



**California Energy Commission
July 08, 2026 Business Meeting
Backup Materials for Western States Council of the International Association of
Sheet Metal, Air, Rail, and Transportation Workers (Western States Council of
SMART)**

The following backup materials for the above-referenced agenda item are available in this PDF packet as listed below:

1. Proposed Resolution
2. Grant Request Form
3. Scope of Work

CALIFORNIA ENERGY COMMISSION

PROPOSED RESOLUTION: Western States Council of the International Association of Sheet Metal, Air, Rail, and Transportation Workers (Western States Council of SMART)

RESOLUTION NO: 26-0708-XX

RESOLVED, that the State Energy Resources Conservation and Development Commission (CEC) adopts the staff CEQA findings contained in the Agreement or Amendment Request Form (as applicable); and

RESOLVED, that the CEC approves Agreement FED-26-004 with the Western States Council of SMART for a \$1,289,757 grant. The project will upgrade six JATCs and SMART Local Union 104 to procure and install residential HVAC and heat-pump training equipment, develop new technician-to-contractor curriculum, and deliver contractor-readiness education. The project will increase access to skilled contractors in energy-burdened communities by improving workforce training capacity, supporting technicians pursuing contractor licenses, and strengthening local availability of high-quality residential electrification services. The six JATC locations are Modesto, Sacramento (Northern California Valley), Fresno, Nipomo (Tri-Counties), Los Angeles/San Bernardino, and San Diego; and

FURTHER BE IT RESOLVED, that the Executive Director or their designee shall execute the same on behalf of the CEC.

APPROVED AND ADOPTED this 08 day of July 2026, by the following vote:

AYE:

NAY:

ABSENT:

ABSTAIN:

CERTIFICATION

The undersigned Secretariat to the CEC does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly approved and adopted by affirmative vote of the CEC at a meeting held on July 08, 2026.

Kim Todd
Secretariat



GRANT REQUEST FORM (GRF)

A. New Agreement Number

IMPORTANT: New Agreement # to be completed by Contracts, Grants, and Loans Office.

New Agreement Number: FED-26-004

B. Division Information

1. Division Name: Reliability, Renewable Energy, and Decarbonization Incentives (RREDI) Division
2. Agreement Manager: Amber Beck
3. MS: Not applicable
4. Phone Number: 279-226-1038

C. Recipient's Information

1. Recipient's Legal Name: Western States Council of SMART

D. Title of Project

Title of project: CA-TREC Group 3: New and Expanding

E. Term and Amount

1. Start Date: July 8, 2026
2. End Date: July 31, 2028
3. Amount: \$1,289,757

F. Business Meeting Information

1. Are the ARFVTP agreements \$75K and under delegated to Executive Director? Not applicable
2. The Proposed Business Meeting Date: July 8, 2026
3. Consent or Discussion? Discussion
4. Business Meeting Presenter Name: Amber Beck
5. Time Needed for Business Meeting: 5 minutes.
6. The email subscription topic is: Decarbonization Topics, Federal IRA Residential Incentives, Efficiency Topics

Project Description:

Proposed resolution approving agreement FED-26-004 with the Western States Council of the International Association of Sheet Metal, Air, Rail and Transportation Workers (SMART) for a \$1,289,757 grant and adopting staff's recommendation that this action is exempt from the California Environmental Quality Act (CEQA). The funding will go toward upgrading six Joint Apprenticeship and Training Centers (JATCs) and SMART Local 104 to procure and install residential HVAC and heat-pump training equipment, develop new technician-to-contractor curriculum, and deliver contractor-readiness education. This project will increase access to skilled contractors in energy-burdened communities by improving workforce training capacity, supporting technicians pursuing contractor licenses, and strengthening local availability of high-quality residential electrification services. The six JATC locations are:

- Modesto



- Sacramento (Northern California Valley)
- Fresno
- Nipomo (Tri-Counties)
- Los Angeles/San Bernardino
- San Diego

G. California Environmental Quality Act (CEQA) Compliance

1. Is Agreement considered a “Project” under CEQA?

Yes

If yes, skip to question 2.

If no, complete the following (PRC 21065 and 14 CCR 15378) and explain why Agreement is not considered a “Project”:

N/A

2. If Agreement is considered a “Project” under CEQA answer the following questions.

a) Agreement **IS** exempt?

Yes

Statutory Exemption?

No

If yes, list PRC and/or CCR section number(s) and separate each with a comma. If no, enter “None” and go to the next question.

PRC section number: N/A

CCR section number: N/A

Categorical Exemption?

Yes

If yes, list CCR section number(s) and separate each with a comma. If no, enter “None” and go to the next question.

CCR section number: Cal. Code Regs., tit. 14, § 15301; Cal. Code Regs., tit. 14, § 15302;

Cal. Code Regs., tit. 14, Section 15301, provides that the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment or topographical features which involve negligible or no expansion of use beyond that existing at the time of the responsible agency's determination, are categorically exempt from the provisions of CEQA. This project involves the installation of new HVAC and heat pump-related equipment that will be installed across 6 training centers statewide in facilities that are already designed to hold and operate this type of equipment. This equipment will either replace equipment previously in place or will work in tandem with existing equipment. There will be minimal expansion in use beyond that in existence at the time the equipment is installed. Therefore, this project will not have a



significant effect on the environment and is exempt from CEQA under California Code of Regulations, title 14, section 15301.

Cal. Code Regs., tit. 14, Section 15302, provides that projects which consist of the replacement or reconstruction of existing structures and facilities where the new structure will be located on the same site as the structure replaced and will have substantially the same purpose and capacity as the structure replaced, inclusive of the replacement or reconstruction of existing utility systems and/or facilities involving negligible or no expansion of capacity, are categorically exempt from CEQA. This project involves the installation of new HVAC and heat pump-related equipment that will be installed across 6 training centers statewide in facilities that are already designed to hold and operate this type of equipment. This equipment will either replace equipment previously in place or will work in tandem with existing equipment. There will be minimal expansion beyond that in existence at the time the equipment is installed. Therefore, this project will not have a significant impact on the environment and is exempt from CEQA under Cal. Code Regs., tit. 14, Section 15306.

