California Energy Commission
November 13, 2024 Business Meeting
Backup Materials for Western Riverside Council of Governments

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: 24-1113-03c

STATE OF CALIFORNIA

STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION

RESOLUTION: Western Riverside Council of Governments

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-24-007 with Western Riverside Council of Governments for a $598,279 grant. This agreement will install eight EV Level 2 charger ports, two EV direct current fast charger (DCFC) ports, and four solar powered EV DCFC ports to support 11 EVs across four different municipal fleets in Riverside County. This agreement is in coordination with a California Air Resources Board grant for six types of municipal EVs; 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 November 13, 2024.

AYE:
NAY:
ABSENT:
ABSTAIN:

Dated:

_____
Kristine Banaag
Secretariat

STATE OF CALIFORNIA
CALIFORNIA ENERGY COMMISSION

CEC-270 (Revised 01/2024)

GRANT REQUEST FORM (GRF)

A. New Agreement Number

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

New Agreement Number: ZVI-24-007

B. Division Information

1. Division Name: Fuels and Transportation
2. Agreement Manager: Elizabeth Menchaca-Guhl
3. MS-: Not Applicable
4. Phone Number: (916) 664-6448

C. Recipient's Information

1. Recipient's Legal Name: Western Riverside Council of Governments
2. Federal ID Number: 33-0451516

D. Title of Project

Title of project: Western Riverside County Municipal Green Zones Pilot Project

E. Term and Amount

1. Start Date: 11/13/2024
2. End Date: 03/31/2027
3. Amount: $598,279

F. Business Meeting Information

1. Are the ARFVTP agreements $75K and under delegated to Executive Director? No
2. The Proposed Business Meeting Date: 11/13/2024
3. Consent or Discussion? Consent
4. Business Meeting Presenter Name: N/A
5. Time Needed for Business Meeting: N/A
6. The email subscription topic is: Clean Transportation Program

Agenda Item Subject and Description:

Western Riverside Council of Governments. Proposed resolution approving agreement ZVI-24-007 with Western Riverside Council of Governments for a $598,279 grant, and adopting staff's recommendation that this action is exempt from CEQA. This agreement will install eight EV Level 2 charger ports, two EV direct current fast charger (DCFC) ports, and four solar powered EV DCFC ports to support 11 EVs across four different municipal fleets in Riverside County. This agreement is in coordination with a California Air Resources Board grant for six types of municipal EVs. (General Fund Funding) Contact: Elizabeth Menchaca-Guhl

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: Cal. Code Regs., tit. 14, sec. 15301, 15303

Cal. Code Regs., tit. 14, sec. 15301 provides that projects which consist of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, and which involve negligible or no expansion of use beyond that existing at the time of the lead agency's determination, are categorically exempt from the provisions of the California Environmental Quality Act (CEQA). This project will install at least eight single port Level 2 EV chargers, two single port DCFCs, and two dual port solar powered DCFCs to support 11 ZEVs across four different municipal fleets in Riverside County (City of Banning, City of Moreno Valley, County of Riverside Transportation and Land Management Agency, and County of Riverside Purchasing and Fleet Services). The installations will result in minor altercations to existing fleet facilities and will not have a significant effect on the environment. Therefore, this project falls under categorical exemption Section 15301 of the CEQA Guidelines.

Cal. Code Regs., tit. 14, sec. 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 includes ZEV charger installations that do not exceed 2,500 square feet of space to existing fleet facilities. Therefore, the project falls under categorical exemption Section 15303 of the CEQA guidelines.

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

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

No

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

Not applicable

b) Agreement **IS NOT** exempt.
IMPORTANT: consult with the legal office to determine next steps.

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
No subcontractors to report	$0	$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
Southern California West Coast Electric, Inc	$12,285	$6,255
TBD Charger Installation	$40,268	$14,733
Champion Electric, Inc	$18,418	$2,000
InCharge Energy, Inc	$22,768	$5,511
Long Beach Clean Cities Coalition	$40,000	$0
TBD Project Management	$176,173	$2,722

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
No key partners to report.

