





## California Energy Commission August 14, 2024 Business Meeting Backup Materials for WattEV, Inc.

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

**RESOLUTION NO: 24-0814-XX** 

#### STATE OF CALIFORNIA

# STATE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION

**RESOLUTION: WattEV, Inc.** 

**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 ZVI-23-031 with WattEV, Inc. for a \$13,203,368 grant. This agreement will install 70 combined charging system 240 kW EV chargers and 14 megawatt charging system 1200 kW EV chargers to provide publicly available charging for MDHD ZEVs along State Route 99 in Fresno, Interstate 80 in Stockton, and Interstate 580 in Oakland. The project will also support job training and recruitment in disadvantaged and low-income communities; and

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

#### **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 adopted at a meeting of the CEC held on August 14, 2024.

AYE: NAY: ABSENT: ABSTAIN:	
	Dated:
	Kristine Banaag Secretariat



STATE OF CALIFORNIA CALIFORNIA ENERGY COMMISSION

## **GRANT REQUEST FORM (GRF)**

#### A. New Agreement Number

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

New Agreement Number: ZVI-23-031

#### **B.** Division Information

1. Division Name: Fuels and Transportation

2. Agreement Manager: Kristi Villareal

3. MS-: Not Applicable

4. Phone Number: (916) 314-0856

#### C. Recipient's Information

1. Recipient's Legal Name: WattEV, Inc.

2. Federal ID Number: 85-2621182

#### D. Title of Project

Title of project: WattEV 3C: Connecting California's Corridors

#### E. Term and Amount

Start Date: 08/14/2024
 End Date: 03/31/2028
 Amount: \$13,203,368

#### F. Business Meeting Information

- 1. Are the ARFVTP agreements \$75K and under delegated to Executive Director? No
- 2. The Proposed Business Meeting Date: 08/14/2024
- 3. Consent or Discussion? Discussion
- 4. Business Meeting Presenter Name: Vivian Nguyen
- 5. Time Needed for Business Meeting: 5 minutes
- 6. The email subscription topic is: Altfuels

#### **Agenda Item Subject and Description:**

WattEV, Inc. Proposed resolution approving agreement ZVI-23-031 with WattEV, Inc. for a \$13,203,368 grant, and adopting staff's determination that this action is exempt from CEQA. This agreement will install 70 combined charging system 240 kW EV chargers and 14 megawatt charging system 1200 kW EV chargers to provide publicly available charging for MDHD ZEVs along State Route 99 in Fresno, Interstate 80 in Stockton, and Interstate 580 in Oakland. The project will also support job training and recruitment in disadvantaged and low-income communities. (General Fund and Clean Transportation Program Funding) Contact: Vivian Nguyen (Staff Presentation: 5 minutes)

#### 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":



Agreement will not cause direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment because:

# 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: None CCR section number: None

#### 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: Sections 15301, 15303, 15304
Cal. Code Regs., tit. 14, Section 15301 Existing Facilities 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 the California Environmental Quality Act. This project involves the installation of public electric vehicle charging infrastructure, including 70 Combined Charging System (CCS) 240 kW chargers and 14 Megawatt Charging System (MCS) 1200 kW chargers in existing paved parking lots across three corridor sites in Fresno, Stockton, and Oakland, California. Therefore, this project is exempt under California Code of Regulations, title 14, section 15301 and will not have a significant effect on the environment.

Cal. Code Regs., tit. 14, Section 15303 provides that projects which consist of construction and location of limited numbers of new, small facilities or structures; installation of small new equipment and facilities in small structures; and the conversion of existing small structures from one use to another where only minor modifications are made in the exterior of the structure, are categorically exempt from the provisions of CEQA. This project involves the installation of new, small equipment, including 70 Combined Charging System (CCS) 240 kW chargers and 14 Megawatt Charging System (MCS) 1200 kW chargers in existing paved parking lots across three corridor sites in Fresno, Stockton, and Oakland, California. The charging equipment to be installed is small and each charger has a footprint of approximately 3 square feet. Therefore, this project is therefore categorically exempt from the provisions of CEQA under section 15303 of the CEQA Guidelines as a project that consists of construction and location of limited



numbers of new, small facilities or structures or the installation of small new equipment and facilities in small structures.

Cal. Code Regs., tit. 14, Section 15304 provides that projects which consist of minor public or private alterations in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees except for forestry and agricultural purposes are categorically exempt from CEQA. This project requires minimum grading on land with a slope of less than 10 percent, and the grading is not in a waterway, in any wetland, in an officially designated (by federal, state, or local government action) scenic area, or in officially mapped areas of severe geologic hazard such as an Alquist-Priolo Earthquake Fault Zone or within an official Seismic Hazard Zone, as delineated by the State Geologist. Furthermore, The project will not affect any visual resources, such as protected trees or historic resources. Installation of the chargers will include installation of conduit, wiring, electrical connections, and mounting equipment. On-site trenching is required to bring power to the charging system. The project will not impact adjacent residential homes, traffic or right of way, or noise. The reconstruction and conversion of any small structures for this project will not impact any scenic resources. Therefore, this project is exempt under California Code of Regulations, title 14, Section 15304.

The project will not impact an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law by federal, state, or local agencies; 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 any scenic resources within a highway officially designated as a state scenic highway; the project sites are 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.

No

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	No
Negative Declaration	No



Mitigated Negative Declaration	No
Environmental Impact Report	No
Statement of Overriding Considerations	No
None	Yes

## H. Is this project considered "Infrastructure"?

Yes

#### 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
TRC Environmental Corporation	\$ 163,791	<b>\$</b> 130,629
EVSE Installment and Procurement Contractor (TBD)	\$11,062,577	\$10,837,624
Construction and Civil Work Contractor (TBD)	\$1,977,000	\$2,738,000

## 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
TRC Environmental Corporation
Valley CAN
Fresno City College



## 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
General Fund	2021-22	601.129ZEV	\$946,338
ARFVTF	2022-23	601.118O	12,257,030

**TOTAL Amount:** \$13,203,368

R&D Program Area: Not Applicable

Explanation for "Other" selection: Not Applicable

Reimbursement Contract #: Not Applicable

Federal Agreement #: Not Applicable

#### M. Recipient's Contact Information

## 1. Recipient's Administrator/Officer

Name: Michael Ganny

Address: 444 W. Ocean Blvd., Suite 1250

City, State, Zip: Long Beach, CA 90802

Phone: (949) 916-2751

E-Mail: mganny@wattev.com

## 2. Recipient's Project Manager

Name: Marcelo Barros

Address: 444 W. Ocean Blvd., Suite 1250 City, State, Zip: Long Beach, CA 90802

Phone: (949) 916-2751

E-Mail: mbarros@wattev.com



#### 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-23-602
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: Kristi Villareal

Approval Date: 4/19/24

Office Manager: Elizabeth John

Approval Date: 4/25/24

**Deputy Director:** Melanie Vail

Approval Date: 5/3/2024

# Exhibit A SCOPE OF WORK

## **TECHNICAL TASK LIST**

Task #	CPRs	Task Name
1		Administration
2		Electric Vehicle Infrastructure Training Program (EVITP) Certification
3		Infrastructure Planning, Design, Engineering & Permitting
4	Х	Procurement & Execution
5	Х	Civil Works & Installation
6		Operations and Reliability
7		Workforce Plan
8		Marketing & Community Outreach
9		Semi-Annual Electric Vehicle Charger Inventory Reports
10		Data Collection & Analysis
11		Project Fact Sheet

## **KEY NAME LIST**

Task #	Key Personnel	Key Subcontractor(s)	Key Partners
1	Marcelo Barros (WattEV, Inc.); Michael Ganny (WattEV, Inc.); TBD (TRC Environmental Corporation, (TRC))	TRC Environmental Corporation	
2	Marcelo Barros (WattEV, Inc.); Michael Ganny (WattEV, Inc.)	N/A	
3	Marcelo Barros (WattEV, Inc.); Sarmad Jabbar (WattEV, Inc.); Ihor Starepravo (WattEV, Inc.)	N/A	Contractor 1 (TBD)
4	Marcelo Barros (WattEV, Inc.); Sarmad Jabbar (WattEV, Inc.)	N/A	Contractor 1 (TBD); Contractor 2 (TBD)
5	Marcelo Barros (WattEV, Inc.); Sarmad Jabbar	N/A	Contractor 2 (TBD)