This project does not involve impacts on any particularly sensitive environment; does not involve any cumulative impacts of successive projects of the same type in the same place that might be considered significant; does not involve unusual circumstances that might have a significant effect on the environment; will not result in damage to scenic resources within a highway officially designated as a state scenic highway; the project site is not included on any list compiled pursuant to Government Code section 65962.5; and the project will not cause a substantial adverse change in the significance of a historical resource. Therefore, none of the exceptions to categorical exemptions listed in CEQA Guidelines section 15300.2 apply to this project, and this project will not have a significant effect on the environment.

Common Sense Exemption? 14 CCR 15061 (b) (3)

No

If yes, explain reason why Agreement is exempt under the above section. If no, enter "Not applicable" and go to the next section.

Not Applicable

b) Agreement **IS NOT** exempt.

IMPORTANT: consult with the legal office to determine next steps.

N/A

If yes, answer yes or no to all that applies. If no, list all as "no" and "None" as "yes".

Additional Documents	Applies
Initial Study	N/A
Negative Declaration	N/A
Mitigated Negative Declaration	N/A
Environmental Impact Report	N/A
Statement of Overriding Considerations	N/A



None	N/A
------	-----

H. Is this project considered “Infrastructure”?

No

I. Subcontractors

List all Subcontractors listed in the Budget (s) (major and minor). Insert additional rows if needed. If no subcontractors to report, enter “No subcontractors to report” and “0” to funds.

Delete any unused rows from the table

Subcontractor Legal Company Name	CEC Funds	Match Funds
Modesto Area Sheet Metal Apprenticeship Training Trust	\$65,000	\$168,268
Northern California Valley Sheet Metal Workers' Training Center	\$84,000	\$213,521
Sheet Metal Workers and Tri County AC Sheet Metal Contractors Apprenticeship (Nipomo)	\$73,000	\$278,562
Fresno & Vicinity Sheet Metal Apprenticeship Training Trust Fund	\$52,000	\$200,026
Southern California Sheet Metal Joint Apprenticeship & Training Committee (Los Angeles)	\$200,000	\$551,624
Sheet Metal and Air Conditioning Apprenticeship Journeyman Training Fund (SIC) San Diego	\$42,000	\$179,795
International Association of Sheet Metal, Air, Rail, and Transportation Workers' (SMART) Local 104	\$25,000	\$12,000

J. Vendors and Sellers for Equipment and Materials/Miscellaneous

List all Vendors and Sellers listed in Budget(s) for Equipment and Materials/Miscellaneous. Insert additional rows if needed. If no vendors or sellers to report, enter “No vendors or sellers to report” and “0” to funds. **Delete** any unused rows from the table.

Vendor/Seller Legal Company Name	CEC Funds	Match Funds
No vendors or sellers to report	\$0	\$0

K. Key Partners

List all key partner(s). Insert additional rows if needed. If no key partners to report, enter “No key partners to report.” **Delete** any unused rows from the table.

Key Partner Legal Company Name
Helmets to Hardhats

L. Budget Information



Include all budget information. Insert additional rows if needed. If no budget information to report, enter "N/A" for "Not Applicable" and "0" to Amount. **Delete** any unused rows from the table.

Funding Source	Funding Year of Appropriation	Budget List Number	Amount
Federal Funding	2024	501.105 IRA_TREC_LA 2024	\$9,289,757

TOTAL Amount: \$9,289,757

R&D Program Area: None

Explanation for "Other" selection not applicable

Reimbursement Contract #: not applicable

Federal Agreement #: SE0000756

M. Recipient's Contact Information

1. Recipient's Administrator/Officer

Name: Jeremy Zeedyk

Address: 4040 Lennane Drive

City, State, Zip: Sacramento, CA 95834

Phone: (860) 209-4324

E-Mail: jeremy@wscsmw.org

2. Recipient's Project Manager

Name: Jeremy Zeedyk

Address: 4040 Lennane Drive

City, State, Zip: Sacramento, CA 95834

Phone: (860) 209-4324

E-Mail: jeremy@wscsmw.org

N. Selection Process Used

There are three types of selection process. List the one used for this GRF.

Selection Process	Additional Information
Competitive Solicitation #	GFO-25-901
First Come First Served Solicitation #	Not applicable
Other	Not applicable



O. Attached Items

1. List all items that should be attached to this GRF by entering “Yes” or “No”.

Item Number	Item Name	Attached
1	Exhibit A, Scope of Work/Schedule	Yes
2	Exhibit B, Budget Detail	Yes
3	CEC 105, Questionnaire for Identifying Conflicts	Yes
4	Recipient Resolution	No
5	Awardee CEQA Documentation	Yes

Approved By

Individuals who approve this form must enter their full name and approval date in the MS Word version.

Agreement Manager: Amber P. Beck

Approval Date: 4/30/2026

Office Manager: Savi Ellis-Pachori

Approval Date: 05/20/2026

Deputy Director: Deana Carrillo

Approval Date: 05/29/2026

Scope of Work

Western States Council of SMART

I. TASK ACRONYM/TERM LISTS

A. Task List

Task #	Task Name
1	Agreement Administration
2	Project Tracking, Data Collection, and Reporting
3	Implement Training Program

B. Acronym/Term List

Acronym/Term	Meaning
AWS	American Welding Society
CAM	Commission Agreement Manager
CAO	Commission Agreement Officer
CA-TREC	California-TREC Contractor Training Grants Program
CEC	California Energy Commission
Contractor	The business owner/contractor's license holder of the company
CPR	Critical Project Review
HVAC	Heating, Ventilation, and Air Conditioning
ICB	International Certification Board
ITI	International Training Institute
JATC	Joint Apprentice Training Committee
SMART	International Association of Sheet Metal, Air, Rail and Transportation Workers
SMACNA	Sheet Metal and Air Conditioning Contractors' National Association
SPC	Special Projects Coordinator
TABB	Testing, Adjusting, and Balancing Bureau
Technician	The worker performing the installation and maintenance of HVAC and Heat Pump systems
WSC	Western States Council of SMART

