



**CALIFORNIA  
ENERGY COMMISSION**



**California Energy Commission  
February 11, 2026 Business Meeting  
Backup Materials for County of Monterey**

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

**[PROPOSED]**

**RESOLUTION NO: 26-0211-XX**

**STATE OF CALIFORNIA**

**STATE ENERGY RESOURCES  
CONSERVATION AND DEVELOPMENT COMMISSION**

**RESOLUTION: County of Monterey**

**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-25-009 with County of Monterey for a \$5,688,125 grant. This project will install 390 EV charging ports in paved parking lots at municipal facilities across the Monterey Bay area and four solar photovoltaic systems to support some of these chargers. This agreement is in coordination with a California Air Resources Board grant agreement that is funding the zero-emission vehicles; 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 February 11, 2026.

AYE:

NAY:

ABSENT:

ABSTAIN:

Dated:

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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:** ZVI-25-009

### B. Division Information

1. Division Name: Fuels and Transportation
2. Agreement Manager: Miki Crowell
3. MS-: Not applicable
4. Phone Number: 916-314-3159

### C. Recipient's Information

1. Recipient's Legal Name: County of Monterey

### D. Title of Project

Title of project: Monterey Bay Municipal Fleet Electrification and Workforce Accelerator

### E. Term and Amount

1. Start Date: 02/11/2026
2. End Date: 05/30/2028
3. Amount: \$5,688,125

### F. Business Meeting Information

1. Are the ARFVTP agreements \$75K and under delegated to Executive Director? No
2. The Proposed Business Meeting Date: 02-11-2026
3. Consent or Discussion? Consent
4. Business Meeting Presenter Name: Miki Crowell
5. Time Needed for Business Meeting: Not applicable
6. The email subscription topic is: Clean Transportation Program

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

County of Monterey. Proposed resolution approving agreement ZVI-25-009 with County of Monterey for a \$5,688,125 grant, and adopting staff's recommendation that this action is exempt from CEQA. This project will install 390 electric vehicle charging ports in paved parking lots at facilities across the Monterey Bay area and four (4) solar photovoltaic systems to support some of these chargers. This agreement is in coordination with a California Air Resources Board grant agreement that is funding the zero-emission vehicles. (General Fund Funding)  
Contact: Miki Crowell

### G. California Environmental Quality Act (CEQA) Compliance

1. Is Agreement considered a "Project" under CEQA?  
Yes
2. If Agreement is considered a "Project" under CEQA answer the following questions.
  - a) Agreement **IS** exempt?  
Yes



Statutory Exemption?

Yes

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: 14 CCR Section 15268

The proposed project is ministerial in nature involving the issuance of a building permit for the installation of electrical utilities infrastructure to support electric vehicle (EV) charger installation at existing municipal facilities. Under California Government Code section 65850.7(b) "a city, county, or city and county shall administratively approve an application to install electric vehicle charging stations through the issuance of a building permit or similar nondiscretionary permit." As such the proposed project is statutorily exempt from CEQA under 14 CCR section 15268 Ministerial Projects.

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: 14 CCR Sections 15301 and 15303

Cal. Code Regs., tit. 14, sec. 15301 provides that projects that consist of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of existing or former use, are categorically exempt from the provisions of CEQA. This project involves the installation of EV chargers and solar photovoltaic systems at existing municipal facilities that are previously disturbed. The EV chargers will be installed on existing paved parking lots and will involve negligible or no expansion of use. Therefore, the project falls within section 15301 and will not have a significant effect on the environment.

Cal. Code Regs., tit. 14, sec. 15303 provides that projects that 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 consists of the installation of new, small equipment to existing sites. In addition, the EV chargers will be installed at existing, paved parking spaces. The solar photovoltaic systems will be installed on canopy carports or on rooftops and will remain within previously disturbed municipal facility areas. Therefore, the project falls within section 15303 and will not have a significant effect on the environment.

Additionally, the project does not involve any unusual circumstances, will not result in damage to any scenic resources within a highway officially designated as a state scenic highway, none of the sites are 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. The project, when considered as a whole, will not result in a cumulative impact that is significant on the environment. Therefore, none of the exceptions to 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
City of Santa Cruz	\$1,007	\$130,000
Ecology Action of Santa Cruz	\$43,435	\$0

**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
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STATE OF CALIFORNIA  
CALIFORNIA ENERGY COMMISSION

Grant Request Form  
CEC-270 (Revised 01/2024)

To be determined (vendor)	\$70,760	\$0
Opterra Energy Services, LLC	\$130,000	\$9,440,884
To be determined (equipment vendors)	\$5,442,923	\$4,109,732

### 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
County of Santa Cruz
City of Watsonville
County of San Benito

### 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	21/22	601.211EO	\$5,688,125

**TOTAL Amount:** \$5,688,125

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: Deborah Paolinelli

Address: 168 W. Alisal, 3rd Fl.

City, State, Zip: Salinas, CA 93901

Phone: 831-755-5309

E-Mail: paolinelli@countyofmonterey.gov

#### 2. Recipient's Project Manager

Name: Cora Panturad

Address: 168 W. Alisal, 3rd Fl.