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	601.211EO	$598,279

TOTAL Amount: $598,279

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

3. Recipient's Administrator/Officer

Name: Casey Dailey

Address: 3390 University Ave. Suite 200

City, State, Zip: Riverside, CA 92501

Phone: (951) 405-6720

E-Mail: cdailey@wrcog.us

4. Recipient's Project Manager

Name: Taylor York

Address: 3390 University Ave. Suite 200

City, State, Zip: Riverside, CA 95201

Phone: (951) 405-6751

E-Mail: tyork@wrcog.us

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: Elizabeth Menchaca-Guhl

Approval Date: 09/16/2024

Office Manager: Elizabeth John

Approval Date: 9/24/24

Deputy Director: Melanie Vail

Approval Date:

Exhibit A
SCOPE OF WORK

TECHNICAL TASK LIST

Task #	CPR	Task Name
1		Administration
2		Vehicle Procurement and Delivery (CARB funded)
3		Infrastructure Planning and Procurement
4	X	Infrastructure Construction, Installation, and Commissioning
5		Project Working Group and ZEV Network Meetings
6		Community Engagement
7		Technical Training for Partner Technicians
8	X	Toolkit Development and Publishing
9		Infrastructure Operations and Reliability
10		Semi-annual Electric Vehicle Charger Inventory Reports
11		Workforce Training and Development Data Collection (CARB funded)
12		EV Data Collection and Analysis (Match funded)
13		Infrastructure Data Collection and Analysis
14		Project Fact Sheet

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
ATDPP	Advanced Technology Demonstration and Pilot Projects
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.
CAM	Commission Agreement Manager

Term/ Acronym	Definition
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 Open Charge Point Protocol.

Term/ Acronym	Definition
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
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).
DCFC	Direct current fast charger. A charger that enables rapid charging by delivering direct-current (DC) electricity directly to an EV's battery.
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 9.
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
EVSE	Electric vehicle supply equipment. A charger as defined.
Excluded downtime	Downtime that is caused by events pursuant to Task 9.
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

Term/ Acronym	Definition
Green Zones	Zero-emission holistic projects that could be focused on almost any operations within a city, municipality, or group of cities that currently use combustion technologies in carrying out the duties of the municipality.
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.

Term/ Acronym	Definition
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	Western Riverside Council of Governments
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.
WRCOG	Western Riverside Council of Governments
Uptime	The time that a charger is installed during a reporting period excluding downtime pursuant to Task 9.
Zero-Emission Vehicle	ZEVs include battery-electric and fuel-cell electric vehicles.

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, Western Riverside Council of Governments (WRCOG, Recipient) submitted application

#31 which was proposed for funding in the CEC's Notice of Proposed Awards on March 29, 2024. 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:

As local agencies plan to deploy zero-emission vehicles (ZEV), they face gaps in available charging infrastructure and a lack of data and experience in how ZEVs perform in unique use cases and duty cycles. Funding is a significant barrier to the deployment of infrastructure, as is the effort required for data collection, and municipalities take a risk by purchasing and deploying vehicles without prior direct experience in how they will perform. It is important to address these barriers now, as municipalities are mandated by CARB's Advanced Clean Fleets Regulation to only purchase ZEVs for their fleets starting on January 1, 2027.

Goals of the Agreement:

The goal of this Agreement is to procure and install electric vehicle (EV) charging infrastructure to support the adoption of six types of EVs across five different vehicle manufacturers and four different municipal fleets. Deployment experiences and operational data will be collected to develop best practices and lessons learned that can inform other municipal fleets within and outside WRCOG. Use cases will span government transportation, off-roading, sanitation services, and public transportation for priority populations.

Objectives of the Agreement:

The objectives of this Agreement are to:

- Install and operate charging infrastructure that supports at least six types of EVs from five vehicle manufacturers within four municipal fleets, including:
    - Sedan

    - Sport utility vehicle
    - Pickup truck
    - Transit van
    - Street sweeper
    - Dump truck
- Install and operate at least 12 charging stations across five project sites within the cities of Banning, Moreno Valley, and Riverside, including:
    - Eight Level 2 single port chargers
    - Two single port direct current fast chargers (DCFC)
    - Two dual port solar powered DCFCs
- Facilitate a quarterly working group with the Inland Zero Emission Vehicle Network to form partnerships and share best project progress, best practices, and resources.
- Engage local community organizations and members at two community events in each of the three participating municipalities (cities of Banning, Moreno Valley, and Riverside) for a total of six engagement events.
- Coordinate with the Long Beach Clean Cities Coalition to train at least one technician from each local agency partner on EV and charging station operations and maintenance.
- Develop and make publicly available a Toolkit that outlines lessons learned and best practices related to deployment and operation of vehicles and infrastructure funded by this project to support ZEV transitions by other municipal fleets.