Task #	Key Personnel	Key Subcontractor(s)	Key Partners
	(WattEV, Inc.); Ihor Starepravo (WattEV, Inc.)		
6	Michael Ganny (WattEV, Inc.)	N/A	
7	Marcelo Barros (WattEV, Inc.); Michael Ganny (WattEV, Inc.)		Fresno City College, Valley CAN
8	Marcelo Barros (WattEV, Inc.); Michael Ganny (WattEV, Inc.); TBD (TRC)		Valley CAN
9	Ihor Starepravo (WattEV, Inc.); Marcelo Barros (WattEV, Inc.); Michael Ganny (WattEV, Inc.)	TRC Environmental Corporation (Subrecipient)	
10	Michael Ganny (WattEV, Inc.); Erin Cornelius (TRC)	TRC Environmental Corporation (Subrecipient)	
11	Michael Ganny (WattEV, Inc.); Erin Cornelius (TRC)	TRC Environmental Corporation (Subrecipient)	

## GLOSSARY

Specific terms and acronyms used throughout this scope of work are defined as follows:

Term/ Acronym	Definition
AB	Assembly Bill
AC Charging	Alternating current. A charger that operates on a circuit from 208 volts to 240 volts and transfers AC electricity to a device in an electric vehicle (EV) that converts AC to direct current to charge an EV battery.
ADA	Americans with Disabilities Act
API	Application programming interface (API). A type of software interface that offers services to other pieces of software. An API allows two or more computer programs to communicate with each other.
CAM	Commission Agreement Manager
CAO	Commission Agreement Officer
CEC	California Energy Commission

Term/ Acronym	Definition
Charge Attempt	Any instance of an EV driver taking action to initiate a charging session by taking one or all of the following steps in any order: 1) attaching the connector to the EV appropriately, or 2) attempting to authorize a charging session by use of radio frequency identification (RFID) technology, credit card, charging network provider smartphone application (app), screen input, or by calling the charging network provider's customer service number.
Charger	A device with one or more charging ports and connectors for charging electric vehicles. Also referred to as Electric Vehicle Supply Equipment (EVSE). This definition excludes any charger used solely for private use at a single-family residence or a multifamily dwelling with four or fewer dwelling units.
Charging Network	A collection of chargers located on one or more property (ies) connected via digital communications to manage the facilitation of payment, the facilitation of electrical charging, and any related data requests.
Charging Network Provider	The entity that operates the digital communication network that remotely manages the chargers. Charging network providers may also serve as charging station operators and/or manufacture chargers.
Charging Port	The system within a charger that charges one electric vehicle. A charging port may have multiple connectors, but it can provide power to charge only one electric vehicle through one connector at a time.
Charging Session	The period after a charge attempt during which the electric vehicle is allowed to request energy. Charging sessions can be terminated by the customer, the electric vehicle, the charger, the charging station operator, or the charging network provider.
Charging Station	The area in the immediate vicinity of one or more chargers that includes the chargers, supporting equipment, parking areas adjacent to the chargers, and lanes for vehicle ingress and egress. A charging station could comprise only part of the property on which it is located.
Charging Station Management System	A system that may be used to operate a charger, to authorize use of the charger, or to record or report charger data, such as by using OCPP.
Charging Station Operator	The entity that owns the chargers, supporting equipment and facilities at one or more charging stations. Although this entity may delegate responsibility for certain aspects of charging station operation and maintenance to subcontractors, this entity retains responsibility for operation and maintenance of chargers, supporting equipment and facilities. In some cases, the charging station operator and the charging network provider are the same entity.
Connector	The device that attaches an EV to a charging port in order to transfer electricity.
Corrective Maintenance	Maintenance that is carried out after failure detection and is aimed at restoring an asset to a condition in which it can perform its intended function.

Term/ Acronym	Definition	
CPR	Critical Project Review	
CTP	Clean Transportation Program	
DCFC	Direct current fast charger (DCFC). A charger that enables rapid charging by delivering direct current electricity directly to an EV's battery	
Depot	A type of "home base" behind-the-fence location where a vehicle is typically kept when not in use (usually parked on a nightly basis)	
Downtime	A period of time that a charger is not capable of successfully dispensing electricity or otherwise not functioning as designed. Downtime is calculated pursuant to Task 6.4.	
EV	An electric vehicle (EV) is a vehicle that is either partially or fully powered on electric power received from an external power source.	
EVSE	Electric vehicle supply equipment (EVSE). A charger as defined.	
Excluded Downtime	Downtime that is caused by events pursuant to Task 6.4.	
Failed Charging Session	Following a charge attempt, the criteria for a successful charging session were not met.	
FTD	Fuels and Transportation Division	
Hardware	The machines, wiring, and other physical components of an electronic system including onboard computers and controllers.	
Inoperative State	The charger or charging port is not operational.	
Installed	Attached or placed at a location and available for use for a charging session. The date a charger is installed is the date it is first available for use for a charging session.	
Interoperability	Successful communication between the software controlling charging on the EV and the software controlling the charger. Interoperability failures are communication failures between the EV and charger that occur while the software of each device is operating as designed. Interoperability failure leads to failed charging sessions.	
Maintenance	Any instance in which preventive or corrective maintenance is carried out on equipment.	
MDHD	Medium-Duty and Heavy-Duty	
Networked	A charger can receive or send commands or messages remotely from or to a charging network provider or is otherwise connected to a central management system, such as by using OCPP 2.0.1, for the purposes of charger management and data reporting.	
OCPP	Open Charge Point Protocol (OCPP). An open-source communication protocol that specifies communication between chargers and the charging networks that remotely manage the chargers.	

Term/ Acronym	Definition
Operational	Or "up." A charging port's hardware and software are both online and available for use, or in use, and the charging port is capable of successfully dispensing electricity.
Operative	A state indicating the charger is operational and available to charge or currently charging.
Operative State	A state in which the charger is operational and available to charge or currently charging.
Preventive Maintenance	Maintenance that is regularly and routinely performed on physical assets to reduce the chances of equipment failure and unplanned machine downtime.
Private	Charging ports located at parking space(s) that are privately owned and operated, often dedicated to a specific driver or vehicle (for example, a charging port installed in a garage of a single-family home).
Public	Charging ports located at parking space(s) designated by the property owner or lessee to be available to and accessible by the public.
Recipient	WattEV, Inc.
SB	Senate Bill
SB 671 (2021)	Priority clean freight corridors for medium- and heavy-duty vehicles identified by the California Transportation Commission.
Shared Private	Charging ports located at parking space(s) designated by a property owner or lessee to be available to, and accessible by, employees, tenants, visitors, and residents. Examples include workplaces and shared parking at multifamily residences.
Software	A set of instructions, data or programs used to operate computers and execute specific tasks.
Successful Charging Session	Following a charge attempt, a customer's EV battery is charged to the state of charge the customer desires and is disconnected manually by the customer or by the EV's onboard software system terminating the charging session, without an additional charge attempt.
Uptime	The time that a charger is installed during a reporting period excluding downtime pursuant to Task 9.4.
Valley CAN	Valley Clean Air Now (CAN) is a 501(c)(3) organization that works towards quantifiably reducing air emissions in California's San Joaquin Valley.

## Background

The Budget Act of 2021 (Assembly Bill (AB) 128, Ting, Chapter 21, Statutes of 2021, as amended by Senate Bill (SB) 129, Skinner, Chapter 69, Statutes of 2021 and SB 170, Skinner, Chapter 240, Statutes of 2021) appropriated \$785,000,000 from the General Fund to support infrastructure deployments and manufacturing projects for zero-emission light-duty and medium-and heavy-duty vehicles.