City, State, Zip: Salinas, CA 93901



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Phone: 831-755-5338

E-Mail: [panturadc@countyofmonterey.gov](mailto:panturadc@countyofmonterey.gov)

Grant Request Form  
CEC-270 (Revised 01/2024)

#### N. Selection Process Used

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

Selection Process	Additional Information
Competitive Solicitation #	SOL-2404-363
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:** Miki Crowell

**Approval Date:** 12/8/2025

**Office Manager:** Elizabeth John

**Approval Date:** 12/10/2025

**Deputy Director:** Melanie Vail

**Approval Date:** 12/23/2025

## EXHIBIT A SCOPE OF WORK

### TECHNICAL TASK LIST

Task #	CPR	Task Name
1		Administration (CARB/CEC Task)
2		Project Management, Planning, Barrier Identification, and Solution Development (CARB Task)
3		Workforce Development (CEC Task)
4	X	Electric Vehicle and Charging Infrastructure Procurement (CARB/CEC Task)
5		Operations and Reliability (CEC Task)
6		Semi-Annual Electric Vehicle Charger Inventory Reports (CEC Task)
7		Other Data Collection and Analysis (CEC Task)
8		Project Fact Sheet (CEC Task)

### KEY NAME LIST

Task #	Key Personnel	Key Subrecipient(s)	Key Partner(s)
1	County of Monterey- Cora Panturad, Sustainability Program Manager	NA	NA
2	County of Monterey- Cora Panturad, Sustainability Program Manager County of Santa Cruz- Tatiana Brennan, Senior Administrative Analyst County of San Benito- Celina Stotler, Integrated Waste Manager City of Watsonville- Gabriel Gordo, Administrative Services Manager City of Santa Cruz- Tiffany Wise-West, Sustainability & Resilience Officer	County of Monterey, County of Santa Cruz, County of San Benito, City of Watsonville, City of Santa Cruz	Ecology Action- Kirsten Liske, Senior Director Regional Climate Leadership



<b>Task #</b>	<b>Key Personnel</b>	<b>Key Subrecipient(s)</b>	<b>Key Partner(s)</b>
3	<p>County of Monterey- Cora Panturad, Sustainability Program Manager</p> <p>County of Santa Cruz- Tatiana Brennan, Senior Administrative Analyst</p> <p>County of San Benito- Celina Stotler, Integrated Waste Manager</p> <p>City of Watsonville- Gabriel Gordo, Administrative Services Manager</p> <p>City of Santa Cruz- Tiffany Wise-West, Sustainability &amp; Resilience Officer</p>	<p>County of Santa Cruz, County of San Benito, City of Watsonville, City of Santa Cruz</p>	<p>Ecology Action- Kirsten Liske, Senior Director Regional Climate Leadership</p>
4	<p>County of Monterey- Cora Panturad, Sustainability Program Manager</p> <p>County of Santa Cruz- Tatiana Brennan, Senior Administrative Analyst</p> <p>County of San Benito- Celina Stotler, Integrated Waste Manager</p> <p>City of Watsonville- Gabriel Gordo, Administrative Services Manager</p> <p>City of Santa Cruz- Tiffany Wise-West, Sustainability &amp; Resilience Officer</p>	<p>County of Santa Cruz, County of San Benito, City of Watsonville, City of Santa Cruz</p>	<p>NA</p>
5	<p>County of Monterey- Cora Panturad, Sustainability Program Manager</p> <p>County of Santa Cruz- Tatiana Brennan, Senior Administrative Analyst</p>	<p>County of Santa Cruz, County of San Benito, City of Watsonville, City of Santa Cruz</p>	<p>NA</p>

<b>Task #</b>	<b>Key Personnel</b>	<b>Key Subrecipient(s)</b>	<b>Key Partner(s)</b>
	County of San Benito- Celina Stotler, Integrated Waste Manager  City of Watsonville- Gabriel Gordo, Administrative Services Manager  City of Santa Cruz- Tiffany Wise-West, Sustainability & Resilience Officer		
6	County of Monterey- Cora Panturad, Sustainability Program Manager  County of Santa Cruz- Tatiana Brennan, Senior Administrative Analyst  County of San Benito- Celina Stotler, Integrated Waste Manager  City of Watsonville- Gabriel Gordo, Administrative Services Manager  City of Santa Cruz- Tiffany Wise-West, Sustainability & Resilience Officer	County of Santa Cruz, County of San Benito, City of Watsonville, City of Santa Cruz	NA
7	County of Monterey- Cora Panturad, Sustainability Program Manager  County of Santa Cruz- Tatiana Brennan, Senior Administrative Analyst  County of San Benito- Celina Stotler, Integrated Waste Manager  City of Watsonville- Gabriel Gordo, Administrative Services Manager	County of Santa Cruz, County of San Benito, City of Watsonville, City of Santa Cruz	NA

Task #	Key Personnel	Key Subrecipient(s)	Key Partner(s)
	City of Santa Cruz- Tiffany Wise-West, Sustainability & Resilience Officer		
8	County of Monterey- Cora Panturad, Sustainability Program Manager	NA	NA