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) 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 or CARB Project Liaison 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.
- Provide an *updated Schedule of Products, updated list of match funds, 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 1.7) 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 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)
    - 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

CAM 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, 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 or CARB Project Liaison to provide support to the CEC and CARB.

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 or CARB Project Liaison 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, CAM, and CARB Project Liaison 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 and 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 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

- 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 or CARB 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 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 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 and CARB Project Liaison prior to the monthly call
- Provide verbal answers to the CAM and CARB Project Liaison during the call.
- Send an *email to CAM concurring with call summary notes*.

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 and the CARB Project Liaison the 10th 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 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*.
- 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 and CARB Project Liaison.

Products:

- Outline of the Final Report
- 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 and 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 match fund commitmen*t 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 match fund commitment* to the CAM and CARB Project Liaison if during the course of the Agreement additional match funds are received.
- Provide the CAM and 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 funds (if applicable)
- Written notification 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 and 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 CARB Project Liaison.
- As permits are obtained, send a *copy of each final approved permit* to the CAM.
- If during the course of the Agreement permits are not obtained on time or are denied, notify the CAM and CARB Project Liaison 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 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 1.9 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 and CARB Project Liaison describing the subawards needed or stating that no subawards are required.
- If requested by the CAM and CARB Project Liaison, submit a *draft of each subaward* required to conduct the work under this Agreement to the CAM and CARB Project Liaison for review.
- If requested by the CAM and CARB Project Liaison, 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 and CARB Project Liaison.

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 VEHICLE PROCUREMENT AND DELIVERY (CARB-FUNDED TASK)

The goal of this task is to finalize vehicle selections with the local agency partners (City of Banning, City of Moreno Valley, County of Riverside Transportation and Land Management Agency, and County of Riverside Purchasing and Fleet Services), and for agencies to procure, take delivery of, and put into service the selected EVs. Note that products required under CARB-funded tasks will also be sent to the CEC CAM.

The Recipient shall:

- Finalize vehicle selections with site partners via partner-specific meetings and technical assistance.
- Document key information discussed in partner-specific meetings and technical assistance actions provided to partner in a *Vehicle Technical Assistance Log.* Provide a copy of *Vehicle Technical Assistance Logs (One for each partner)* to the CAM and CARB Project Liaison.

- Procure 11 EVs: one sedan, one sport utility vehicle, six pickup trucks, one transit van, one street sweeper, one dump truck.
- Provide a copy of *Final Vehicle Specifications for each EV* to the CAM and CARB Project Liaison.
- Provide a copy of *Purchase Order for each EV* to the CAM and CARB Project Liaison.
- Accept the 11 EVs and prepare them for demonstration. Provide a *Delivery Receipt for each EV* with *Photographs of each EV* to the CAM and CARB Project Liaison.
- Conduct vehicle inspections and provide CAM and CARB Project Liaison *Completed Vehicle Inspection Checklists* for each EV.
- Provide a *Copy of Title* and *Proof of Insurance for each EV* to the CAM and CARB Project Liaison.

Products:

- Vehicle Technical Assistance Logs (One for each partner)
- Purchase Orders for the 11 EVs
- Final Vehicle Specifications for each EV
- Delivery Receipt for each EV
- Photograph of each EV
- Completed Vehicle Inspection Checklists for each EV
- Copy of Title for each EV
- Proof of Insurance for each EV

TASK 3 INFRASTRUCTURE PLANNING AND PROCUREMENT

The goal of this task is for each local agency partner to coordinate with the appropriate electric utility and to complete pre-installation activities, including site design, permitting, and procurement of charging infrastructure required to charge the 11 EVs procured in Task 2. The charging infrastructure will span five sites, one site owned by City of Banning, one site owned by City of Moreno, one site owned by County of Riverside Transportation and Land Management Agency, and two sites owned by County of Riverside Purchasing and Fleet Services.

The Recipient shall:

- Facilitate coordination between each local agency partner and the appropriate electric utility to ensure sufficient power is available at each of the project sites to support charging.
- Develop a *Final Vehicle and Equipment Memo* that outlines the final vehicle and infrastructure needs for each of the five project sites, describes application and use case for the vehicles and supporting infrastructure, and provides evidence of compatibility between the vehicle and charger.
- Provide a copy of the *Final Vehicle and Equipment Memo* to the CAM and CARB Project Liaison.

