipment will help to ensure that participants have access to this energy-saving technology, and SCE will also establish valuable relationships with equipment distributors and manufacturers helping to support the establishment of future equipment supplies pipelines.

2.3 Program Design and Best Practices

A. Program Design

Participants will engage in a minimum 90-minute prerequisite course, covering the basics of building electrification. This course will provide participants with the high-level knowledge needed to understand building electric technologies and decarbonization efforts taking place statewide. Once participants successfully complete this training, they become eligible to enroll in an in-person CDBP training course. During the in-person CDBP session, instructors will help participants dive deeper into the subject matter, providing access to hands-on experience, resulting in a more comprehensive understanding of HPWH technology. To facilitate a complete evaluation of program performance and its impact, scheduled assessments will be conducted to gain feedback from participants, highlighting areas that may need improvement. This information will enable SCE to make timely adjustments and enhancements, ensuring that the program remains effective and relevant.

Single-Day Training:

Contractors will participate in an intensive single-day training program lead by expert instructors. The training will cover the following key areas:

- HPWH technology and components
- Proper installation techniques and common challenges in retrofit installations
- Technology talking points and savings calculations
- The advantages of HPWH programming and maximizing utility rates to reduce costs
- QI/QM and Equipment Troubleshooting Techniques
- How to leverage rebates and incentives that benefit their customers

Incentive and Voucher Redemption:

- Completion of the training will entitle participants to obtain a voucher redeemable for a HPWH
- The voucher can be redeemed with participating HPWH manufacturers, distributors, or suppliers for a no-cost HPWH unit

SCE will conduct follow-up surveys with participants approximately 90 days after the training to gather participant feedback, obtain information about their equipment installation, and identify whether the technology was employed in a retrofit or new construction project.

B. Best Practices

The program will uphold best practices in curriculum development and delivery, fostering an interactive learning environment through peer-to-peer engagements and hands-on learning opportunities. As an equipment distribution best practice, participants who successfully complete the training will receive vouchers that can then be conveniently redeemed at partner suppliers' locations. At redemption, participants will obtain the necessary HPWH equipment enabling them to arrange for appropriate transportation needed to safely transport the equipment.

2.4 Innovation

Adoption of electric technologies requires innovative solutions that help to reduce barriers to training, build the knowledge base of the workforce, address supply chain concerns, and end user financial constraints. CDBP will begin by leveraging WE&T-IEET curriculum related to building electrification fundamentals. Additionally, the CDBP will help to address barriers to training by increasing accessibility by providing on-site offerings at locations across SCE’s service territory, reducing travel barriers and increasing reach of the program. CDBP will utilize a comprehensive educational curriculum to tackle installers’ distinct challenges while offering practical hands-on experience.

A goal of the CDBP training program is to help equip participants with persuasive talking points and provide them with informative handouts that they can share with the customers they serve, ensuring clear communication of benefits associated with HPWH Technology. SCE’s aim is to reduce barriers and extend workforce education to ensure that participants are well-equipped with the KSA’s required to contribute to California’s Greenhouse Gas (GHG) reduction goals and support SCE’s Pathway 2045 targets.

2.5 Metrics

Program performance will involve monitoring three key metrics: the total count of trained installers, the quantity of HPWH vouchers distributed, and the level of participation from DW’s. For informational purposes, SCE will record the types of installations, differentiating between those in new construction or retrofit projects. The information gathered will help to inform program curriculum, ensuring that the needs of participants are being met should gaps be identified. Residential zip codes from participants will be collected during the registration process and those residing in zip codes that are within the top 25 percent unemployment indicator, as identified in the most recently published CalEnviroScreen Tool will be identified as disadvantaged workers for purposes of this program.¹

PROJECTED METRICS			
Program Year	Trained Installers	Number of Incentive Coupons Distributed	Percent of Participants meeting the EE Definition of a Disadvantaged Worker
2024	650	650	40%
2025	1,100	1,100	45%
2026	1,450	1,450	50%
2027	1,820	1,820	55%
Total	5,020	5,020	

¹ D.18-10-008, A.17-01-013 et al. ALJ/JF2/avs, Section 4.5.1, pg 54

2.6 For Programs Claiming To-Code Savings

Not applicable for this program

2.7 Pilots

No pilot programs are planned for this program

2.8 Workforce Standards²

Not applicable for this program

2.9 Disadvantaged Worker Plan³

CDBP is dedicated to supporting DW's by addressing known barriers to education and training. A significant identified barrier is limited access to transportation and participant proximity to training centers.⁴ To help mitigate this challenge, CDBP has adopted a strategy of providing on-location training, within disadvantaged communities ensuring that program participants can conveniently access the training.