## GLOSSARY

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

Term/ Acronym	Definition
AB	Assembly Bill
AC Level 2	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. A type of software interface that offers service to other pieces of software. An API allows two or more computer programs to communicate with each other.
ATDPP	Advanced Technology Demonstration and Pilot Projects
Battery Energy Storage	Technology that stores electrical energy in batteries for later use, helping to stabilize the electric grid by balancing supply and demand, integrating renewable energy sources, and providing backup power during outages or peak demand periods.
CAM	Commission Agreement Manager
CAO	Commission Agreement Officer
CARB	California Air Resources Board
CEC	California Energy Commission
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 calling the charging network provider's customer service number.
Charger	A device with one or more charging ports and connectors for charging EVs. 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) that are 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 provides 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 EV. A charging port may have multiple connectors, but it can provide power to charge only one EV through one connector at a time.
Charging session	The period after a charge attempt during which the EV is allowed to request energy. Charging sessions can be terminated by the customer, the EV, the charger, the charging station operator, or the charging network provider.
Charging station	The area in the immediate vicinity of one or more chargers and 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 and 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 and 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.
CPR	Critical Project Review
CTP	Clean Transportation Program
DCFC	Direct current fast charger. A charger that enables rapid charging by delivering direct-current (DC) electricity directly to an EV's battery.
Depot	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 5.3.
DSA	Data Sharing Agreement
EV	Electric vehicle. A vehicle that is either partially or fully powered on electric power received from an external power source. For the purposes of this Agreement, this definition does not include golf carts, electric bicycles, or other micromobility devices.
EVITP	Electric Vehicle Infrastructure Training Program. It provides training and certification for electricians installing electric vehicle supply equipment.
EVSE	Electric vehicle supply equipment. A charger as defined.
Excluded downtime	Downtime that is caused by events pursuant to Task 5.3.
Failed charging session	Following a charge attempt, the criteria for a successful charging session were not met.
FTD	Fuels and Transportation Division
GFO	Grant Funding Opportunity
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, such as 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.
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.
Nonnetworked charger	A charger that is not networked.
OCPP	Open Charge Point Protocol. An open-source communication protocol that specifies communication between chargers and the charging networks that remotely manage the chargers.

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 state	The charger is operational.
Preventative maintenance	Maintenance that is performed on physical assets to reduce the chances of equipment failure and unplanned machine downtime.
Primary Vehicle Type	A vehicle type depending on the GVWR such as "light duty" or "LD" (GVWR <= 10,000), "medium duty" or "MD" (10,000 < GVWR <= 26,000), "heavy duty" or "HD" (GVWR > 26,000).
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	An applicant awarded a grant under a CEC solicitation.
RSA	Registered Service Agency. An entity that repairs a commercial device that is registered with the California Department of Food and Agriculture Division of Measurement Standards.
SB	Senate Bill
SCAR	Successful Charge Attempt Rate
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 charging port uptime percentage for the reporting period, excluding downtime pursuant to Task 5.3.

## Background

The Budget Act of 2022 (Chapters 43, 45, and 249 of the Statutes of 2022) and Assembly Bill (AB) 211 (Chapter 574, Statutes of 2022), as amended by AB 158 (Chapter 996, Statutes of 2024), appropriated one-time funding from the General Fund to support infrastructure deployments, emerging opportunities, and manufacturing projects for zero-emission light-duty and medium- and heavy-duty vehicles.

On July 14, 2023, the California Air Resources Board (CARB) released a solicitation entitled “Advanced Technology Demonstration and Pilot Projects”. This competitive grant solicitation was to support a wide array of emerging opportunities including zero-emission off-road equipment, marine vessel, and Green Zone projects. The California

Energy Commission (CEC) would provide funding to support the purchase and installation of infrastructure in support of the resulting CARB projects. In response to the Advanced Technology Demonstration and Pilot Projects (ATDPP) solicitation, County of Monterey (Recipient) submitted application #28 which was proposed for funding in the CEC's Notice of Proposed Awards on August 5, 2025. The ATDPP solicitation 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.

**NOTE:** CEC is acting in coordination with CARB regarding the overall project, but CARB is not a party to this CEC grant agreement (Agreement). This Agreement is a companion agreement to the agreement between CARB and the Recipient. No work on this project can begin until CARB's agreement with the Recipient has been executed. Work under the agreement between CARB and the Recipient ("CARB agreement") is referenced in this Agreement as a "CARB Task" or a "CARB Sub-task;" these terms mean a task or sub-task for which (1) the CARB agreement governs; (2) where the Recipient's performance is due to CARB; and (3) where the Recipient's reimbursable costs will be funded by CARB.

### **Problem Statement:**

Local government institutions face significant technological, financial, and institutional barriers to meeting greenhouse gas and air pollutant emissions reductions targets through the decarbonization of municipal fleets. Existing infrastructure, lack of training, utility management processes, capital improvement processes, and funding shortfalls for fleet decarbonization represent obstacles that few California jurisdictions have been able to successfully navigate. Furthermore, municipalities have been largely siloed from regional collaboration on this issue due to jurisdictional and administrative boundaries.

The availability of electric vehicle (EV) models and charging infrastructure alone has not been enough to clear the aforementioned barriers to scaled municipal fleet decarbonization in California. Significant State investment is needed to achieve rapid municipal fleet decarbonization due to the institutional inertia of municipalities and the procurement policies established over the last century that prioritize internal combustion.

### **Goals of the Agreement:**

The goal of this Agreement is to develop a replicable model for municipal EV fleet transition.

## Objectives of the Agreement:

The objectives of this Agreement are to:

- Install 390 charging ports (192 dual-port Level 2 chargers and three (3) dual-port direct current fast chargers) in parking lots at municipal facilities across the Monterey Bay area and four (4) solar photovoltaic systems to support some of these chargers.
- Understand and address organizational and planning barriers through change management techniques and use of a fleet electrification planning tool.
- Increase staff acceptance of EVs by training EV users and fleet mechanics/maintenance staff and co-developing standard operating procedures around training, maintenance, and charging.
- Reduce emissions and inform future decision-making by strategically procuring EVs and electric vehicle supply equipment (EVSE) and collecting data across the Monterey Bay area.

## TASK 1 ADMINISTRATION (CARB/CEC Task)

### Task 1.1 Attend Kick-off Meeting

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

#### The CAM shall:

- Send the Recipient the *kick-off meeting agenda*.

#### The Recipient shall:

- Attend a “Kick-Off” meeting that includes the CAM, the CARB Project Liaison, 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 match share 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.
  - The statement should include the following project activities: key milestone dates, site specific charger information and any other equipment to be included at the site(s).