On September 26, 2023, the California Energy Commission (CEC) released a Grant Funding Opportunity (GFO) entitled, "Charging and Refueling Infrastructure for Transport in CALifornia Provided Along Targeted Highway Segments (CRITICAL PATHS)." This competitive grant solicitation was to support the development of publicly available charging and/or hydrogen refueling stations for medium- and heavy-duty (MDHD) zero-emission vehicles (ZEVs) along designated corridors, to help create an infrastructure network that supports the state's transition to zero-emission transportation. In response to GFO-23-602, the Recipient submitted application #21 which was proposed for funding in the CEC's Notice of Proposed Awards on February 16, 2024. GFO-23-602 and Recipient's application are hereby incorporated by reference into this Agreement in their entirety.

In the event of any conflict or inconsistency between the terms of the Solicitation and the terms of the Recipient's Application, the Solicitation shall control. In the event of any conflict or inconsistency between the Recipient's Application and the terms of this Agreement, this Agreement shall control. Similarly, in the event of any conflict or inconsistency between the terms of this Agreement and the Solicitation, the terms of this Agreement shall control.

#### **Problem Statement:**

MDHD ZEV electrification is beginning to accelerate but lacks the necessary infrastructure to support widespread adoption. Currently, adoption of MDHD ZEVs is predominantly limited to short-range and return-to-base operations. To increase adoption rates of longer-range MDHD ZEVs and ensure equity among fleets that lack the physical and financial resources for onsite private depot charging infrastructure, public charging options need to exist.

Deployment of public charging options for MDHD ZEVs has not taken place due in large part to the lack of market penetration in electric vehicles. With manufacturers rapidly increasing new product offerings, investment in charging infrastructure needs to occur now to ensure widespread fleet adoption. California is on the precipice of a market shift in public charging, especially along critical trade corridors, which will provide fleets and the overall industry with more market certainty. This will stimulate adoption, and equity in adoption, of MDHD ZEVs for the commercial sector.

## **Goals of the Agreement:**

The goal of this Agreement is to install, commission, and operate three (3) public charging facilities in Fresno, Stockton (less than one linear mile from California State Route (SR) 99) and Oakland (less than one linear mile to Interstate (I) 580/I-80), California that will serve MDHD ZEVs, specifically battery electric trucks. In partnership with the local air districts, vehicle manufacturers, and industry leaders, these facilities will drive market adoption of MDHD battery electric vehicles across weight classes through access to affordable and reliable public charging. This project will be enabled by top tier design, engineering, and business innovation that ensure long-term sustainability.

#### **Objectives of the Agreement:**

The objectives of this Agreement are to:

- Permit, design, engineer, procure, construct and commission a safe, fully operational, charging network comprised of seventy (70) Combined Charging System (CCS) 240kW dispensers and fourteen (14) 1200kW Megawatt Charging System (MCS) dispensers across WattEV's Fresno, Stockton, and Oakland locations.
- Expand and increase public access to MDHD ZEV charging infrastructure along SB 671 designated Priority Clean Freight Corridors.
- Operate charging stations throughout the project term, providing a sustainable business

- model at the end of the project for long-term operation and project expansion.
- Develop a workforce plan that will address the needs of priority populations adjacent to the project sites and help lift barriers to employment in clean transportation jobs.

#### **TASK 1 ADMINISTRATION**

#### Task 1.1 Attend Kick-off Meeting

The goal of this task is to establish the lines of communication and procedures for implementing this Agreement. The Commission Agreement Manager (CAM) shall designate the date and location of this meeting and provide an agenda to the Recipient prior to the meeting.

#### The Recipient shall:

- Attend a "Kick-Off" meeting that includes the CAM and may include the Commission Agreement Officer (CAO) and a representative of the CEC Accounting Office. The Recipient shall bring their Project Manager, Agreement Administrator, Accounting Officer, and any others determined necessary by the Recipient or specifically requested by the CAM to this meeting.
- Provide a written statement of project activities that have occurred after the notice of proposed awards but prior to the execution of the agreement using match funds. If none, provide a statement that no work has been completed using match funds prior to the execution of the agreement. All pre-execution match expenditures must conform to the requirements in the Terms and Conditions of this Agreement.
- Discuss the following administrative and technical aspects of this Agreement:
  - Agreement Terms and Conditions
  - Critical Project Review (Task 1.2)
  - Match fund documentation (Task 1.7) No reimbursable work may be done until this documentation is in place.
  - Permit documentation (Task 1.8)
  - Subawards needed to carry out project (Task 1.9)
  - The CAM's expectations for accomplishing tasks described in the Scope of Work
  - An updated Schedule of Products and Due Dates
  - Monthly Calls (Task 1.4)
  - Quarterly Progress Reports (Task 1.5)
  - Technical Products (Product Guidelines located in Section 5 of the Terms and Conditions)
  - Final Report (Task 1.6)

#### **Recipient Products:**

- Updated Schedule of Products
- Updated List of Match Funds
- Updated List of Permits

Written Statement of Match Share Activities

#### **Commission Agreement Manager Product:**

Kick-Off Meeting Agenda

#### Task 1.2 Critical Project Review (CPR) Meetings

CPRs provide the opportunity for frank discussions between the CEC and the Recipient. The goal of this task is to determine if the project should continue to receive CEC funding to complete this Agreement and to identify any needed modifications to the tasks, products, schedule or budget.

The CAM may schedule CPR meetings as necessary, and meeting costs will be borne by the Recipient.

Meeting participants include the CAM and the Recipient and may include the CAO, the Fuels and Transportation Division (FTD) program lead, other CEC staff and Management as well as other individuals selected by the CAM to provide support to the CEC.

#### The CAM shall:

- Determine the location, date, and time of each CPR meeting with the Recipient.
   These meetings generally take place at the CEC, but they may take place at another location or remotely.
- Send the Recipient the agenda and a list of expected participants in advance of each CPR. If applicable, the agenda shall include a discussion on both match funding and permits.
- Conduct and make a record of each CPR meeting. Prepare a schedule for providing the written determination described below.
- Determine whether to continue the project, and if continuing, whether or not
  modifications are needed to the tasks, schedule, products, and/or budget for the
  remainder of the Agreement. Modifications to the Agreement may require a
  formal amendment (please see section 8 of the Terms and Conditions). If the
  CAM concludes that satisfactory progress is not being made, this conclusion will
  be referred to the Lead Commissioner for Transportation for his or her
  concurrence.
- Provide the Recipient with a written determination in accordance with the schedule. The written response may include a requirement for the Recipient to revise one or more product(s) that were included in the CPR.

#### The Recipient shall:

- Prepare a CPR Report for each CPR that discusses the progress of the
  Agreement toward achieving its goals and objectives. This report shall include
  recommendations and conclusions regarding continued work of the projects.
  This report shall be submitted along with any other products identified in this
  scope of work. The Recipient shall submit these documents to the CAM and any
  other designated reviewers at least 15 working days in advance of each CPR
  meeting.
- Present the required information at each CPR meeting and participate in a discussion about the Agreement.

#### **CAM Products:**

- Agenda and a list of expected participants
- Schedule for written determination
- Written determination

#### **Recipient Product:**

• CPR Report(s)

#### Task 1.3 Final Meeting

The goal of this task is to closeout this Agreement.

#### The Recipient shall:

Meet with CEC staff to present the findings, conclusions, and recommendations.
 The final meeting must be completed during the closeout of this Agreement.

This meeting will be attended by, at a minimum, the Recipient and the CAM. The technical and administrative aspects of Agreement closeout will be discussed at the meeting, which may be two separate meetings at the discretion of the CAM.

The technical portion of the meeting shall present an assessment of the degree to which project and task goals and objectives were achieved, findings, conclusions, recommended next steps (if any) for the Agreement, and recommendations for improvements. The CAM will determine the appropriate meeting participants.