CDBP will conduct outreach to and engagement with Community-Based Organizations (CBOs) who focus on serving disadvantaged communities and workers. These partnerships are instrumental in reaching DWs and facilitating low-barrier training opportunities. SCE's approach will also include targeted marketing efforts aimed at distributing training information and registration details to potential participants located within disadvantaged worker zip codes.

Furthermore, recognizing the importance of technical upskill for incumbent workers in a comprehensive workforce strategy, CDBP's training is designed to enhance participants knowledge of and ability to complete work supporting the installation and maintenance of HPWH technologies.⁵ By providing DW participants with these additional insights into how larger climate issues impact their communities and lives, they will be better equipped to make strategic decisions for their businesses, have intentional conversations with their customers, and ultimately have a meaningful impact within the communities they serve.⁶

2.10 Additional Information

Not applicable

3. Supporting Documents

3.1 Program Manuals and Program Rules

To be eligible to participate in the program the following requirements must be met:

- Participants are required to first register and complete the prerequisite on-demand portion of the program before being eligible to register for and attend the in-person sessions.
- Participants must provide evidence of a valid state issued Identification Card
- Participants must attend a minimum of 90% of the training session to be eligible to receive a voucher
- Vouchers for HPWHs will be limited to one per participant for program life, have no cash value,

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

³ D.18-10-008, Attachment B, Section C, page B-9

⁴ 2019, Why Aren't More People Working in LMI Areas?, Kelly D. Edminston, Federal Reserve Bank of Kansas City

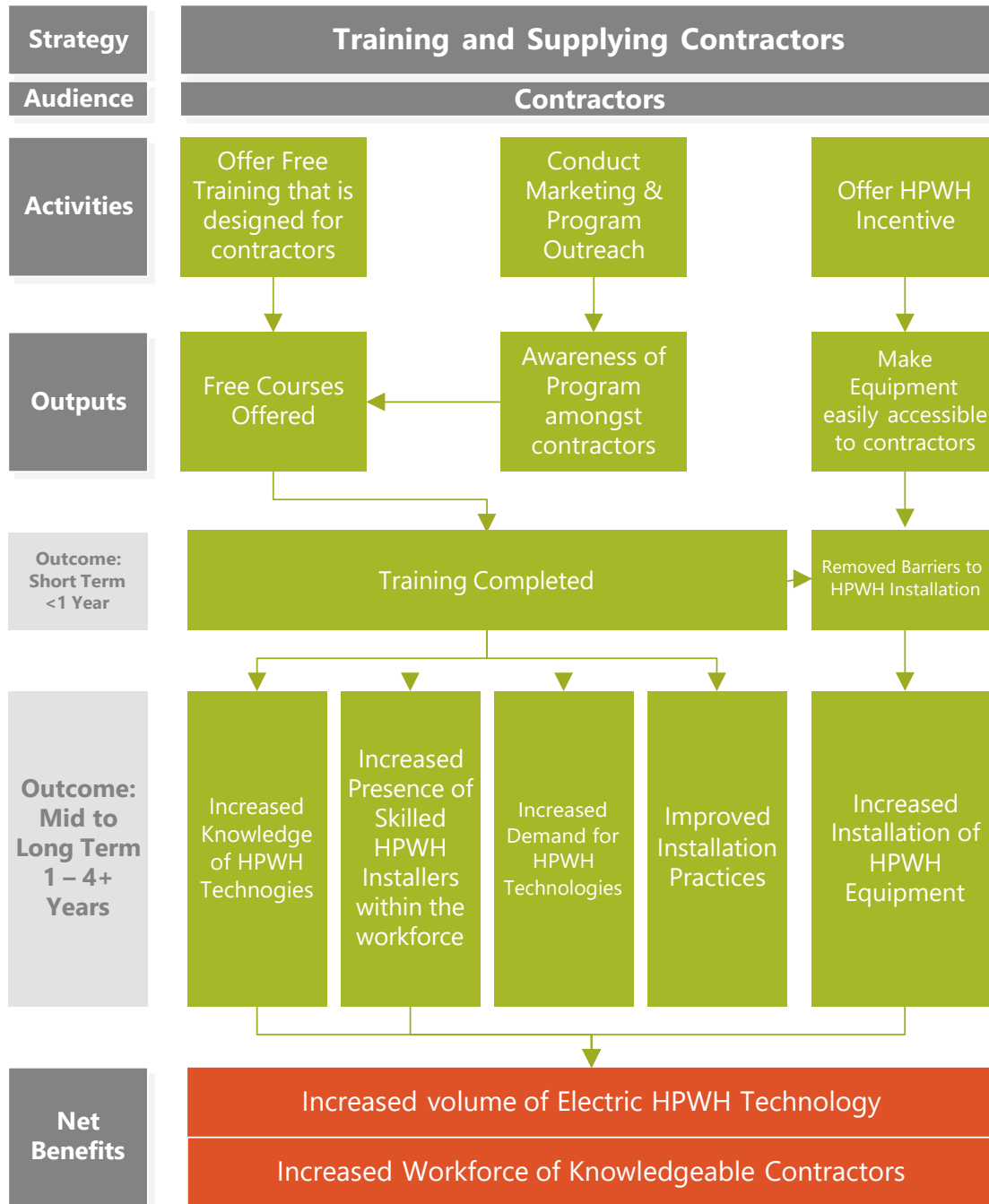
⁵ 2020, Putting CA on the High Road A Jobs and Climate Action Plan for 2030, Carol Zabin, Berkeley