- Provide an *updated Schedule of Products, updated list of match funds (Private, Utility, Federal), and updated list of permits.*
- Discuss the following administrative and technical aspects of this Agreement:
  - Agreement Terms and Conditions
  - Critical Project Review (Task 1.2)
  - Match fund documentation (Task 1.6) No reimbursable work may be done until this documentation is in place.
  - Permit documentation (Task 1.7)
  - Subawards and site host agreements (if applicable) needed to carry out project (Task 1.8)
  - The CAM and CARB Project Liaison'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)
  - Program Management Data Report (report template to be provided by CAM)
  - EV Utilization Data Report (report template to be provided by CAM)
  - GHG Intensity Report (report template to be provided by CAM)
  - Technical Products (Product Guidelines located in Section 5 of the Terms and Conditions)

#### **CAM Product:**

- Kick-Off Meeting Agenda

#### **Recipient Products:**

- Updated Schedule of Products
- Updated List of Match Funds (Private, Utility, Federal)
- Updated List of Permits
- Written Statement of Match Share Activities

#### **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, the CARB Project Liaison, 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 and the CARB Project Liaison 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 *CPR meeting 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:**

- CPR meeting 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, the CARB Project Liaison, 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 or the CARB Project Liaison.

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 and the CARB Project Liaison will determine the appropriate meeting participants.

The administrative portion of the meeting shall be a discussion with the CAM and the CARB Project Liaison 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
- Provide *written documentation of meeting agreements*.
- 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, CARB Project Liaison, 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 or the CARB Project Liaison. 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 and CARB Project Liaison shall:**

- Schedule monthly calls.
- Provide and explain the Program Management Data Report Template during first monthly call and review with Recipient during subsequent 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 or CARB Project Liaison prior to the monthly call
- Complete the Program Management Data Report following the first monthly call and review and update with CAM during subsequent monthly calls as needed (Task 7)
- Provide verbal answers to the CAM and the CARB Project Liaison during the call.
- Send an *email to CAM and CARB Project Liaison concurring with call summary notes.*

#### **Product:**

- Email to CAM and CARB Project Liaison 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 and the CARB Project Liaison 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 <https://www.energy.ca.gov/media/4691>.

**Product:**

- Quarterly Progress Reports

**Task 1.6 Identify and Obtain Match 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 the CARB Project Liaison 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, including but not limited to, a *letter of new match fund commitment* to the CAM and the CARB Project Liaison if during the course of the Agreement additional match funds are received.
- Provide the CAM and the CARB Project Liaison *written notification* 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 fund commitment (if applicable)
- Written notification that match funds were reduced (if applicable)

#### **Task 1.7 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 and the CARB Project Liaison 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 and the CARB Project Liaison.
- As permits are obtained, send a *copy of each approved permit* to the CAM and the CARB Project Liaison.
- If during the course of the Agreement permits are not obtained on time or are denied, notify the CAM and the CARB Project Liaison within 5 working days. Either of these events may trigger actions available to the CEC under this Agreement, such as an additional CPR.

### **Products:**

- Letter documenting the permits or stating that no permits are required
- A copy of each final 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)

## **Task 1.8 Obtain and Execute Subawards and Agreements with Site Hosts**

The goal of this task is to ensure quality products and to execute subrecipient and site host agreements, as applicable, required to carry out the tasks under this Agreement consistent with the Agreement Terms and Conditions and the Recipient's own procurement and contracting policies and procedures.

### **The Recipient shall:**

- Execute and manage subawards and coordinate subrecipient activities.
- Execute and manage site host agreements and ensure the right to use the project site throughout the term of the Agreement, as applicable. A site host agreement is not required if the Recipient is the site host.
- Notify the CEC in writing immediately, but no later than five calendar days, if there is a reasonable likelihood the project site cannot be acquired or can no longer be used for the project.
- Submit a *letter* to the CAM and the CARB Project Liaison describing the subawards and any site host agreements needed or stating that no subawards or site host agreements are required.
- If requested by the CAM and the CARB Project Liaison, submit a *draft of each subaward and any site host agreement* required to conduct the work under this Agreement to the CAM and the CARB Project Liaison for review.
- If requested by the CAM and the CARB Project Liaison, submit a *final copy of each executed subaward and any site host agreement*.
- If Recipient intends to add new subrecipients or change subrecipients, then the Recipient shall notify the CAM and the CARB Project Liaison.

### **Products:**

- Letter describing the subawards and any site host agreements needed, or stating that no subawards or site host agreements are required
- Draft subaward (if requested)
- Final subaward (if requested)
- Draft site host agreement (if requested)
- Final site host agreement (if requested)



## TECHNICAL TASKS

### TASK 2 PROJECT MANAGEMENT, PLANNING, BARRIER IDENTIFICATION, AND SOLUTION DEVELOPMENT (CARB Task)

The goal of this task is to form a community practice of jurisdictional staff across the Regional Climate Project Working Group, which includes the Recipient, the Cities of Santa Cruz and Watsonville, and counties of San Benito and Santa Cruz, that will be a forum for fleet management staff, from managers to EV users to mechanics to maintenance staff, to identify and overcome barriers to transitioning fleets from internal combustion engines to EVs.