II. PURPOSE OF AGREEMENT, PROBLEM/SOLUTION STATEMENT, AND GOALS AND OBJECTIVES

Scope of Work

Western States Council of SMART

A. Purpose of Agreement

The purpose of this Agreement is to support the expansion of residential high-efficiency contractor training to provide a pathway for qualified technicians to become contractors by 1) upgrading US Department of Labor (DOL) and California Division of Apprenticeship Standards (DAS)-approved joint labor-management apprenticeship training facilities serving underserved California communities and 2) implementing new contractor education pathways that increase the number of qualified residential heat-pump contractors across the state. This will increase California's pool of qualified contractors to meet the growing needs of the residential heat pump market and improve the likelihood of meeting California's ambitious energy efficiency goals. This pool of qualified contractors will be supported in delivering comprehensive System Understanding training to their technicians', ensuring California has the technical workforce needed to meet the state's energy goals and evolving mechanical system requirements for the coming decades.

B. Problem/ Solution Statement

Problem

California's residential energy goals are limited by a shortage of high-road, qualified heat pump and residential HVAC contractors, especially in communities with limited access to services. California's expected energy-savings and energy goals will be severely undermined if installed equipment does not perform as designed. Poor installation and maintenance practices lead to systems that fail to achieve design intent, resulting in inadequate performance, higher energy use, reduced savings, and diminished consumer confidence. Ensuring a qualified workforce is therefore essential not only to meeting installation targets but to realizing the energy and economic benefits the state is counting on. These gaps not only slow implementation of state and federal rebate programs, but they also lead to inadequate installations and maintenance that prevent equipment from performing as intended. As a result, systems fail to deliver expected energy savings, compromise comfort, safety, and reliability, and ultimately undermine the state's broader energy goals.

Technicians and aspiring contractors face multiple barriers. These include the cost of training, lack of access to residential equipment, limited exposure to residential installation procedures, and limited coaching on contractor licensing and small-business readiness. Barriers are greater for trainees who live far from training centers or who cannot access consistent residential training opportunities.

While some organizations provide isolated or vendor-specific residential HVAC trainings, no statewide program delivers coordinated; vendor-neutral training rooted in

Scope of Work

Western States Council of SMART

high-road workforce standards. Existing efforts do not provide the combination of equipment upgrades, curriculum development, contractor-pathway mapping, and structured outreach needed to expand contractor availability in communities with limited access to services. Short-term training programs offer partial training, but none provide a comprehensive contractor-development pipeline. Nor do these programs provide the foundation for developing a truly skilled and trained workforce, one in which technicians have access to high-quality training and to the essentials that keep them in the trade: a living wage, comprehensive family medical coverage, and a modest but reliable retirement. These supports significantly increase the likelihood that technicians will remain in the industry and continue serving their communities for decades. Programs that lack these built-in workforce benefits experience chronic turnover, as technicians are forced to leave the trade in search of sustainable pathways to the middle class.

Solution

We will build new contractor-focused training modules that cover installation, building assessments, utility impacts, refrigerant recovery, customer communication, California state licensing preparation, and basic business readiness including bonding and insurance requirements. These courses help technicians move toward contractor licensing and prepare them for high-road residential work. All training will be comprehensive, vendor-neutral, and aligned with state standards.

A Special Projects Coordinator (SPC) will work on expanding contractor pathways by leading outreach efforts, coordinating training scheduling and managing training logistics, and ensuring accurate metrics tracking and reporting. The SPC will support trainees through the Joint Apprenticeship Training Centers (JATCs) by helping to review curriculum and coordinating an annual comprehensive statewide survey of apprentices. This role ensures statewide collaboration, clear communication, strong participation, and steady progress for contractors in underserved areas.

By improving training facilities, expanding contractor education, and offering direct support to emerging contractors, the project meets CA-TREC goals. It increases access to quality training, strengthens the contractor pipeline in communities with limited services, and helps California grow the workforce needed to reach its energy targets.

C. Goals and Objectives of the Agreement

Agreement Goals

The goals of this Agreement are to:

Scope of Work

Western States Council of SMART

- Expand contractor training capacity in underserved California communities by upgrading JATC facilities with residential heat-pump and modern training equipment and tools for refrigerant charging, capture, and leak detection.
- Create accessible, high-road training pathways that help technicians advance into residential contractor roles.
- Increase the number of qualified residential contractors able to perform permitted, safe, efficient and code compliant heat-pump and modern installations.
- Reduce barriers to training by providing hands-on tools and equipment, updated curriculum, and coordinated outreach and support.
- Strengthen local economies by growing small business opportunities and improving homeowner access to high-quality residential energy services.

Agreement Objectives

The objective of this Agreement is to:

The objectives of this Agreement are to:

- Purchase and install residential heat-pump, HPWH, and diagnostic equipment at participating JATCs to support at least **50–100%** of planned technician training activities.
- Develop and approve new residential technician and contractor training curricula at all participating JATCs, reaching **100%** of the planned course offerings.
- Schedule residential training courses for at least **45–110** technicians over the Agreement term, based on JATC coordinator enrollment data.
- Achieve a contractor interest and engagement rate of at least **70–90%**, measured by participation in trainings, certifications, and pathway activities.
- Deliver and track at least **10–20** contractor education sessions focused on licensing, business readiness, and residential high-efficiency practices.
- Support at least **2–10** technicians in obtaining new contractor licenses, with proof submitted to the Program Coordinator.
- Award at least **2–10** entrepreneurial scholarships to technicians who become new highroad contractors.
- Achieve an outreach response rate of at least **30%** for communications led by the SPC, based on email, survey, and training sign-up data.
- Provide a minimum of **10–20** total training hours per participant for technician-tocontractor training, documented through sign-in and attendance sheets.