⁶ 2021, The High Road to Economic Prosperity, Gonzalez-Vasquez, Lopez, UCLA

and will expire one year from issuance

- A participant survey must be completed, at course completion, to obtain a voucher

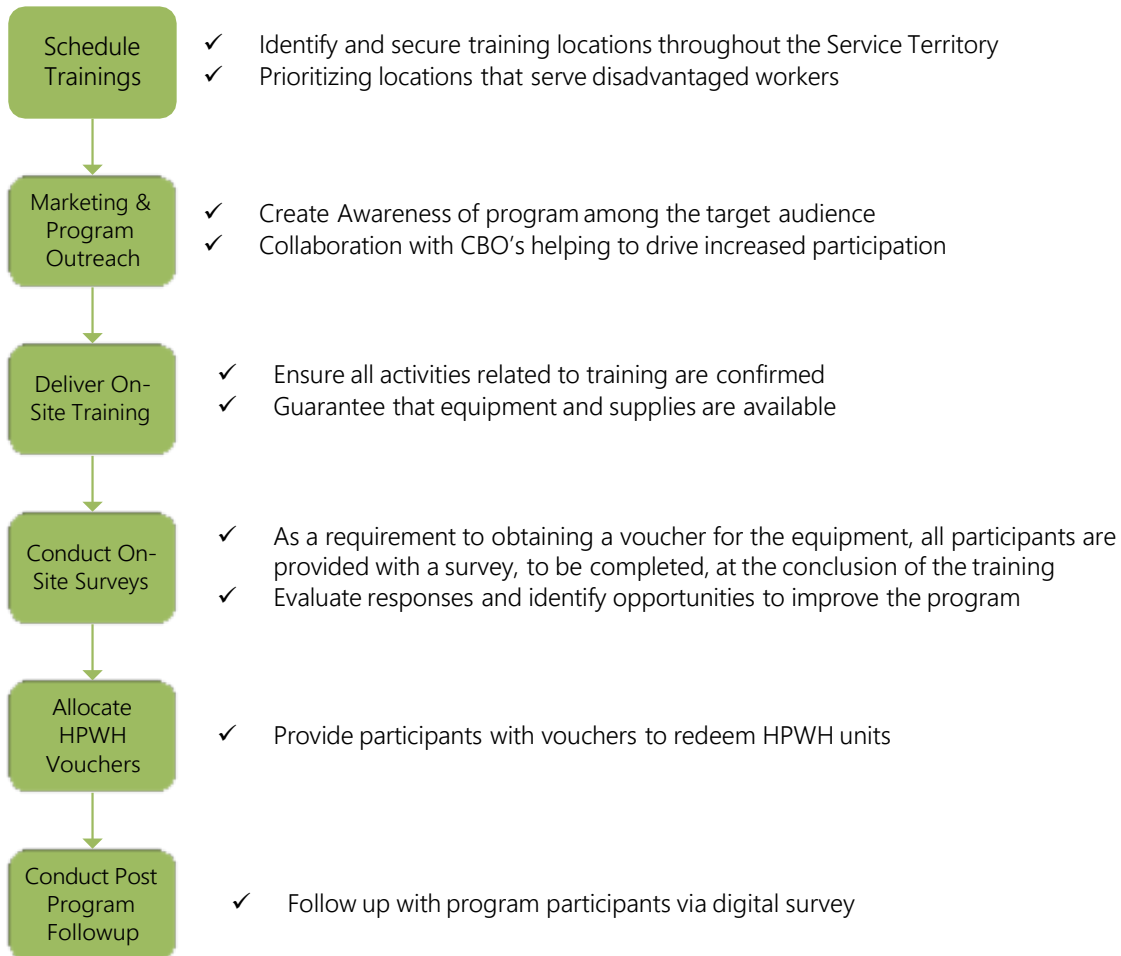
3.2 Program Theory⁷ and Program Logic Model⁸



⁷ 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 to accomplish the goals and clearly describe how the program activities are expected to overcome those barriers. *California Evaluation Framework*, June 2004.