The administrative portion of the meeting shall be a discussion with the CAM about the following Agreement closeout items:

- What to do with any equipment purchased with CEC funds (Options)
- CEC request for specific "generated" data (not already provided in Agreement products)
- Need to document Recipient's disclosure of "subject inventions" developed under the Agreement, if applicable
- "Surviving" Agreement provisions
- Final invoicing and release of retention
- Prepare a schedule for completing the closeout activities for this Agreement.

#### **Products:**

- Written documentation of meeting agreements
- Schedule for completing closeout activities

#### **Task 1.4 Monthly Calls**

The goal of this task is to have calls at least monthly between 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 the next reporting period, 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, 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:

- Review the questions provided by CAM prior to the monthly call
- Provide verbal answers to the CAM during the call.

#### **Product:**

Email to CAM concurring with call summary notes.

#### **Task 1.5 Quarterly Progress Reports**

The goal of this task is to periodically 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 summarize activities performed during the reporting period, to identify activities planned for the next reporting period, to identify issues that may affect performance and expenditures, and to form the basis for determining whether invoices are consistent with work performed.

## The Recipient shall:

Prepare a Quarterly Progress Report which summarizes all Agreement activities conducted by the Recipient for the reporting period, including an assessment of the ability to complete the Agreement within the current budget and any anticipated cost overruns. Progress reports are due to the CAM the 10<sup>th</sup> day of each January, April, July, and October. The Quarterly Progress Report template can be found on the ECAMS Resources webpage available at <a href="https://www.energy.ca.gov/media/4691">https://www.energy.ca.gov/media/4691</a>.

#### **Product:**

Quarterly Progress Reports

#### **Task 1.6 Final Report**

The goal of the Final Report is to assess the project's success in achieving the Agreement's goals and objectives, advancing science and technology, and providing energy-related and other benefits to California.

The objectives of the Final Report are to clearly and completely describe the project's purpose, approach, activities performed, results, and advancements in science and technology; to present a public assessment of the success of the project as measured by the degree to which goals and objectives were achieved; to make insightful observations based on results obtained; to draw conclusions; and to make recommendations for further projects and improvements to the FTD project management processes.

The Final Report shall be a public document and is limited to 25-pages. If the Recipient has obtained confidential status from the CEC and will be preparing a confidential version of the Final Report as well, the Recipient shall perform the following activities for both the public and confidential versions of the Final Report.

In addition to any other applicable requirements, the Final Report must comply with the Americans with Disabilities Act (ADA) of 1990 (42 U.S.C. 12101 et seq.), which prohibits discrimination on the basis of disability; all applicable regulations and guidelines issued pursuant to the ADA; Cal. Gov. Code sects. 7405 and 11135; and Web Content Accessibility Guidelines 2.0, or a subsequent version, as published by the Web Accessibility Initiative of the World Wide Web Consortium at a minimum Level AA success criteria.

#### The Recipient shall:

- Prepare an Outline of the Final Report, if requested by the CAM.
- Prepare a *Draft Final Report* complying with ADA requirements and following the latest version of the Final Report guidelines which will be provided by the CAM. The CAM shall provide written comments on the Draft Final Report within fifteen (15) working days of receipt. The Final Report must be completed at least 60 days before the end of the Agreement Term.
- Submit *Final Report* in Microsoft Word format or similar electronic format as approved by the CAM.

#### **Products:**

- Outline of the Final Report, if requested
- Draft Final Report
- Final Report

#### Task 1.7 Identify and Obtain Matching Funds

The goal of this task is to ensure that the match funds planned for this Agreement are obtained for and applied to this Agreement during the term of this Agreement.

The costs to obtain and document match fund commitments are not reimbursable through this Agreement. Although the CEC budget for this task will be zero dollars, the Recipient may utilize match funds for this task. Match funds must be identified in writing and the associated commitments obtained before the Recipient can incur any costs for which the Recipient will request reimbursement.

#### The Recipient shall:

- Prepare a letter documenting the match funding committed to this Agreement and submit it to the CAM at least 2 working days prior to the kick-off meeting. If no match funds were part of the proposal that led to the CEC awarding this Agreement and none have been identified at the time this Agreement starts, then state such in the letter. If match funds were a part of the proposal that led to the CEC awarding this Agreement, then provide in the letter a list of the match funds that identifies the:
  - Amount of each cash match fund, its source, including a contact name, address and telephone number and the task(s) to which the match funds will be applied.
  - Amount of each in-kind contribution, a description, documented market or book value, and its source, including a contact name, address and telephone number 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 shall identify its owner and provide a contact name, address and telephone number, and the address where the property is located.
- Provide a copy of the letter of commitment from an authorized representative of each source of cash match funding or in-kind contributions that these funds or contributions have been secured. For match funds provided by a grant a copy of the executed grant shall be submitted in place of a letter of commitment.
- Discuss match funds and the implications to the Agreement if they are reduced or not obtained as committed, at the kick-off meeting. If applicable, match funds will be included as a line item in the progress reports and will be a topic at CPR meetings.
- Provide the appropriate information to the CAM if during the course of the Agreement additional match funds are received.
- Notify the CAM within 10 days if during the course of the Agreement existing match funds are reduced. Reduction in match funds must be approved through a formal amendment to the Agreement and may trigger an additional CPR meeting.

#### **Products:**

- A letter regarding match funds or stating that no match funds are provided
- Copy(ies) of each match fund commitment letter(s) (if applicable)
- Letter(s) for new match funds (if applicable)
- Letter that match funds were reduced (if applicable)

#### Task 1.8 Identify and Obtain Required Permits

The goal of this task 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. Although the CEC budget for this task will be zero dollars, the Recipient may budget match funds for any expected expenditures associated with obtaining permits. Permits must be identified in writing and obtained before the Recipient can make any expenditure for which a permit is required.

#### The Recipient shall:

- Prepare a letter documenting the permits required to conduct this Agreement and submit it to the CAM at least 2 working days prior to the kick-off meeting. If there are no permits required at the start of this Agreement, then state such in the letter. If it is known at the beginning of the Agreement that permits will be required during the course of the Agreement, provide in the letter:
  - A list of the permits that identifies the:
    - Type of permit
    - Name, address and telephone number of the permitting jurisdictions or lead agencies
  - The schedule the Recipient will follow in applying for and obtaining these permits.
- Discuss the list of permits and the schedule for obtaining them at the kick-off
  meeting and develop a timetable for submitting the updated list, schedule and the
  copies of the permits. The implications to the Agreement 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 the Progress Reports and will be a topic
  at CPR meetings.
- If during the course of the Agreement additional permits become necessary, provide the appropriate information on each permit and an updated schedule to the CAM.
- As permits are obtained, send a copy of each approved permit to the CAM.
- If during the course of the Agreement permits are not obtained on time or are denied, notify the CAM within 5 working days. Either of these events may trigger an additional CPR.

#### **Products:**

- Letter documenting the permits or stating that no permits are required
- A copy of each approved permit (if applicable)
- Updated list of permits as they change during the term of the Agreement (if applicable)
- Updated schedule for acquiring permits as changes occur during the term of the Agreement (if applicable)
- A copy of each final approved permit (if applicable)

#### **Task 1.9 Obtain and Execute Subawards**

The goal of this task is to ensure quality products and to procure subrecipients required to carry out the tasks under this Agreement consistent with the Agreement Terms and Conditions and the Recipient's own procurement policies and procedures.

#### The Recipient shall:

- Manage and coordinate subrecipient activities.
- Submit a *letter* to the CAM describing the subawards needed or stating that no subawards are required.
- If requested by the CAM, submit a *draft of each subaward* required to conduct the work under this Agreement to the CAM for review.
- If requested by the CAM, submit a final copy of each executed subaward.
- If Recipient intends to add new subrecipients or change subrecipients, then the Recipient shall notify the CAM.

#### **Products:**

- Letter describing the subawards needed, or stating that no subawards are required
- Draft subaward (if requested)
- Final subaward (if requested)

#### **TECHNICAL TASKS**

## TASK 2 ELECTRIC VEHICLE INFRASTRUCTURE TRAINING PROGRAM (EVITP) CERTIFICATION

The goal of this task is to comply with Assembly Bill (AB) 841 certification requirements at each of the three project sites.