III. AGREEMENT ADMINISTRATION

TASK 1: AGREEMENT ADMINISTRATION

Scope of Work

Western States Council of SMART

Subtask 1.1 Products (Tranches 1 and 2)

The goal of this subtask is to establish the requirements for submitting project products (e.g., reports, summaries, plans, and presentation materials). Unless otherwise specified by the Commission Agreement Manager (CAM), the Recipient must deliver products as required below by the dates listed in Attachment 4 **Project Schedule**.

All products submitted which will be viewed by the public, must comply with the accessibility requirements of Section 508 of the federal Rehabilitation Act of 1973, as amended (29 U.S.C. Sec. 794d), and regulations implementing that act as set forth in Part 1194 of Title 36 of the Federal Code of Regulations.

All technical tasks should include product(s). Products that require a draft version are indicated by marking “**(draft and final)**” after the product name in the “Products” section of the task/subtask. If “(draft and final)” does not appear after the product name, only a final version of the product is required. With respect to due dates within this Scope of Work, “**days**” means working days.

The Recipient shall:

For products that require a draft version, including the Final Report Outline and Final Report

- Submit all draft products electronically to the CAM for review and comment in accordance with the dates listed in Attachment 4 Project Schedule. The CAM will provide written comments to the Recipient on the draft product within 15 days of receipt, unless otherwise specified in the task/subtask for which the product is required.
- Consider incorporating all CAM comments into the final product. If the Recipient disagrees with any comment, provide a written response explaining why the comment was not incorporated into the final product.
- Submit the revised product and responses to comments within 10 days of notice by the CAM, unless the CAM specifies a longer time period, or approves a request for additional time.

For products that require a final version only

- Submit the product to the CAM for approval. The CAM may request minor revisions or explanations prior to acceptance.

For all products

- Submit all data and documents required as products in accordance with the following:

Scope of Work

Western States Council of SMART

Instructions for Submitting Electronic Files and Developing Software:

- **Electronic File Format**

- Submit all data and documents required as products under this Agreement in an electronic file format that is fully editable and compatible with the California Energy Commission's (CEC) software and Microsoft (MS) operating computing platforms, or with any other format approved by the CAM. Deliver an electronic copy of the full text of any Agreement data and documents in a format specified by the CAM, such as via shared drives or secure file transfer.

The following describes the accepted formats for electronic data and documents provided to the CEC as products under this Agreement, and establishes the software versions that will be required to review and approve all software products:

- Data sets will be in MS Access or MS Excel file format, or any other format approved by the CAM
- Text documents will be in MS Word file format, (.doc or .docx)
- Presentations and related talking points will be in MS PowerPoint file format □ Project management documents will be in a file format specified by the CAM.

- **Software Application Development**

Use the following standard Application Architecture components in compatible versions for any software application development required by this Agreement (e.g., databases, models, modeling tools), unless the CAM approves other software applications such as open-source programs:

- Microsoft ASP.NET framework (version 3.5 and up). Recommend 4.0.
- Microsoft Internet Information Services (IIS), (version 6 and up) Recommend 7.5.
- Visual Studio.NET (version 2008 and up). Recommend 2010.
- C# Programming Language with Presentation (UI), Business Object and Data Layers.
- SQL (Structured Query Language).
- Microsoft SQL Server 2008, Stored Procedures. Recommend 2008 R2.
- Microsoft SQL Reporting Services. Recommend 2008 R2. □ XML (external interfaces).

Any exceptions to the Electronic File Format requirements above must be approved in writing by the CAM. The CAM will consult with the CEC's Information Technology Services Branch to determine whether the exceptions are allowable.

Scope of Work

Western States Council of SMART

Subtask 1.2 Project Kick-off (Tranche 1)

The goal of this subtask is to establish the lines of communication and procedures for implementing this Agreement.

The Recipient shall:

The goal of this subtask is to establish the lines of communication and procedures for implementing this Agreement.

The Recipient shall:

- Attend a “Kick-off” meeting with the CAM, and other CEC staff relevant to the Agreement. The Recipient’s Project Manager and any other individuals deemed necessary by the CAM or the Project Manager shall participate in this meeting. The administrative and technical aspects of the Agreement will be discussed at the meeting. Prior to the meeting, the CAM will provide an agenda to all potential meeting participants. The meeting may take place in person or by electronic conferencing (e.g., Teams, Zoom), with approval of the CAM.

The Kick-off meeting will include discussion of the following:

- The CAM’s expectations for accomplishing tasks described in the Scope of Work;
 - An updated Project Schedule;
 - Terms and conditions of the Agreement;
 - Invoicing and auditing procedures;
 - Travel;
 - Equipment purchases;
 - Administrative and Technical products (subtask 1.1);
 - CPR meetings (subtask 1.3);
 - Monthly Calls (subtask 1.5)
 - Progress reports and Invoices (subtask 1.6)
 - Final Report (subtask 1.7)
 - Match funds (subtask 1.8);
 - Permit documentation (if required, subtask 1.9);
 - Subawards(subtask 1.10);
 - Agreement changes;
 - Performance Evaluations; and
 - Any other relevant topics.
- Provide *Kick-off Meeting Presentation* to include but not limited to:
 - Project overview (i.e. project description, goals and objectives, work and technical tasks, maps, expected benefits and goals, etc.)
 - Project schedule that identifies milestones
 - List of potential risk factors and hurdles, and mitigation strategy

Scope of Work

Western States Council of SMART

- Provide an *Updated Project Schedule*, *Match Funds Status Letter*, and *Permit Status Letter*, as needed to reflect any changes in the documents.

The CAM shall:

- Designate the date and location of the meeting.
- Send the Recipient a *Kick-off Meeting Agenda*.

Recipient Products:

- Kick-off Meeting Presentation
- Updated Project Schedule (*if applicable*)
- Match Funds Status Letter (subtask 1.8) (*if applicable*)
- Permit Status Letter (subtask 1.9) (*if applicable*)

CAM Product:

- Kick-off Meeting Agenda

Subtask 1.3 Critical Project Review (CPR) Meetings (Tranches 1 and 2)

The goal of this subtask is to determine if the project should continue to receive CEC funding, and if so whether any modifications must be made to the tasks, products, schedule, or budget. CPR meetings provide the opportunity for frank discussions between the CEC and the Recipient. As determined by the CAM, discussions may include project status, challenges, successes, advisory group findings and recommendations, and final report preparation.