- Develop a site design for each project site. The design shall include but is not limited to the physical location of chargers and the type of charger attachments (e.g., pole mounted, wall mounted, etc.), connections between the charger and electric service equipment, and other considerations that allow for safe and effective installation.
- Provide a copy of the *Final Site Design Drawings for each project site* to the CAM and CARB Project Liaison.
- Develop and execute a *Procurement Plan*. This plan shall include, but is not limited to:
    - Complete list of procurements necessary for the CEC-funded portion of the project
    - Procedures, steps, and timelines that will be followed for procurements for the CEC-funded portion of the project
- Provide a copy of the *Procurement Plan* to the CAM and CARB Project Liaison. CAM written approval to proceed with procurement is required.
- Upon CAM written approval to proceed, procure chargers and charging equipment. Provide a copy of *Purchase Orders* to the CAM and CARB Project Liaison.
- Document key information discussed in partner-specific meetings and technical assistance actions provided to partner in an *Infrastructure Technical Assistance Log.* Provide a copy of the *Infrastructure Technical Assistance Logs (One for each partner)* to the CAM and CARB Project Liaison.

Products:

- Final Vehicle and Equipment Memo
- Copy of the Final Site Design Drawings for each project site
- Procurement Plan
- Purchase Orders
- Infrastructure Technical Assistance Logs (One for each partner)

TASK 4 INFRASTRUCTURE CONSTRUCTION, INSTALLATION, AND COMMISSIONING

The goal of this task is to successfully set up, install, and test or commission all charging infrastructure purchased for the local agency partners under Task 3.

The Recipient shall:

- Prepare *Site Specific Installation Plan*s and provide to the CAM and CARB Project Liaison. The plans will include but are not limited to

    - A schedule of activities and anticipated dates from pre-construction to commissioning
        - For sites that do not have construction, provide a schedule from pre-setup to post-testing
    - An update, as necessary, to milestones and timeline
- Oversee site construction.
- Take and provide at least *six High Quality Digital Photographs of Pre-Construction* of each site to the CAM and CARB Project Liaison.
- Take and provide at least *six High Quality Digital Photographs of Completed Installation of chargers* at each site to CAM and CARB Project Liaison.
- 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 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 Division of Measurement Standards 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.
- Ensure installation, repair, or maintenance on 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. To place a device into service, the RSA must perform accuracy testing. Device owners are responsible for registering their device with the county.
- Prepare and provide a *Commissioning Report* for each site, which will include but not be limited to
    - A written notification of completion of commissioning
    - Testing results of actual equipment commissioned
    - Documentation of all aspects of the site that may become useful for troubleshooting or operational issues in the future
        - This includes asset information of all chargers onsite, relevant network and electrical schematics, and any other unique information that may prove useful in the future

- Ensure compatibility with the new EVs prior to full deployment. Provide CAM and CARB Project Liaison a *Notification of Vehicle and Charger Compatibility.*

Products:

- Site Specific Installation Plans
- Six High Quality Digital Photographs of Pre-Construction
- Six High Quality Digital Photographs of Completed Installation
- AB 841 Certification
- EVITP Certification Numbers
- Commissioning Report
- Notification of Vehicle and Charger Compatibility

[CPR WILL BE HELD IN THIS TASK. See Task 1.2 for details]

TASK 5 PROJECT WORKING GROUP AND ZEV NETWORK MEETINGS

The goal of this task is to facilitate a working group of project participants to coordinate project-related progress, share best practices, and discuss challenges.

The Recipient shall:

- Coordinate with the Inland Zero Emission Vehicle Network to meet quarterly at different member sites and facilities to form partnerships and share project progress and resources. Working group meeting times will align with the project's overall progress and participant availability and will be determined as far in advance as feasible.
- Incorporate project-related material into quarterly meetings of the Inland Zero-Emission Vehicle Network and utilize network-facilitated partnerships where appropriate to advance project goals.
- Prepare *Working Group Meeting Agendas* for each working group meeting and share them with the CAM and CARB Project Liaison at least ten days prior to scheduled working group meeting.
- Attend and facilitate meetings.
- Prepare *Summary Memos* for the working group meetings that include but are not limited to action items and working group attendance list. Provide to the CAM and CARB Project Liaison within 14 days following the working group meeting.

Products:

- Working Group Meeting Agendas
- Summary Memos

TASK 6 COMMUNITY ENGAGEMENT

The goal of this task is to inform surrounding communities about the project, ZEVs and infrastructure deployment and to seek feedback where appropriate.