⁸ 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

3.3 Process Flow Chart



3.4 Incentive Tables, Workpapers, Software Tools⁹

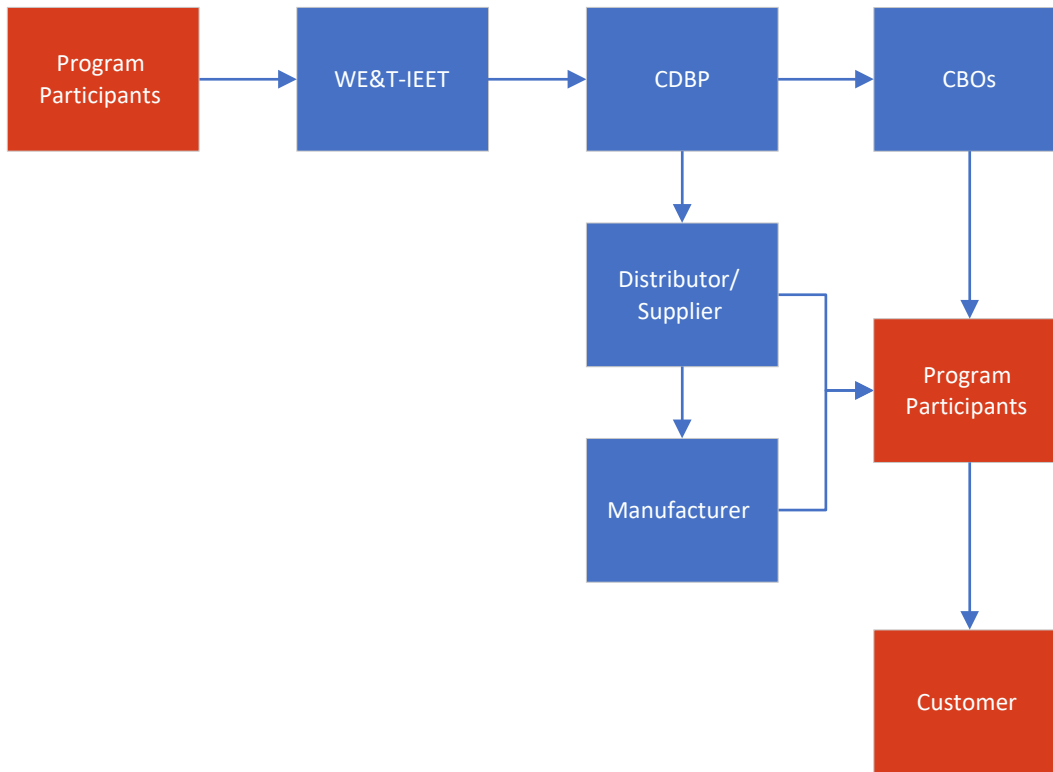
Not applicable for this program

3.5 Quantitative Program Targets

See section 2.5

⁹D.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.

3.6 Diagram of Program



3.7 Evaluation, Measurement, and Verification (EM&V):

Customer data is collected during class registration and attendance records are systematically compiled at the conclusion of each class. The data collected will provide insights for assessing the program's overall performance. Additionally, completed participant surveys play a crucial role in evaluating the training's effectiveness and identifying areas for improvement. To ensure accurate measurement of Disadvantaged Worker (DW) participation, SCE will employ the most recent data from the CalEnviroScreen tool, focusing on residential zip codes that fall within the top 25 percent unemployment bracket. This data-driven approach enhances our ability to accurately evaluate and verify the program's impact.

3.8 Normalized Metered Energy Consumption (NMEC):

Not applicable for this program

4. Appendix – list of acronyms and abbreviations

Term	Definition
CDBP	Contractor Demand Building Program
CBO	Community Based Organization
DW	Disadvantaged Workers
EE	Energy Efficiency
EEC	Energy Education Center
EM&V	Evaluation, Measurement & Verification
DW	Disadvantaged Worker
GHG	Greenhouse Gas
HPWH	Heat Pump Water Heater
IET	Integrated Energy Education & Training
KSA	Knowledge, Skills, and Abilities
PAC	Program Administrator Cost
QI	Quality Installation
QM	Quality Maintenance
TRC	Total Resource Cost
WE&T	Workforce Education & Training