#### The Recipient shall:

- Establish a Project Management Team to support data collection of and facilitation of Community of Practice. The Project Management Team will prepare a *final report (draft and final) summarizing and reporting activities carried out as part of this task in CARB-specified format*.
- Establish a Community of Practice to provide a forum for peer learning, identify barriers to EV adoption for municipal operations within fleet management teams (e.g., users, fleet managers, mechanics, maintenance staff), and propose solutions to the barriers.
  - Prepare a *status report on completion of Phase 1: Discovery/Prepare Approach status report*.
  - Prepare a *status report on project management, barrier identification, and solution development kickoff meeting*.
  - Prepare a *status report on unique tactics for adoption, lessons learned and recommendations*.
  - Prepare a *report on change management closeout and sustainment plan*.
- Implement the City of Santa Cruz's Fleet Electrification Planning Tool across three jurisdictions, (County of Monterey, County of Santa Cruz, and City of Watsonville), to assess its utility for planning transformation of municipal fleets to EVs.
  - Collect *data on existing fleet characteristics, EV charging installations and other parameters* for input to the City of Santa Cruz's Fleet Electrification Planning Tool.
  - Prepare a *report on City of Santa Cruz's Fleet Electrification Planning Tool Model*.
  - Prepare a *technical memorandum analyzing fleet electrification scenarios*.

- Develop a framework for an employee subsidy program for EV purchases and for standard operating procedures that provide charging access at work. Prepare a *status report on the framework for equitable employee subsidy program for EV purchase*.
- Engage with the Monterey Bay Area Climate Justice Collaborative with over 50% frontline serving organization membership to serve as a project advisory group and channel for outreach to their community constituents, including subgrants to community-based organizations providing services in each jurisdiction for participation.
  - Report a *summary of feedback*.
  - Provide a *completed framework for equitable employee subsidy program for EV purchase*.
  - Prepare an *outreach report describing results of collaborative engagement*.

#### **Products:**

- Draft Final Report for CARB and CEC
- Final Report for CARB and CEC
- Phase 1: Discovery/Prepare Approach status report
- Status report on project management, planning, barrier identification, and solution development
- Status report on unique tactics for adoption, lessons learned and recommendations
- Report on change management closeout and sustainment plan
- Data on existing fleet characteristics, EV charging installations and other parameters
- Report on City of Santa Cruz's Fleet Electrification Planning Tool Model
- Technical memorandum analyzing fleet electrification scenarios
- Status report on the framework for equitable employee subsidy program for EV purchase
- Climate Justice Collaborative Workforce summary of feedback
- Completed framework for equitable employee subsidy program for EV purchase
- Outreach report describing results of collaborative engagement

### TASK 3 WORKFORCE DEVELOPMENT (CEC Task)

The goal of this task is to provide training to all participating jurisdictions' major EV users, mechanics, and maintenance staff to overcome institutional and educational barriers to EV adoption; this includes the County of Monterey, County of Santa Cruz, County of San Benito, City of Santa Cruz, and City of Watsonville. This task also includes efforts to increase the number of electricians who have completed the Electrical Vehicle Infrastructure Training Program (EVITP).

#### The Recipient shall:

- Provide training to EV users and EV charging installation operators, mechanics, and maintenance staff and expand this effort through regional workforce analysis and coordination.
  - Training sessions will include two (2) large plenary sessions (one (1) for EV users and one (1) for mechanics and maintenance staff) and four (4) three-hour hands-on training sessions with mechanics and maintenance staff for each jurisdiction.
  - Develop *an initial report on training sessions* that includes but is not limited to attendance, barriers, and recommendations for revisions.
- Provide webinar, training, and outreach through training provider Ecology Action of Santa Cruz to promote increased EVITP Certifications (or equivalent certification required by Federal or State grant programs) for electricians in participating jurisdictions, including County of Monterey, County of Santa Cruz, County of San Benito, City of Santa Cruz, and City of Watsonville, to enable accelerated infrastructure development and maximizing funding to local contractors for grant funded electrification projects.
  - Submit *list of scheduled dates, locations, and contractors for training workshops*.
- Develop *EVITP Training Access Report* to document training delivered, any changes in the population of certified electricians, and recommendations to increase EVITP access and uptake.
  - The EVITP Training Access Report shall also include, but not be limited to: Completed training with the numbers of and staff positions receiving training and a recommendation for how to leverage curriculum within the region; EVITP webinar materials; summary of EVITP training and subsidies; training attendance logs; lessons learned through the training process; and log of frequently asked questions.
- Develop *training curriculum* for EV users, EV charging installation operators, and maintenance staff. Submit a *copy of training curriculum*.

**Products:**

- Initial report on training sessions
- List of scheduled dates, locations, and contractors for training workshops
- EVITP Training Access Report
- Copy of training curriculum

**TASK 4 ELECTRIC VEHICLE AND CHARGING INFRASTRUCTURE PROCUREMENT AND DATA COLLECTION (CARB/CEC Task)**

The goal of this task is to purchase 116 municipal fleet EVs and install 390 charging ports (192 dual-port Level 2 chargers and three (3) dual-port direct current fast chargers) and four (4) solar photovoltaic systems (all match funds) across Regional Climate Project Working Group jurisdictions to accelerate EV adoption, and to collect data to assist in optimizing future use, maintenance, and procurement of decarbonized fleets. The CEC is only responsible for reimbursement of EV charger installation related portions of this task.