#### The Recipient shall:

- Submit an AB 841 Certification that certifies the project has complied with all AB 841 (2020) requirements specified in the Agreement Terms and Conditions or describes why the AB 841 requirements do not apply to the project. The certification shall be signed by Recipient's authorized representative.
- Submit EVITP Certification Numbers of each Electric Vehicle Infrastructure
   Training Program certified electrician that installed electric vehicle charging
   infrastructure or equipment. EVITP Certification Numbers are not required to be
   submitted if AB 841 requirements do not apply to the project.

#### Products:

- AB 841 Certification at Each Project Site (Fresno, Oakland, Stockton)
- EVITP Certification Numbers for Each Project Site (Fresno, Oakland, Stockton)

# TASK 3 INFRASTRUCTURE PLANNING, DESIGN, ENGINEERING & PERMITTING TASK 3.1 CIVIL AND ENGINEERING DESIGN

The goal of this task is to engage in overarching civil and engineering design to create a detailed project master plan and schedule that embodies all major technical design issues and identifies a preliminary solution to each design decision.

#### The Recipient shall:

- Prepare engineering design drawings and plans for each project site. These
  plans shall include but are not limited to a grading plan, trench and conduits,
  paving plan, and structural design for equipment housing.
- Provide a copy of the *Stamped Civil and Architectural Engineering Design Drawings* for Each Project Site (Fresno, Oakland, Stockton) to the CAM.

#### **Products:**

 Stamped Civil and Architectural Engineering Design Drawings for Each Project Site (Fresno, Oakland, Stockton)

#### **TASK 3.2 ELECTRICAL ENGINEERING DESIGN**

The goal of this task is to complete electrical design of all AC medium voltage and DC voltage cabling and equipment through stamped construction drawings.

## The Recipient Shall:

- Prepare electrical engineering design and construction drawings. These designs and drawings shall include but are not limited to MV switchgear specifications, AC and DC cable sizing, and utility and customer side equipment and cabling.
- Provide a copy of the Stamped Electrical Engineering Drawings for Each Project Site (Fresno, Oakland, Stockton) to the CAM.

#### **Products:**

 Stamped Electrical Engineering Drawings for Each Project Site (Fresno, Oakland, Stockton)

#### TASK 3.3 UTILITY ENGAGEMENT AND GRID INTERCONNECTION

The goal of this task is to establish interconnection with the utility (PG&E) for each project site.

## The Recipient shall:

- Coordinate with PG&E to establish electrical service agreements, complete infrastructure upgrades as needed, and establish grid interconnection.
- Provide *written notification* of completion of site plans and engineering documents to the CAM.
- Provide written notification of execution of electrical service agreements to the CAM.
- Provide *written notification* of completion of infrastructure upgrades, and establishment of grid interconnection to the CAM.

#### **Products:**

- Written notification of completion of site plans and engineering documents
- Written notification of execution of electrical service agreements
- Written notification of completion of infrastructure upgrades, and establishment of grid interconnection

#### **TASK 4 PROCUREMENT & EXECUTION**

#### **TASK 4.1 EVSE EQUIPMENT ORDER**

The goal of this task is to procure and obtain all equipment, supplies, and services to support the installation of seventy (70) CCS 240 kW dispensers and fourteen (14) 1200 kW MCS dispensers.

#### The Recipient shall:

- Engage in final EVSE equipment specification discussions.
- Develop and execute EVSE Equipment Procurement Plan. This plan will include, but is not limited to:
  - o Complete list of EVSE equipment procurements necessary for the project;
  - Procedures, steps, and timelines that will be followed to acquire them for the project.
- Provide a copy of the EVSE Equipment Procurement Plan to the CAM. CAM written approval to proceed with procurement is required.

#### **Products:**

 EVSE Equipment Procurement Plan for Each Project Site (Fresno, Oakland, Stockton), if ordered separately

#### TASK 4.2 SWITCHGEAR AND GRID INTERFACE EQUIPMENT ORDER

The goal of this task is to procure all switchgear and isolation switch equipment for grid interface. This will first be done through a procurement process to select a qualified vendor.

#### The Recipient Shall:

- Engage in final switchgear and grid interface equipment specification discussions.
- Develop and execute Switchgear and Grid Interface Equipment Procurement Plan. This plan will include, but is not limited to:
  - Complete list of switchgear and grid interface equipment procurements necessary for the project;
  - Procedures, steps, and timelines that will be followed to acquire them for the project.
- Provide a copy of the *Switchgear and Grid Interface Equipment Procurement Plan* to the CAM. CAM written approval to proceed with procurement is required.

#### **Products:**

• Switchgear and Grid Interface Equipment Procurement Plan for Each Project Site (Fresno, Oakland, Stockton), if ordered separately

#### TASK 4.3 SWITCHGEAR METAL STRUCTURE ORDER

The goal of this task is to procure a metal structure building to house the switchgear. This will first be done through a procurement process to select a qualified vendor.

#### The Recipient Shall:

- Engage in final switchgear metal structure specification discussions.
- Develop and execute Switchgear Metal Structure Procurement Plan. This plan will include, but is not limited to:
  - Complete list of switchgear metal structure procurements necessary for the project;
  - Procedures, steps, and timelines that will be followed to acquire them for the project.
- Provide a copy of the *Switchgear Metal Structure Procurement Plan* to the CAM. CAM written approval to proceed with procurement is required.

#### **Products:**

 Switchgear Metal Structure Procurement Plan for Each Project Site (Fresno, Oakland, Stockton), if ordered separately.

## [CPR WILL BE HELD IN THIS TASK, see Task 1.2 for details]

#### **TASK 5 CIVIL WORKS & INSTALLATION**

#### TASK 5.1 GRADING AND CIVIL WORKS

The goal of this task is to complete all grading work for the equipment at each site. This includes leveling the site and creating the electrical pad.

#### The Recipient Shall:

- Complete all paving and electrical pad construction to enable equipment delivery and installation.
- Provide *photos* of completed site construction for pavement and electrical pad work at each project site to the CAM.

#### **Products:**

 Photo Documentation of Site Construction for Pavement and Electrical Pad Work at Each Project Site (Fresno, Oakland, Stockton)

#### **TASK 5.2 SWITCHGEAR ROOM FABRICATION**

The goal of this task is to complete all housing for the electrical switchgear at each project site.

#### The Recipient Shall:

- Complete metal fabricated shell for housing all electrical switchgear at each project site.
- Provide photos of finished structure housing for electrical switchgear at each project site to the CAM.

#### **Products:**

 Photo Documentation of Finished Structure Housing for Electrical Switchgear at Each Project Site (Fresno, Oakland, Stockton)

#### TASK 5.3 EQUIPMENT DELIVERY TO PROJECT SITES

The goal of this task is to take possession of all equipment, including charging hardware, switchgears, and other electrical equipment and hardware to complete charging installations.

#### The Recipient Shall:

- Arrange for delivery of all project equipment to the project site, including charging hardware, switchgears, and other electrical equipment and hardware.
- Inspect equipment upon delivery.
- Issue acceptance order of equipment upon delivery.
- Provide photos of equipment delivery at each project site to the CAM.

#### **Products:**

 Photo Documentation of Equipment Delivery at Each Project Site (Fresno, Oakland, Stockton)

#### **TASK 5.4 ELECTRICAL WORK**

The goal of this task is to complete all electrical work to prepare for charger installation and commissioning. This includes conduit wiring and installation of MV equipment on utility and customer side.

#### The Recipient Shall:

- Complete all electrical work, including conduit wiring and access to utility grade and installation of MV switchgear.
- Inspect all final completed electrical work.
- Provide *Documentation for Final Inspection of Completed Electrical Work* at each project site to the CAM.

#### **Products:**

 Documentation for Final Inspection of Completed Electrical Work at Each Project Site (Fresno, Oakland, Stockton)

#### TASK 5.5 INSTALLATION AND COMMISSIONING

The goal of this task is to install and commission all the charging equipment.