Participants will include the CAM and the Recipient and may include the CAO and any other individuals selected by the CAM to provide support to the CEC.

CPR meetings generally take place at key, predetermined points in the Agreement, as determined by the CAM and as shown in the Task List on page 1 of this Exhibit. However, the CAM may schedule additional CPR meetings as necessary. The budget may be reallocated to cover the additional costs borne by the Recipient, but the overall Agreement amount will not increase. CPR meetings generally take place at the CEC, but they may take place at another location, or may be conducted via electronic conferencing (e.g., Microsoft Teams) as determined by the CAM.

The Recipient shall:

- Prepare and submit a *CPR Report* for each CPR meeting that: (1) discusses the progress of the Agreement toward achieving its goals and objectives; and (2) includes recommendations and conclusions regarding continued work on the project.
- Attend the CPR meeting.
- Present the CPR Report and any other required information at each CPR meeting.

Scope of Work

Western States Council of SMART

The CAM shall:

- Determine the location, date, and time of each CPR meeting with the Recipient's input.
- Send the Recipient a *CPR Agenda* with a list of expected CPR participants in advance of the CPR meeting. If applicable, the agenda may include a discussion of match funding and permits.
- Conduct and make a record of each CPR meeting. Provide the Recipient with a schedule for providing a Progress Determination on continuation of the project.
- Determine whether to continue the project, and if so whether modifications are needed to the tasks, schedule, products, or budget for the remainder of the Agreement. A determination of unsatisfactory progress This may result in project delays, including a potential Stop Work Order, while the CEC determines whether the project should continue.
- Provide the Recipient with a *Progress Determination* on continuation of the project, in accordance with the schedule. The Progress Determination may include a requirement that the Recipient revise one or more products.

Recipient Products:

- CPR Report(s)

CAM Products:

- CPR Agenda(s)
- Progress Determination

Subtask 1.4 Final Meeting (Tranche 2)

The goal of this subtask is to complete the closeout of this Agreement.

The Recipient shall:

- Meet with CEC staff to present project findings, conclusions, and recommendations. The final meeting must be completed during the closeout of this Agreement. This meeting will be attended by the Recipient and CAM, at a minimum. The meeting may occur in person or by electronic conferencing (e.g., Microsoft Teams), with approval of the CAM.

The technical and administrative aspects of Agreement closeout will be discussed at the meeting, which may be divided into two separate meetings at the CAM's discretion.

- o The technical portion of the meeting will involve the presentation of findings, conclusions, and recommended next steps (if any) for the Agreement. The CAM will determine the appropriate meeting participants.
- o The administrative

Scope of Work

Western States Council of SMART

portion of the meeting will involve a discussion with the CAM of the following Agreement closeout items:

- Disposition of any procured equipment.
 - The CEC's request for specific "generated" data (not already provided in Agreement products).
 - Need to document the Recipient's disclosure of "subject inventions" developed under the Agreement.
 - "Surviving" Agreement provisions such as repayment provisions and confidential products.
 - Final invoicing and release of retention.
- Prepare a *Final Meeting Agreement Summary* that documents any agreement made between the Recipient and Commission staff during the meeting.
 - Prepare a *Schedule for Completing Agreement Closeout Activities*.
 - Provide copies of *All Final Products* organized by the tasks in the Agreement.

Recipient Products:

- Final Meeting Agreement Summary (*if applicable*)
- Schedule for Completing Agreement Closeout Activities
- All Final Products

Subtask 1.5 Monthly Calls (Tranches 1 and 2)

The goal of this task is to have calls at least monthly between the CAM and Recipient to verify that satisfactory and continued progress is made towards achieving the objectives of this Agreement on time and within budget.

The objectives of this task are to verbally summarize activities performed during the reporting period, to identify activities planned for future reporting period, to seek approval from CAM to proceed as appropriate, to identify issues that may affect performance and expenditures, to verify match funds are being proportionally spent concurrently or in advance of CEC funds or are being spent in accordance with an approved Match Funding Spending Plan, to form the basis for determining whether invoices are consistent with work performed, discuss any modifications to program as defined by the U.S. Department of Energy, and to answer any other questions from the CAM. Monthly calls might not be held on those months when a quarterly progress report is submitted, or the CAM determines that a monthly call is unnecessary.

The CAM shall:

- Schedule monthly calls.
- Provide questions to the Recipient prior to the monthly call.
- Provide call summary notes to Recipient of items discussed during call.

The Recipient shall:

Scope of Work

Western States Council of SMART

- Review the questions provided by CAM prior to the monthly call.
- Provide verbal answers to the CAM during the call.
- Provide written responses or documentation to the CAM as requested.

Recipient Products:

- As requested, submit written responses electronically to CAM along with call summary notes.

Subtask 1.6 Progress Reports and Invoices (Tranches 1 and 2)

The goals of this subtask are to: (1) periodically verify that satisfactory and continued progress is made towards achieving the project objectives of this Agreement; and (2) ensure that invoices contain all required information and are submitted in the appropriate format.

The Recipient shall:

- Submit a monthly Invoice on the template(s) provided by the CAM. Invoices are due to the CAM 10 days after the first of each month.
- Submit a quarterly Progress Report on the template(s) provided by the CAM. The report should summarize progress made on all Agreement activities as specified in the scope of work for the reporting period, including an assessment of the ability to complete the Agreement within the current budget and the successes and challenges of the project. Quarterly progress reports should be submitted no later than 10 calendar days after each quarter, unless otherwise specified by the CAM. Progress Reports are due to the CAM 10 days after the first of each month.

Recipient Products:

- Quarterly Progress Reports
- Monthly Invoices
- Provide written responses or support documentation to the CAM for invoices

CAM Product:

- Invoice template
- Progress Report template

Subtask 1.7 Final Report (Tranche 2)

The goal of this subtask is to prepare a comprehensive Final Report that describes the original purpose, approach, results, and conclusions of the work performed under this Agreement.