**The Recipient shall:**

- Procure 116 EVs using CARB funds across the participating jurisdictions and install at a minimum 95 EV chargers using CEC funds and 100 EV chargers using match funds. Submit *Contracts with EVSE manufacturers* to CEC CAM and CARB Project Liaison. Purchase orders for 116 EVs must be submitted before reimbursement for eligible EVSE costs will be considered by the CEC CAM.
- Submit *invoices for EV purchase orders* (to CARB Project Liaison and CEC CAM) and *receipts for delivery of EVs and telematics installed* (to CEC CAM).
- Submit *installed EVSE documentation with map and photos* to CEC CAM and CARB Project Liaison.
- Install four (4) solar photovoltaic systems in County of Monterey and City of Santa Cruz to support new EVSE. Submit *installed solar photovoltaic system documentation with map and photos* to CEC CAM and CARB Project Liaison.
- Collect and submit to CARB project liaison *data* as required by Appendix F to the Advanced Technology Demonstration and Pilot Projects Grant Solicitation and summarize jurisdictional accomplishments/process.
- Submit an *AB 841 Certification* that certifies the project has complied with all AB 841 (2020) requirements specified in Exhibit C 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.
- Ensure all applicable electric vehicle supply equipment (EVSE) installed for commercial use has a type approval certificate issued through the California Type Evaluation Program (CTEP) administered by the California Department of Food and Agriculture (CDFA) Division of Measurement Standards (DMS) or Certificate of Conformance issued by the National Type Evaluation Program (NTEP) administered through the National Conference on Weights and Measures. California accepts NTEP certificates so long as the device also meets CCR Title 4, Section 4002.11.
- Unless otherwise updated by the CDFA DMS, ensure installation, repair, and/or maintenance on applicable commercial EVSE is performed by a Registered Service Agency (RSA) and after the device is placed in service, the RSA must report this information to the county within 24 hours. Device owners are responsible for registering their device with the county.

**[CPR WILL OCCUR DURING THIS TASK. See Task 1.2 for details.]**

**Products:**

- Contracts with EVSE manufacturers
- Invoices for EV purchase orders
- Receipts for delivery of EVs and telematics installed
- Installed EVSE documentation with map and photos
- Installed solar photovoltaic system documentation with map and photos
- Data (to CARB)
- AB 841 Certification
- EVITP Certification Numbers for all electricians installing EVSE

## TASK 5 OPERATIONS AND RELIABILITY (CEC Task)

Recipient shall comply with the reliability performance standards, recordkeeping, reporting, and maintenance requirements (Requirements) for EV chargers installed as part of this Agreement, excluding any charger used solely for private use at a single-family residence or a multifamily housing unit with four or fewer units. In the event the CEC adopts regulations that include Requirements, for example as required by AB 2061 (Chapter 345, Statutes of 2022) and/or AB 126 (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 5.1 Operations

- **Operational requirement for all chargers:** The Recipient shall operate charging ports installed as part of this Agreement during the term of this Agreement.
- **Uptime requirement for all chargers:** The Recipient shall 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.
- **Successful charge attempt rate (SCAR) requirement for networked chargers:** The Recipient shall ensure that the charging port SCAR for each charging port installed in the project is at least 90 percent for each year for six years after the beginning of operation.
- **Maintenance requirements for all chargers:** 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 or charging port is inoperative or exhibiting failures that result in an inability to charge.
- **OCPP requirements for networked chargers:** The Recipient shall retain the services of a charging network provider that meets the bulleted criteria below to record, retain, and transmit the Remote Monitoring data for networked chargers specified in Task 5.2.
  - 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.
  - 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.

- 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.
- 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:
  - AuthorizeRequest shall be transmitted to the Central Management System by the charger.
  - AuthorizeResponse shall be transmitted by the Central Management System to the charger.
  - BootNotificationResponse shall be transmitted by the Central Management System to the charger in response to any received BootNotificationRequest.
  - HeartbeatRequest shall be transmitted to the Central Management System by the charger on a set interval.
  - HeartbeatResponse shall be transmitted to the charger by the Central Management System in response to any received HeartbeatRequest.
  - RequestStartTransactionRequest shall be transmitted by the Central Management System to the charger as specified in OCPP 2.0.1 or a subsequent version of OCPP.
  - 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.
  - TransactionEventRequest shall be transmitted to the Central Management System by the charger as specified in OCPP 2.0.1 or a subsequent version of OCPP.
    - The optional field meterValue must be populated when the eventType field is set to either "Started" or "Ended."
    - When populated, the sub-subfield Value of the subfield SampledValue of the field meterValue shall be transmitted in Watt-hours (Wh).
    - When populated, the sub-sub-subfield unit of the sub-subfield unitOfMeasure of the subfield SampledValue of the field meterValue shall be set to the default string, "Wh."
    - When populated, the sub-sub-subfield multiplier of the sub-subfield unitOfMeasure of the subfield SampledValue of the field meterValue shall be set to the default integer, 0 (zero).
    - When the meterValue field is populated, the measurand sub-subfield of the SampledValueType subfield, of the field meterValue shall be populated as specified in OCPP 2.0.1 or a later version.

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 5.2 Recordkeeping and Transmittals**

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

### **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. Transmittals must begin within one month of the charger becoming operational.
- **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.
  - Provide digital records in a comma separated values file unless another file format is approved by the CEC for the request.
  - Provide a clear and understandable *Data Dictionary* that describes each data element and any associated units with all digital records.
  - **Remote monitoring data for networked chargers**, which will serve as the foundation for the *Remote Monitoring records* that must be submitted include:
    - All instances of the following Protocol Data Units, specified in OCPP 2.0.1, that are transmitted between the charger and the central system.
      1. AuthorizeRequest
      2. AuthorizeReponse
      3. BootNotificationRequest
      4. HeartbeatResponse
      5. RequestStartTransactionRequest
      6. StatusNotificationRequest
      7. TransactionEventRequest
- **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.