#### The Recipient Shall:

- Complete all installation of charging hardware.
- Prepare Commissioning Report for each project site, which will include but not be limited to:
  - Acceptance Test Plan for each piece of charging equipment
  - Tests to verify acceptance that charging equipment meets specifications
  - Verification with vehicle manufacturers that charging equipment is supporting vehicle technology
- Provide a copy of the Commissioning Report for each project site to the CAM.
- Finalize hardware commissioning with electrical contractor.
- Provide photo documentation of site installations at each project site to the CAM.

#### **Products:**

- Commissioning Report for Each Project Site (Fresno, Oakland, Stockton)
- Photo Documentation of Site Installations at Each Project Site (Fresno, Oakland, Stockton)

## [CPR WILL BE HELD IN THIS TASK, see Task 1.2 for details]

#### TASK 6 OPERATIONS AND RELIABILITY

Recipients shall comply with the reliability performance standards, recordkeeping, reporting, and maintenance requirements (Requirements) for EV chargers installed as part of this Agreement. In the event the CEC adopts regulations that include Requirements, for example as required by AB 2061 (Ting, Chapter 345, Statutes of 2022) and/or AB 126 (Reyes, Chapter 319, Statutes of 2023), those Requirements shall supersede the Requirements contained in this Scope of Work for this Agreement wherever, as determined by the CAM, they conflict or are redundant.

#### Task 6.1 Operations

#### The Recipient shall:

- Operate the installed charging ports during the term of this Agreement.
- Ensure that the charging port uptime for each charging port installed in the project is at least 97 percent of each year for six years after the beginning of operation.

Without limitation to other rights and remedies which the CEC may have, including but not limited to survival provisions specified in the Terms and Conditions of this Agreement, this requirement to ensure operationality for six years after the beginning of operation shall survive the completion or termination date of this Agreement. In addition to other requirements in the Terms and Conditions of this agreement, all CEC-reimbursable expenditures must be incurred within the Agreement term.

#### Task 6.2 Recordkeeping

The goal of this task is to collect, maintain, and transmit records of charging port operation and reliability to the CEC.

For networked chargers, the Recipient shall collect and retain the maintenance records specified in this section. The Recipient shall retain the services of a charging network provider that meets the criteria in 1. through 4. to record, retain, and transmit the Remote Monitoring data specified in this section.

- 1. The charging network provider must have an API of the CEC's choosing to permit the charging network provider to transfer the data required in this section directly to the CEC or the CEC's designee within 60 minutes of the record's generation.
- 2. The charging network provider must have Subset Certification of the Charging Station Management System in the Open Charge Alliance OCPP Certification Program for OCPP version 2.0.1, published May 24, 2023, or a subsequent version of OCPP for Core, Advanced Security, and ISO 15118 Support functionalities.
- 3. For networked chargers, the charging network provider's central system must have connection to the chargers using OCPP version 2.0.1 or a subsequent version of OCPP. This does not preclude the additional use of other communication protocols.

- 4. For networked chargers, the charging network provider and chargers must transmit the following protocol data units between the Central Management System and the charger(s) as specified in OCPP version 2.0.1 or a subsequent version of OCPP:
  - a. HeartbeatRequest shall be transmitted to the Central Management System by the charger on a set interval.
  - b. HeartbeatResponse shall be transmitted to the charger by the Central Management System in response to any received HeartbeatResponse.
  - c. StatusNotificationRequest shall be transmitted by the charger to the Central Management System any time the charger or an associated charging port's operative status changes.
  - d. BootNotificationRequest shall be transmitted by the charger to the Central Management System any time the charger is powered on.
  - e. BootNotificationResponse shall be transmitted by the Central Management System to the charger in response to any received BootNotificationRequest.

#### The Recipient Shall:

- For networked chargers, ensure the charging network provider collects and retains the Remote Monitoring data below from each charging port installed and operated as part of this Agreement.
- For networked chargers, ensure the charging network provider automatically transmits the Remote Monitoring data below to the CEC, via API, within 60 minutes of the Remote Monitoring data's generation.
- For networked chargers, ensure the charging network provider retains the Remote Monitoring data below for 2 years from the date of each record's generation. Provide Remote Monitoring records to the CEC within 10 business days of request.
  - 1. Provide digital records in a comma separated values file unless another file format is approved by the CEC for the request.
  - 2. Provide a clear and understandable Data Dictionary that describes each data element and any associated units with all digital records.
- For all chargers, collect and retain the maintenance records specified below for each charging port installed and operated as part of this Agreement for 6 years from the date the charging port begins operation. Provide Maintenance Records to the CEC within 10 business days of request.

#### **Remote Monitoring Data**

- 1. All instances of the following Protocol Data Units, specified in OCPP 2.0.1, that are transmitted between the charger and the central system.
  - a. HeartbeatResponse
  - b. StatusNotificationRequest
  - c. BootNotificationRequest
- 2. The total number of charge attempts for the reporting period.

- 3. The total number of successful charging sessions for the reporting period.
- 4. The total number of failed charging sessions for the reporting period.
- 5. The percentage of successful charging sessions for the reporting period relative to the total number of charge attempts for the reporting period.

#### Maintenance Records

- 1. For all chargers, reports of inoperative charging ports or charging port failures resulting in inability to charge, such as a customer complaint, internal diagnostics, or inspection.
- 2. For all chargers, records of any maintenance conducted on charging ports installed and operated as part of the agreement. Records should specify the following:
  - a. Date and time of the maintenance event
  - b. Whether maintenance was corrective or preventive in nature
  - c. Whether and for how long the charging port was in an inoperative state prior to maintenance.
  - d. Whether the charging port was in an operative state following maintenance

#### **Products:**

- Remote Monitoring Records
- Maintenance Records
- Data Dictionary

#### **Task 6.3 Maintenance Requirements**

The goal of this task is to increase reliability through timely and effective preventive and corrective maintenance. The Recipient shall conduct maintenance on each charger installed and operated as part of the Agreement as specified in this section.

#### The Recipient Shall:

- Conduct preventive maintenance, as specified by the charger manufacturer, on the charger hardware by a certified technician annually. The time interval between consecutive preventive maintenance visits to any charger shall be no more than 13 months.
- Complete corrective maintenance within 5 business days of the beginning of a time when the charger is inoperative or exhibiting failures that result in an inability to charge.
- Report on preventive and corrective maintenance in each Quarterly Report on Charger and Charging Port Reliability and Maintenance described in Task 6.4

#### **Products:**

 Maintenance section of Quarterly Report on Charger and Charging Port Reliability and Maintenance described in Task 6.4

#### Task 6.4 Reporting

The goal of this task is to provide the CEC reports on charger reliability and maintenance.

#### The Recipient shall:

- Prepare and submit to the CEC Quarterly Reports on Charger and Charging Port Reliability and Maintenance. Each report shall include: A summary of charging port downtime, including total downtime and the number and frequency of downtime events, the minimum, median, mean, and maximum duration, and the causes of downtime events during the reporting period. Downtime shall be determined on a per charging port basis by summing the durations of all downtime events during the reporting period. The duration of a downtime event shall be the longest of the following periods:
  - 1. For networked charging ports, the time after the charger has transmitted a StatusNotificationRequest indicating that the charging port associated with that charger is in a "faulted" or "unavailable" state until a subsequent StatusNotificationRequest is transmitted by that charger indicating that the charging port has transitioned to an "available," "occupied," or "reserved" state. The timestamps in each StatusNotificationRequest shall be used to quantify downtime.
  - For networked chargers, the time between a BootNotificationResponse transmitted by the Central Management System and the last HeartbeatResponse transmitted by the Central Management System prior to the BootNotificationResponse. The timestamps in the relevant BootNotificationResponse and HeartbeatResponse shall be used to quantify downtime.
  - 3. For all charging ports, the time between the earliest record that a charging port is not capable of successfully dispensing electricity or otherwise not functioning as designed and the time it is available to deliver a charge. First record that a charger is not capable of successfully dispensing electricity or otherwise not functioning as designed includes, but is not limited to, consumer notification, internal diagnostics, or inspection, whichever is earliest.
- Prepare and submit to the CEC a summary of Excluded Downtime, including total excluded downtime and the number and frequency of excluded downtime events, the minimum, median, mean, and maximum duration, and the causes of excluded downtime events each Quarterly Report on Charger and Charging Port Reliability and Maintenance. 'Excluded Downtime' includes:
  - 1. **Before Initial Installation:** Downtime before the charging port was initially installed.
  - 2. **Grid Power Loss:** Downtime during which power supplied by a third-party provider is not supplied at levels required for minimum function of the charging port. This may include, but is not limited to, service outages due to utility equipment malfunction or public safety power shutoffs. This does not include power generation or storage equipment installed to serve the charger(s) exclusively. Documentation from power provider detailing outage is required to claim this as excluded downtime.
  - 3. **Vehicle Fault:** Any failure to charge or failure to meet the EV charging customer's expectation for power delivery due to the fault of the vehicle.