When creating the Final Report Outline and the Final Report, the Recipient must use the CEC Style Manual provided by the CAM.

Scope of Work

Western States Council of SMART

Subtask 1.7.1 Final Report Outline

The Recipient shall:

- Prepare a *Final Report Outline* in accordance with the *Energy Commission Style Manual* provided by the CAM.

Recipient Products:

- Final Report Outline (draft and final)

CAM Products:

- Energy Commission Style Manual
- Comments on Draft Final Report Outline
- Acceptance of Final Report Outline

Subtask 1.7.2 Final Report

The Recipient shall:

- Prepare a *Final Report* for this Agreement in accordance with the approved Final Report Outline, Energy Commission Style Manual, and Final Report Template provided by the CAM with the following considerations:
 - o Ensure that the report includes the following items, in the following order:
 - Cover page (**required**)
 - Credits page on the reverse side of cover with legal disclaimer (**required**)
 - Acknowledgements page (optional)
 - Preface (**required**)
 - Abstract, keywords, and citation page (**required**)
 - Table of Contents (**required**, followed by List of Figures and List of Tables, if needed)
 - Executive summary (**required**)
 - Body of the report (**required**)
 - References (if applicable)
 - Glossary/Acronyms (If more than 10 acronyms or abbreviations are used, it is required.)
 - Bibliography (if applicable)
 - Appendices (if applicable) (Create a separate volume if very large.) □
 - Attachments (if applicable)
- Submit a draft of the report to the CAM for review and comment. The CAM will provide written comments to the Recipient on the draft product within 15 business days of receipt.

Scope of Work

Western States Council of SMART

- Incorporate all CAM comments into the *Final Report*. If the Recipient disagrees with any comment, provide a *Written Responses to Comments* explaining why the comments were not incorporated into the final product.
- Submit the revised *Final Report* electronically with any *Written Responses to Comments* within 10 days of receipt of CAM's *Written Comments* on the Draft *Final Report*, unless the CAM specifies a longer time period or approves a request for additional time.

Recipient Products:

- Draft Final Report
- *Written Responses to Comments (if applicable)*
- Final Report

CAM Product:

- *Written comments on the Draft Final Report*
- *Acceptance of Final Report*

Subtask 1.8 Match Funds (Tranches 1 and 2)

The goal of this subtask is to ensure that the Recipient obtains any match funds planned for this Agreement and applies them to the Agreement during the Agreement term.

While the costs to obtain and document match funds are not reimbursable under this Agreement, the Recipient may spend match funds for this task. Match funds must be identified in writing, and the Recipient must obtain any associated commitments before incurring any costs for which the Recipient will request reimbursement.

The Recipient shall:

- Prepare a *Match Funds Status Letter* that documents the match funds committed to this Agreement.

If match funds were a part of the application that led to the CEC awarding this Agreement, then provide in the letter:

o A list of the match funds that identifies:

- The amount of cash match funds, their source(s) (including a contact name, address, and telephone number), and the task(s) to which the match funds will be applied.
- The amount of each in-kind contribution, a description of the contribution type (e.g., property, services), the documented market or book value, the source (including a contact name, address, and telephone number),

Scope of Work

Western States Council of SMART

and the task(s) to which the match funds will be applied. If the in-kind contribution is equipment or other tangible or real property, the Recipient must identify its owner and provide a contact name, address, telephone number, and the address where the property is located.

- If different from the solicitation application, provide a letter of commitment from an authorized representative of each source of match funding that the funds or contributions have been secured.
- At the Kick-off meeting, discuss match funds and the impact on the project if they are significantly reduced or not obtained as committed. If applicable, match funds will be included as a line item in the progress reports and will be a topic at CPR meetings.
- Provide a *Supplemental Match Funds Notification Letter* to the CAM of additional match funds.
- Provide a *Match Funds Reduction Notification Letter* to the CAM if existing match funds are reduced during the course of the Agreement. Reduction of match funds may trigger a CPR meeting.

Recipient Products:

- Match Funds Status Letter
- Supplemental Match Funds Notification Letter (*if applicable*)
- Match Funds Reduction Notification Letter (*if applicable*)

Subtask 1.9 Permits (Tranches 1 and 2)

The goal of this subtask is to obtain all permits required for work completed under this Agreement in advance of the date they are needed to keep the Agreement schedule on track. Permit costs and the expenses associated with obtaining permits are not reimbursable under this Agreement. Permits must be identified and obtained before the Recipient may incur any costs related to the use of the permit(s) for which the Recipient will request reimbursement.

The Recipient shall:

- Prepare a *Permit Status Letter* that documents the permits required to conduct this Agreement. If no permits are required at the start of this Agreement, then state this in the letter. If permits will be required during the course of the Agreement, provide in the letter:
 - A list of the permits that identifies: (1) the type of permit; and (2) the name, address, and telephone number of the permitting jurisdictions or lead agencies.
 - The schedule the Recipient will follow in applying for and obtaining the permits.

Scope of Work

Western States Council of SMART

The list of permits and the schedule for obtaining them will be discussed at the Kick-off meeting (subtask 1.2), and a timetable for submitting the updated list, schedule, and copies of the permits will be developed. The impact on the project if the permits are not obtained in a timely fashion or are denied will also be discussed. If applicable, permits will be included as a line item in progress reports and will be a topic at CPR meetings.

- If during the course of the Agreement additional permits become necessary, then provide the CAM with an *Updated List of Permits* (including the appropriate information on each permit) and an *Updated Schedule for Acquiring Permits*.
- Send the CAM a *Copy of Each Approved Permit*.
- If during the course of the Agreement permits are not obtained on time or are denied, notify the CAM within 5 days. Either of these events may trigger a CPR meeting.

Recipient Products:

- Permit Status Letter
- Updated List of Permits (*if applicable*)
- Updated Schedule for Acquiring Permits (*if applicable*)
- Copy of Each Approved Permit (*if applicable*)

Subtask 1.10 Subawards (Tranches 1 and 2)

The goals of this subtask are to: (1) procure subawards required to carry out the tasks under this Agreement; and (2) ensure that the subawards are consistent with the terms and conditions of this Agreement.