- **Maintenance Records, for all chargers, Recipient shall collect and retain:**
  - Reports of inoperative charging ports or charging port failures resulting in inability to charge, such as a customer complaint, internal diagnostics, or inspection.
  - Records of any maintenance conducted on charging ports installed and operated as part of the agreement. Records should specify the following:
    1. Date and time of the maintenance event.
    2. Whether maintenance was corrective or preventive in nature.
    3. Whether and for how long the charging port was in an inoperative state prior to maintenance.
    4. Whether the charging port was in an operative state following maintenance.

#### **Products:**

- Remote Monitoring Records
- Data Dictionary
- Maintenance Records

#### **Task 5.3 Reporting**

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

#### **The Recipient shall:**

- For **each charger**, after the charger becomes operational, prepare and submit to the CEC *Quarterly Reports on Charger and Charging Port Reliability and Maintenance*. This report must conform to a format approved by the CEC and is provided for six years after the charging ports are operational. Each report must 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. 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:
    - **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.
- **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.
- 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. 'Excluded Downtime' includes:
  - **Before Initial Installation:** Downtime before the charging port was initially installed.
  - **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.
  - **Outage for Preventative Maintenance or Upgrade:** Downtime caused by any preventative 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 preventative maintenance or upgrade work is 24 hours for any 12-month period.
  - **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.

- **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.
  - **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.
  - **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.
- A summary and calculation of uptime. 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 =

Q1 reporting period = 129,600 minutes, except for a leap year, which is 131,040 minutes.

Q2 reporting period = 131,040 minutes.

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,** a charge attempt summary for each charging port. The charge attempt summary shall include, as defined below, the total number of charge attempts, the total number of successful charge attempts, the total number of failed charge attempts, and the successful charge attempt rate for the reporting period.

- **Charge Attempt.** A charge attempt occurs upon transmission of one or more of the protocol data units identified in following subsections A. through G. below between the Central Management System and the charger as specified in OCPP Version 2.0.1 or a subsequent version of OCPP. Any number of the Protocol Data Units described in A. through G. of this subsection below timestamped within a three-minute interval shall be counted as one charge attempt. Any number of TransactionEventRequest described in D. through G. of this subsection below transmitted with identical identifier strings in the transactionId subfield of the transactionInfo field shall be counted as one charge attempt.

- A. An AuthorizeRequest message transmitted by the charger to the Central Management System.

The AuthorizeRequest message shall not count as a charge attempt if the Central Management System responds with an AuthorizeResponse message with the status subfield of the idTokenInfo field set to any of the following responses:

- “Blocked”
- “ConcurrentTx”
- “Expired”
- “Invalid”
- “NoCredit”
- “NotAllowedTypeEVSE”
- “NotAtThisLocation”
- “NotAtThisTime”
- “Unknown”

- B. A RequestStartTransactionRequest message transmitted by the Central Management System to the charger.
- C. A StatusNotificationRequest message transmitted by the charger to the Central Management System with the connectorStatus field set to “Occupied”.
- D. A TransactionEventRequest message transmitted by the charger to the Central Management System with the eventType field set to “Started”.
- E. A TransactionEventRequest message transmitted by the charger to the Central Management System with the triggerReason field set to “CablePluggedIn”.

- F. A TransactionEventRequest message transmitted by the charger to the Central Management System with the chargingState subfield of the transactionInfo field set to “EVConnected”.
  - G. A TransactionEventRequest message transmitted by the charger to the Central Management System with the chargingState subfield of the transactionInfo field set to “Charging”.
- **Charging Session.** A charging session begins and ends as follows:
    - A. A charging session begins when the charger transmits TransactionEventRequest to the Central Management System with the chargingState subfield of the transactionInfo field set to “Charging.”
      - In the event that multiple TransactionEventRequest protocol data units are transmitted with the chargingState subfield of the transactionInfo field set to 'Charging' AND identical identifier strings in the transactionId subfield of the transactionInfo field, the charging session shall begin when the first of those protocol data units are sent. Which protocol data unit was sent first shall be determined based on the lowest value in the seqNo field.
    - B. A charging session ends when the charger transmits a subsequent TransactionEventRequest to the Central Management System with the chargingState subfield of the transactionInfo field set to any of the following values:
      - “EVConnected”
      - “SuspendedEV”
      - “SuspendedEVSE”
      - “Idle”
    - C. The identifier string contained in the transactionId subfield of the transactionInfo field must be identical in the messages described in A. and B. of this subsection above.
    - D. The date and time found in the timestamp field of the messages described in A. and B. of this subsection above shall be used to determine the start and stop time of a charging session.
  - **Successful Charge Attempt.** A successful charge attempt is a charge attempt that is followed by either A. or B. of this subsection below prior to another charge attempt.

- A. A charging session that lasts for 5 minutes or longer as determined by the timestamps described above
- B. The stoppedReason subfield of the transactionInfo field of the TransactionEventRequest protocol data unit ending the charging session is set to one of the following:
  - “EnergyLimitReached”
  - “Local”
  - “Remote”
  - “SOCLimitReached”

- **Failed Charge Attempt.** A failed charge attempt is any charge attempt that is not followed by a successful charge attempt prior to a subsequent charge attempt.
- **Successful Charge Attempt Rate.** The successful charge attempt rate for a charging port shall be calculated using the following formula:

$$SCAR = \frac{CA - FCA}{CA} * 100\%$$

Where:

SCAR = Successful Charge Attempt Rate

CA = Total Charge Attempts for the reporting period

FCA = Total failed charge attempts for the reporting period

- **For all chargers,** 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.

**Product:**

- Quarterly Report on Charger and Charging Port Reliability and Maintenance, submitted in a manner specified by the CEC for six years after charging ports are operational.