- 4. **Outage for Preventive Maintenance or Upgrade:** Downtime caused by any preventive maintenance or upgrade work that takes the charging port offline. This must be scheduled at least two weeks in advance of the charger being placed in an inoperative state. The maximum downtime that can be excluded for preventive maintenance or upgrade work is 24 hours for any 12-month period.
- 5. Vandalism or Theft: Downtime caused by any physical damage to the charger or station committed by a third party. This may include, but is not limited to, theft of charging cables, damage to connectors from mishandling, or damage to screens. A maximum of 5 days may be claimed as excluded downtime for each Vandalism or Theft event. A police report or similar third-party documentation is required to claim this as excluded time.
- 6. **Natural Disasters:** Downtime caused by any disruption of the charging port due to a natural event such as a flood, earthquake, or wildfire that causes great damage. Third party documentation such as news reporting must be provided along with a narrative of the direct impacts to the charger(s) to claim this as excluded downtime.
- 7. **Communication Network Outages:** Downtime caused by loss of communication due to cellular or internet service provider system outages. A Communication Network Outage can be claimed as excluded downtime provided the chargers default to a free charge state during communication losses. A free charge state is when the charger is operational and dispenses energy free of charge to any consumer.
- 8. **Operating Hours:** Hours in which the charging port is in an operative state but that are outside of the identified hours of operation of the charging station.
- For all charging ports, prepare a summary and calculation of uptime and include in each Quarterly Report on Charger and Charging Port Reliability and Maintenance. Each report shall include the uptime percentage of each charging port (Uptime) installed and operated as part of this Agreement for the reporting period. Charging port uptime shall be calculated as:

$$U = \frac{T - D + E}{T} * 100\%$$

U = Charging Port Uptime

T =

- 1. Q1 reporting period = 129,600 minutes, except for a leap year, which is 131,040 minutes.
- 2. Q2 reporting period = 131,040 minutes.
- 3. Q3 and Q4 reporting periods = 132,480 minutes.

D = Total charging port downtime for the reporting period, in minutes.

E = Total charging port excluded downtime in the reporting period, in minutes.

- For networked charging ports, prepare a summary of charge data and include in each Quarterly Report on Charger and Charging Port Reliability and Maintenance. The data will include:
  - a. Total number of charge attempts in the reporting period
  - b. Total number of successful charge attempts in the reporting period
  - c. Total number of failed charges in the reporting period
  - d. The percentage of successful charging sessions for the reporting period relative to the total number of charge attempts for the reporting period
  - e. A description of steps taken to reduce the number of failed charge attempts, and the success rate of those steps
- For all chargers, prepare a summary of the total number of maintenance dispatch
  events that occurred since the last report, the number of days to complete each
  maintenance event reported, and a narrative description of significant
  maintenance issues. Include details of all excluded downtime and a narrative
  description of events that caused the excluded downtime. Include the summary
  in each Quarterly Report on Charger and Charging Port Reliability and
  Maintenance.

#### **Products:**

 Quarterly Report on Charger and Charging Port Reliability and Maintenance, submitted in a manner specified by the CEC

#### **TASK 7 WORKFORCE PLAN**

## **Task 7.1 Workforce Plan Development**

The goal of this task is to develop a Workforce Plan.

#### The Recipient shall:

- Develop a Workforce Plan that includes, but is not limited to:
  - Outreach and engagement efforts aimed at job recruitment, jobplacement strategies, and local hiring especially from those facing employment barriers and residents from disadvantaged and/or lowincome communities and individuals whose income is below poverty.
  - Recruitment of pre-apprentices from Division of Apprenticeship Standards (DAS) approved pre-apprenticeship programs.
  - Number of direct and indirect jobs by the proposed project with calculations and assumptions.

- Support job quality by providing estimated total number of workers to be trained and/or hired; job classifications or titles; job classifications' specific role(s) in the project; wage rates and benefits; share of jobs that are short-duration positions (less than 12 months) and long-term positions (12 months or more).
- Promote training and upward mobility including benefits to workers from disadvantaged and/or low-income communities, provide an estimate of the number of training hours during the project, and identify workforce training partnerships with local community-based organizations, workforce development boards, and high road training partnerships which can include State-approved Joint Apprenticeship Training Programs.
- How job training, placement and employment will lead to careers with living wages, health care, and other benefits.
- Experience respecting and implementing labor laws including workers right to organize.
- Provide a copy of the Workforce Plan to the CAM.

#### **Products:**

Workforce Plan

#### **Task 7.2 Workforce Plan Implementation**

#### The Recipient shall:

- Implement finalized Workforce Plan through:
  - Outreach and engagement with the community and stakeholders; partnerships with agencies for job recruitment, hiring and placement; job quality; fair wages and benefits; partnerships for job training and career growth opportunities; and specific efforts towards addressing the needs of priority populations, disadvantaged communities (DACs) and low-income communities (LICs) that face barriers to employment and require specific pathways to assist in the transition from education to training to clean transportation jobs.
  - O Partnership with community-based organizations, non-profit organizations, hiring agencies, local businesses, officials from Fresno, San Joaquin, and Alameda Counties, and communications firms to assist impactful community engagement and workforce outreach in the communities benefiting from the project sites, with a priority on hiring individuals that are facing employment barriers, residents from DACs and LICs, and individuals whose income is below poverty.
  - Provide essential training, career advancement, educational and upward mobility opportunities, and benefits to its workforce from DAC and LIC and priority populations facing numerous barriers of socioeconomic factors including unemployment, poverty, education disparities and linguistic isolation.
- Prepare a Workforce Implementation Report, summarizing the actions taken to implement the Workforce Plan.

#### **Products:**

Workforce Implementation Report

#### TASK 8 MARKETING & COMMUNITY OUTREACH

The goal of this task is to develop a marketing and outreach plan to best showcase the impact of the project on local communities. This will be done through the support of project partner Valley CAN, who will develop and deploy a community outreach plan to surrounding communities of Fresno, Stockton, and Oakland. WattEV will also provide updates towards the commissioning and operations of all three (3) sites.

#### The Recipient Shall:

- Engage in dedicated fleet outreach marketing to enable offtake agreements and overall fleet awareness.
- Issue press releases and enable media coverage for all three sites for the following:
  - Site groundbreaking
  - Opening / ribbon cutting event
- Provide copy of the press releases to the CAM.
- Design and launch a website on the charging facility and larger charging network.
- Provide the website design layout to the CAM.
- Design and publish marketing collateral on the project.
- Hold ribbon cutting events.
- Conduct EVITP Education Impact Analysis, including class size and graduation figures for EVITP programs supported.
- Monitor public messaging and produce a Final Community Report summarizing public engagement and feedback given during the project period(s).