The Recipient shall:

- Manage and coordinate subrecipients activities in accordance with the requirements of this Agreement.
- Incorporate this Agreement by reference into each subaward.
- Include any required Energy Commission flow-down provisions in each subaward, in addition to a statement that the terms of this Agreement will prevail if they conflict with the subaward terms.
- If requested by the CAM, submit a draft of each *Subaward* required to conduct the work under this Agreement.
- If requested by the CAM, submit a final copy of each executed subaward.
- Notify and receive written approval from the CAM prior to adding any new subrecipient (see the terms regarding of subrecipient additions in the terms and conditions).

Recipient Products:

- Subawards

Scope of Work

Western States Council of SMART

IV. TECHNICAL TASKS

TASK 2 PROJECT TRACKING, DATA COLLECTION, AND REPORTING (TRANCHES 1 AND 2)

The goal of this task is to submit key performance targets for the project using the metrics listed in the Solicitation Manual, Attachment 9 Project Performance Metrics and Measurement and Verification Requirements, which may be modified and must be approved by the CAM. These metrics will ensure accuracy and accountability as the project moves forward.

The Recipient shall:

- Incorporate a draft version of a Measurement & Verification Plan in their Project Narrative that aligns with the performance metrics listed in Attachment 9 Project Performance Metrics and M&V Requirements Instructions.
- Incorporate all CAM comments into the Final Measurement and Verification Plan.
- Submit the revised Final Measurement and Verification Plan electronically to the CAM.
- Collect data from program activities as specified by the Final Measurement and Verification Plan.
- Submit metrics electronically to the CAM in accordance with the dates listed in Attachment 4 Project Schedule.

Recipient Products:

- Measurement and Verification Plan (draft and final)
- Metrics reports

TASK 3 IMPLEMENT TRAINING PROGRAM

Subtask 3.1 Preliminary Evaluation Report (Tranche 1)

The goal of this subtask is to develop a Preliminary Evaluation Results report. The draft products may be adjusted based on feedback from the CAM and the final products must be approved by the CAM. This is required by the Department of Energy and DOE must grant approval to access funds from the second tranche.

The Report shall include at minimum:

- Plans for incorporating the evaluation results into improving current programs.
- Progress against goals, activities, and metrics.
- Feedback from program participants collected by the program.
- Process and program design improvements that would increase the likelihood of meeting program goals, activities, and metrics.
- Review of program impacts.
- Recommendations for improvement as identified by the program evaluation.

Scope of Work

Western States Council of SMART

Recipient Products:

- Draft and Final Preliminary Evaluation Report

CAM Products

- Report template

Subtask 3.2 Equipment Procurement (Tranche 1)

The goal of this subtask is to purchase the necessary equipment and materials for residential HVAC and Heat Pump mock-ups and training scenarios to simulate real-world applications. In general, a mock-up is defined as a training workstation or module or structure to resemble a real-world experience for students.

The Recipient shall:

- Purchase residential heat pumps and training equipment, installation and diagnostic tools, training consumable materials, refrigerant equipment, and/or training mock-ups or materials to build mock-ups for each JATC. Consumable materials are defined as items needed to support the training installation and tear down students perform during training. Many materials are not reusable due to being cut, soldered, and installed.
- Ensure all equipment aligns with current market needs.
- Keep and compile Equipment Procurement Summary and Equipment Inventory Lists of what was purchased, including vendors, quantities, and how each item will be used.

Recipient Products:

- Equipment Procurement Summary
- Equipment Inventory List

Subtask 3.3 Equipment Installation (Tranche 1)

The goal of this subtask is to purchase any materials to support the installation of the newly purchased residential HVAC and Heat Pump mock-ups along with any consumables necessary for the training of students.

The Recipient shall:

- Purchase any additional installation and consumable materials or equipment for permanent installation, including building any mock-ups needed to house current or future equipment or infrastructure upgrades, if needed.

Scope of Work

Western States Council of SMART

- Install all equipment and/or mock-ups at each subrecipient JATC training center and create Equipment Installation and Start-Up Reports, as required.
- Create Photo Documentation Packages to document the installation and start-up process.
- Prepare training spaces so that training can begin.

Recipient Products:

- Equipment Installation and Start-Up Report, as required
- Photo Documentation Package

Subtask 3.4 Curriculum Development (Draft and Final) & Approval (Tranche 1)

The goal of this subtask is to have JATCs review or create residential training curriculum and have it reviewed by industry professionals to ascertain the relevance and applicability. Once reviewed and updated, the finalized curriculum will be further reviewed and approved by the JATC Trustees.

The Recipient shall:

- Send JATC instructors and Training Coordinators to manufacturer factory trainings and relevant ITI courses (such as Instructor Professional Development, Testing & Air Balancing, and Heat Pump training) as needed to ensure they remain current on new equipment, technologies, and industry best practices.
- Update existing residential and Heat Pump training and curriculum to ensure effective integration into the training center's existing offerings.
- Seek volunteers (contractors, manufacturers, technicians, and the SPC) to review the updated Draft Residential Technician Curriculum.
- Align all curriculum with state standards and high-road practices, and present materials to JATC Trustee Boards for approval.
- Revise curriculum based on Trustee, Contractor, Manufacturer, Technician, and SPC feedback and prepare Final versions of Residential Technician Curriculum for use in scheduled trainings.

Recipient Products:

- Draft and Final Residential Technician Curriculum
- Curriculum Approval Documentation

Scope of Work

Western States Council of SMART

Subtask 3.5 Training Scheduling & Enrollment (Tranche 1)

The goals of this subtask are to 1) create a training schedule specifically for Residential HVAC and Heat Pump Training, 2) open enrollment for the Residential HVAC training and 3) track the membership's interest in taking and completing the training.

The Recipient shall:

- Create a training schedule for all participating regions.
- Open enrollment and track how many technicians sign up for and complete classes in the Enrollment and Interest Log.
- Use interest levels to determine class sizes, locations, and resource needs.