**TASK 6 SEMI-ANNUAL ELECTRIC VEHICLE CHARGER INVENTORY REPORTS (CEC Task)**

The goal of this task is to provide information on the total 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. In the event the CEC adopts regulations that include Requirements, for example as required by AB 2061 (Chapter 345, Statutes of 2022) and/or AB 126 (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.

**The Recipient shall:**

- Prepare an *Electric Vehicle Charger Inventory Report*, in a template provided by the CAM, on the total number of chargers in the Recipient's charging network in California 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 50 – 150 kW, 150 kW – 350 kW, 350 kW 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.

**Product:**

- Electric Vehicle Charger Inventory Report

## **TASK 7 OTHER DATA COLLECTION AND ANALYSIS (CEC Task)**

The goal of this task is to collect operational and programmatic data from the project. In the event the CEC adopts regulations that include Requirements, for example as required by AB 2061 (Chapter 345, Statutes of 2022) and/or AB 126 (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.

### **The Recipient shall:**

- Prepare and provide a *Program Management Data Report* in a format chosen by the CEC following the first monthly call (Task 1.4) and update during subsequent monthly calls as needed.
- Collect and provide the following programmatic data for all EV chargers, and include in the *Program Management Data Report*. The programmatic data shall include, but not be limited to the following:
  - Electric Vehicle Charger Station Information:
    - Funding
      - The subsidy from a federal program, utility program, and private funding
    - Vehicles
      - Primary Vehicle Type served such as light duty (GVWR ≤ 10,000), medium duty (10,000 < GVWR ≤ 26,000), heavy duty (GVWR > 26,000)
    - Milestone Dates
      - Key milestone dates, such as permit request and received date, charger energization date, charger operational date, and other dates as requested by the CAM
    - Location
      - Primary site access type such as publicly available, shared private, private
      - Location/site use type, such as hotel, restaurant, or multi-unit housing
      - Charger site address



- Parking location type, such as street, parking lot or parking garage
- Other Equipment
  - Battery Energy Storage CEC cost and kWh capacity
  - Non-battery Distributed Generation CEC cost, kW capacity and type
- ZEV Infrastructure Information:
  - Charger Information
  - Charger make and model, serial number, level (Level 1, Level 2, DCFC, MCS), nameplate capacity (kW), number ports per charger

**Products:**

- Program Management Data Report

**Task 7.1 Utilization**

**The Recipient shall:**

- Collect and provide to the CAM, at minimum, quarterly utilization data from the project for all installed chargers in an *EV Utilization Data Report*, in the format of the CEC's choosing, for three years after the charging ports are operational, including, but not limited to:
  - EV Charging Port:
    - Charging network provider name
    - Charger site address, city, zip code
    - Charger make, model, and manufacturer serial number
    - EV service equipment charger and charging port ID
    - Peak Power (kW)
    - Charging session start/end date and times
    - Charging session energy consumed (kW)
    - Plug in/un-plugged timestamp Coordinated Universal Time (UTC)
    - Charging interval peak demand
    - Charging interval start/end times
    - Charging interval energy consumed
    - If a bidirectional charger, energy (kWh) discharged back to grid or facility
    - Total transacted amount
    - Payment method

**Products:**

- EV Utilization Data Report provided, at a minimum, quarterly for three years after charging ports are operational.

## Task 7.2 GHG Intensity Reporting

### The Recipient shall:

- For EV chargers: collect and report 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 the *GHG Intensity Report* specified by the CAM.

### Products:

- GHG Intensity Report

## Task 7.4 Data Sharing Agreement

The goal of this subtask is to ensure a data sharing agreement with the parameters outlined below is in place for the purposes of facilitating data collection and reporting on EV charging ports.

### The Recipient shall:

- Enter into a data sharing agreement with a charging network provider that shall include the following, and if the Recipient is a charging network provider, the Recipient shall enter into a data sharing agreement with the CEC that shall include the following:
  - The charging network provider fulfills all the data collection and reporting requirements described in Task 5.2 Recordkeeping and Transmittals (excluding Maintenance Records), Task 5.3 Reporting, TASK 6 SEMI-ANNUAL ELECTRIC VEHICLE CHARGER INVENTORY REPORTS, and Task 7.1 Utilization, on behalf of Recipient.
  - The charging network provider's reports adhere to CEC-approved formatting, report templating, and delivery methods.
  - CEC is identified as a third-party beneficiary to the data sharing agreement.
- Be responsible for ensuring the charging network provider fulfills all requirements described in the data-sharing agreement. Retention may be withheld under this Agreement until at least 12 months of data collection is provided by the charging network provider to the CEC.
- If the Recipient is not the charging network provider, submit a copy of the *dually signed data-sharing* agreement to the CEC within 30 calendar days of selecting a charging network provider and no later than when the first charging port under this agreement is energized. If the Recipient is the charging network provider, submit the *signed data-sharing agreement* using a template provided by the CAM, upon Cam request.

- Notify the CAM in writing within 30 calendar days if Recipient changes its selected charging network provider.
- If a new charging network provider is selected, the new dually signed data-sharing agreement shall be submitted to the CEC within 30 calendar days of the charging network provider's selection.

**Product:**

- Signed data-sharing agreement

**TASK 8 PROJECT FACT SHEET (CEC Task)**

The goal of this task is to develop an initial and final project fact sheet that describes the CEC-funded 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 includes but is not limited to: a description of the project; the actual benefits resulting from the project; lessons learned from implementing the project; data on potential job creation, economic development, and increased state revenue as a result of expected future expansion; and a comparison of any project performance and expectations provided in the proposal to CEC with actual project performance and accomplishments. 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