#### **Products:**

- Press releases for site groundbreaking
- Press releases for opening/ribbon cutting
- Website design layout
- EVITP Education Impact Analysis
- Final Community Report

#### Task 9 SEMI-ANNUAL ELECTRIC VEHICLE CHARGER INVENTORY REPORTS

The goal of this task is to provide information on the number of chargers in the Recipient's charging network in California, including both public and shared private, serving all vehicle sectors (light-, medium-, and heavy duty) excluding any charger used solely for private use at a single-family residence or a multifamily housing unit with four or fewer units.

## The Recipient shall:

• Prepare an *Electric Vehicle Charger Inventory Report* in a template provided by the CAM that includes:

- For chargers serving light-duty electric vehicles:
  - Number of public AC charging ports aggregated at the county level by charging network provider
  - Number of shared private AC charging ports aggregated at the county level by charging network provider
  - Number of public DC fast charging ports aggregated at the county level by charging network provider
  - Number of shared private DC fast charging ports aggregated at the county level by charging network provider
- For chargers serving medium- and/or heavy-duty vehicles:
  - Number of public AC charging ports aggregated at the county level by charging network provider
  - Number of shared private AC charging ports aggregated at the county level by charging network provider
  - Number of public DC fast charging ports aggregated at the county level by charging network provider
- Number of shared private DC fast charging ports aggregated at the county level by charging network provider
- Number of other publicly available charging ports at the county level by charging network provider
- Number of other depot charging ports by power output (less than 50 kilowatts (kW), between 50kW to 150kW,150kW to 350kW, 350kW and above) at the county level by charging network provider (if applicable)
- Submit the *Electric Vehicle Charger Inventory Report* to the CAM no later than 30 calendar days after the Agreement is executed and then each calendar half-year thereafter. Reports are due at the end of July and end of January.

#### **Recipient Product:**

Electric Vehicle Charger Inventory Report

#### **TASK 10 DATA COLLECTION AND ANALYSIS**

The goal of this task is to collect operational data from the project and to analyze that data for economic and environmental impacts.

#### The Recipient shall:

- For all electric vehicle chargers and charging stations installed on or after January 1, 2024:
  - Comply with recordkeeping and reporting standards as described in CEC's regulations. These requirements are not applicable to those electric vehicle chargers and charging stations installed at residential real property containing four or fewer dwelling units.
  - Comply with all industry best practices and charger technology capabilities that are demonstrated to increase reliability, as described in CEC's regulations.

- Without limitation to other requirements in this Agreement, Recipient shall comply with any other regulatory requirements, including but not limited to uptime requirements and operation and reliability requirements. Such regulatory requirements may, but will not necessarily, be enacted after execution of this Agreement. Once regulations are final, they will apply to work under this Agreement irrespective of when finalized. Any updates to regulations may also be applicable to work under this Agreement.
- o If the Recipient is an electric vehicle service provider or other third-party entity that is not the site host, the electric vehicle service provider or third-party entity shall provide a disclosure to the site host about the site host's right to designate the service provider or third-party as the entity to report the data on behalf of the site host. The Recipient shall verify receipt by signing the disclosure.
- Once charging station becomes operational, submit to the CAM an *Open Retail Attestation Form* within 5 business days.
- Collect and report to the CEC:
  - For an electric vehicle charging station, the availability of operational charging plugs, whether the station was energized, the volume of electricity in kilowatt-hours used to charge by vehicles, the number of vehicles charged by a station, and any other data deemed necessary by the CEC to monitor reliability and accessibility of the charging infrastructure. This data shall be measured no less frequently than on a daily basis and reported electronically to the CEC no less frequently than quarterly in AB 126 Data Reports submitted with the quarterly reports described in Task 1.5.
  - For an electric vehicle charging station, the source and greenhouse gas emissions intensity, on an annual basis, of the electricity used and dispensed by the EV charging station(s) at the meter, consistent with the disclosure methodology set forth in Article 14 (commencing with Section 398.1) of Chapter 2.3 of Part 1 of Division 1 of the Public Utilities Code. Data must be reported to the CEC annually in an AB 126 Data Report specified by the CAM.
- Collect and provide the following data:
  - Number, type, date, and location of chargers installed.
  - Nameplate capacity of the installed equipment, in kW for chargers.
  - Number and type of outlets per charger.
  - Location type, such as street, parking lot, hotel, restaurant or shopping center, existing retail gasoline station, etc.
  - Total cost per charger, the subsidy from the CEC per charger, federal subsidy per charger, utility subsidy per charger, and privately funded share per charger.
- Identify and discuss the results of performance data measured and collected in the Workforce Plan.
- Collect and provide 12 months of throughput, usage, and operations data from the project including, but not limited to:

- Number of charging sessions
- Average charger downtime
- Peak power delivered (kW)
- Duration of active charging, hourly
- Duration of charging sessions, hourly (e.g., vehicle parked but not actively charging)
- Average session duration
- Energy delivered (kWh)
- Average kWh dispensed
- Types of vehicles using the charging equipment
- Applicable price for charging, including but not limited to: electric utility tariff, EVSP service contract, or public charger price
- Payment method for public charging
- Energy delivered back to grid or facility if a bidirectional charging use case (kWh)
- Normal operating hours, up time, downtime, and explanations of variations
- Gallons of gasoline and/or diesel fuel displaced (with associated mileage information)
- Expected air emissions reduction, for example:
  - Non-methane hydrocarbons
  - Oxides of nitrogen
  - Particulate Matter
  - Formaldehyde
- Identify any current and planned use of renewable energy at the facility.
- Provide data on potential job creation, economic development, and increased state revenue as a result of expected future expansion.
- Compare any project performance and expectations provided in the proposal to CEC with actual project performance and accomplishments.
- Collect and provide 12 months of throughput, usage, and operations data from the project including, but not limited to, for each session:

Category	Field	Desired Data Type
Sites	Site ID	Hash key
Sites	Site Name	Varchar
Sites	Site Type	Varchar
Sites	EVSP	Varchar

Sites       City       Varchar         Sites       State       Varchar         Sites       Zip       Varchar         Sites       Latitude       Decimal         Sites       Longitude       Decimal         Sites       Number of EVSEs       Varchar         Sites       Number of Ports       Varchar         EVSE       EVSE ID       Hash key         EVSE       EVSE Manufacturer       Varchar         EVSE       EVSE Manufacturer       Varchar         EVSE       EVSE Model Number       Varchar         EVSE       EVSE Maximum kW       Integer         EVSE       EVSE Number of Ports       Integer         EVSE       EVSE Power Level       Varchar         Ports       Port ID       Hash key         Ports       Port Maximum kW       Integer         Ports       Connector Type       Varchar         Sessions       Charge Duration       (HH:MM:SS)         Sessions       Charge Session Start Date       Date         Sessions       Charge Session End Date       Date         Sessions       Charge Session End Time       Time         Sessions       Connection Duration       (HH:MM	Sites	Street Address	Varchar
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Sessions	Driver ID	Hash key
Sessions	Vehicle Make, if known	Varchar
Sessions	Vehicle Model, if known	Varchar
Sessions	Vehicle Year, if known	Integer
Sessions	Vehicle Type, if known	Character

• Provide a *Data Collection and Information Analysis Report* that lists and analyzes all the data and information described above.

#### **Products:**

- Open Retail Attestation Form
- AB 126 Data Reports
- Data Collection Information and Analysis Draft Report
- Data Collection Information and Analysis Final Report

#### **TASK 11 PROJECT FACT SHEET**

The goal of this task is to develop an initial and final project fact sheet that describes the CECfunded project and the benefits resulting from the project for the public and key decision makers.

#### The Recipient shall:

- Prepare an *Initial Project Fact Sheet* at start of the project that describes the project and the expected benefits. Use the format provided by the CAM.
- Prepare a Final Project Fact Sheet at the project's conclusion that describes the project, the actual benefits resulting from the project, and lessons learned from implementing the project. Use the format provided by the CAM.
- Provide at least (6) six *High Quality Digital Photographs* (minimum resolution of 1300x500 pixels in landscape ratio) of pre and post technology installation at the project sites or related project photographs.

#### **Products:**

- Initial Project Fact Sheet
- Final Project Fact Sheet
- High Quality Digital Photographs