Recipient Products:

- Training Schedule
- Enrollment and Interest Log

Subtask 3.6 Contractor Education Delivery & Pathway Support (Tranche 1)

The goal of this subtask is to develop Technician to Contractor training and create the infrastructure to support interested technicians wishing to transition into Residential HVAC contracting and track the success of this program.

The Recipient shall:

- Develop comprehensive vendor-neutral Residential Technician to Contractor curriculum that prepares technicians for residential contractor work.
- Create or offer training on contractor-readiness focused topics such as California licensing procedure, insurance and bonding, customer communication, utility impacts, and basic business skills.
- Help technicians understand and move through the contractor pathway.
- Track contractor participation and generate the Contractor Education Report and develop an ongoing Contractor Pathway Progress Log.

Recipient Products:

- Residential Technician to Contractor Curriculum
- Contractor Education Report
- Contractor Pathway Progress Log

Subtask 3.7 Entrepreneurial Scholarships (Tranche 1&2)

The goal of this subtask is to create a program to offer Entrepreneurial Scholarships to vetted technicians who are in the process of making the transition into contracting and help defray the start-up costs associated with that endeavor.

Scope of Work

Western States Council of SMART

The Recipient shall:

- Set entrepreneurial scholarship criteria for new contractors and develop the Recipient Scholarship Criteria Verification Documentation.
- Verify that recipients have obtained a contractor license and meet the scholarship criteria.
- Award scholarships and keep documentation of each award in the Scholarship Award Summary.
- If required by the DOE, between Tranche 1 and 2, make any necessary modifications or incorporate feedback.

Recipient Products:

- Recipient Scholarship Criteria Verification Documentation
- Scholarship Award Summary

Subtask 3.8 Outreach, Engagement, and Program Expansion Support (Tranche 1&2)

The goal of this subtask is to create a sustainable system for outreach to help JATCs and Local Unions with engaging prospective member apprentices, community partners, and technicians wishing to become contractors while tracking the results of such outreach efforts.

The Recipient shall:

- Conduct outreach to JATCs, members, contractors, and community partners to promote upcoming training opportunities and support curriculum development.
- Track outreach results, including email engagement, survey responses, and class signups in the Outreach and Engagement Report.
- Support technicians by explaining contractor pathways and offering one-on-one guidance.
- Keep logs documenting outreach activity and responses in the Response Rate Log.
- If required by the DOE, between Tranche 1 and 2, make any necessary modifications or incorporate feedback.

Recipient Products:

- Outreach and Engagement Report
- Response Rate Log

Scope of Work

Western States Council of SMART

Subtask 3.9 HVAC Technician Certification Rebates (Tranche 1&2)

The goal of this subtask is to incentivize members and JATCs to pursue Residential industry recognized certifications to build technicians skills and employability, and customer confidence by defraying the cost to gain the certifications.

The Recipient shall:

- Conduct outreach to JATCs, members and contractors to promote technicians getting EPA Section 608, HVAC Excellence Low GWP Refrigerant Safety, HVAC Excellence Principles of Electrical and Refrigeration Theory, HVAC Excellence Residential Air Conditioning, HVAC Excellence Heat Pump Installer certifications.
- Track technicians who successfully gain these certifications through the local JATCs with the Outreach and Engagement Report.
- Support technicians by providing testing facilities and support signing up for the required testing.
- Keep logs documenting copies of new certifications gained by technicians and providing reimbursement to JATCs of testing fees of \$50 for each successful certification.
- If required by the DOE, between Tranche 1 and 2, make any necessary modifications or incorporate feedback.

Recipient Products:

- Outreach and Engagement Report
- Log documenting copies of new certifications gained by technicians.

Subtask 3.10 Equipment Procurement (Tranche 2)

The goal of this subtask is to purchase additional necessary equipment and materials for residential HVAC and Heat Pump mock-ups and training scenarios to simulate real-world applications.

The Recipient shall:

- Purchase residential heat pumps and training equipment, installation and diagnostic tools, training consumable materials, refrigerant equipment, and/or training mock-ups or materials to build mock-ups for each JATC.
- Ensure all equipment aligns with current market needs.
- Keep and compile Equipment Procurement Summary and Equipment Inventory Lists of what was purchased, including vendors, quantities, and how each item will be used.

Scope of Work

Western States Council of SMART

- If required by the DOE, between Tranche 1 and 2, make any necessary modifications or incorporate feedback.

Recipient Products:

- Equipment Procurement Summary
- Equipment Inventory List

Subtask 3.11 Equipment Installation (Tranche 2)

The goal of this subtask is to purchase any additional materials to support the installation of the newly purchased residential HVAC and Heat Pump mock-ups along with any consumables necessary for the training of students.

The Recipient shall:

- Purchase any additional installation and consumable materials or equipment for permanent installation, including building any mock-ups needed to house current or future equipment or infrastructure upgrades, if needed.
- Install all equipment and/or mock-ups at each subrecipient JATC training center and create Equipment Installation and Start-Up Reports, as required.
- Create Photo Documentation Packages to document the installation and start-up process.
- Prepare training spaces so that training can begin.
- If required by the DOE, between Tranche 1 and 2, make any necessary modifications or incorporate feedback.

Recipient Products:

- Equipment Installation and Start-Up Report, as required
- Photo Documentation Package

Subtask 3.12 Technician Training Delivery (Tranche 2)

The goal of this subtask is to deliver the Residential curriculum developed in Subtask 3.4 to students and track the number of students and their progress in the program.

The Recipient shall:

- Deliver residential training on heat pumps, equipment diagnostics, refrigerant management, and building assessments.
- Track attendance, training hours, and course completions and create the Technician Training Report.
- Keep sign-in and Attendance Sheets and other relevant Training Records.

Scope of Work

Western States Council of SMART

- If required by the DOE, between Tranche 1 and 2, make any necessary modifications or incorporate feedback.

Recipient Products:

- Technician Training Report
- Attendance Sheets and Training Records

V. PROJECT SCHEDULE

Please see the attached Excel spreadsheet labeled Attachment 4 Project Schedule.