The Recipient shall:

- Engage with local community organizations and community members to receive input on community needs and highlight progress, success, challenges, and next steps for each agency's portion of the project.
- Facilitate booths or exhibits at two community events in each of the four participating jurisdictions during the project period, for a total of eight events. Events will:
    - Be existing community opportunities, such as health fairs, farmers markets, sporting events, and others, to ensure accessibility to a diverse set of community members.
    - Take place in two phases, the first to align with the initial deployment and the second to align with the development of the project Toolkit outlined in Task 8.
- Create and provide a *Draft and Final Community Engagement Plan* to the CAM and CARB Project Liaison that outlines engagement goals, strategies, content and activities, staffing, preparation timeline, and other important considerations to ensure that engagement is successful.
- Provide CAM and CARB Project Liaison with *Copies of Promotional Materials* from each of the eight outreach events at least 30 days prior to the engagement event. Promotional materials will reflect community language needs and will be ADA accessible.
    - Press releases must be submitted to CAM for CEC Media Office review and approval 30 days prior to release.
- Provide CAM and CARB Project Liaison with *Engagement Event Summary Reports* that include but are not limited to photographs, summary of activities and outcomes, and the number of community members participating. Send Summary Reports within 14 days of an engagement event.

Products:

- Draft Community Engagement Plan
- Final Community Engagement Plan
- Copies of Promotional Materials
- Engagement Event Summary Reports

TASK 7 TECHNICAL TRAINING FOR PARTNER TECHNICIANS

The goal of this task is to provide technical training to technicians supporting participating local agencies. Training will follow an established, high-quality curriculum developed by the Cerritos College Advanced Transportation and Logistics (ATL) Center.

The Recipient shall:

- Coordinate with Long Beach Clean Cities Coalition to prepare curriculum, training materials, and training session agendas.
- Coordinate training scheduling and invitations with local agency partners.
- Provide to CAM and CARB Liaison a *Schedule of Planned Training* that includes dates of training and the number of participants and what local agency they support.
- Deliver technical training to at least one technician from each local agency partner. The format will consist of a combination of online and hands-on training.

  The online training will consist of five modules that will be delivered in sequential order:

  1. EV Technology
  2. High Voltage
  3. Electrical Understanding- Level 1
  4. Advanced Electrical
  5. Electric Vehicle Service Equipment (EVSE)

  The hands-on training will consist of:

  1. High Voltage Safety
  2. Electrical Understanding- Level 1
  3. Advanced Electrical
  4. Electric Vehicle Service Equipment (EVSE)
  5. Electrical Control Area Network (CAN) Communication

- Provide to CAM and CARB Project Liaison a *Final Training Log* that summarizes all training within the agreement term, including but not limited to:
  - Locations of training
  - Dates of training
  - Trainer information
  - List of trainees per event and their corresponding local agency
  - Training topics
  - Demographic data on trainees, including but not limited to low-income or disadvantaged community member participation

Products:

- Schedule of Planned Training

- Final Training Log

TASK 8 TOOLKIT DEVELOPMENT AND PUBLISHING

The goal of this task is to prepare a ZEV deployment toolkit that will outline lessons learned and best practices related to the deployment and operation of vehicles and infrastructure funded by this project to support ZEV transitions by other municipal fleets.

The Recipient shall:

- Analyze quantitative and qualitative data collected from participants throughout the project period. This includes, but is not limited to, data related to:
    - Use cases and duty cycles
    - Equipment performance, including comparison of expected vs. actual performance
    - Equipment reliability, maintenance requirements, and maintenance processes
    - Practices and processes for acquiring, installing, and placing equipment into service
    - Availability and quality of local equipment installers
    - Permitting processes and local regulations that impact equipment deployment and operations
    - Performance of equipment compared to alternate technologies or equipment that would have previously completed a specific use case or duty cycle
    - Performance of similar equipment operated by other organizations in similar use cases and duty cycles
    - Cost, cost-effectiveness, and other economic considerations
    - Operator experience
    - Safety and health considerations
    - Greenhouse gas and local air quality emissions impacts
    - Availability of equipment and timeline for acquiring equipment, including experiences with manufacturers, dealers, or other related organizations
    - Availability of power to serve electric vehicle chargers and experience working with utilities to address those challenges
- Facilitate discussion among participants on successes, challenges, best practices, and other considerations.

- Develop a toolkit that identifies successes, challenges, best practices, next steps, and other considerations to improve the deployment of ZEVs and supporting infrastructure in the future. The toolkit will be designed to facilitate broad distribution to other agencies operating in similar environments. Content will include, but is not limited to:
    - Identification of all equipment deployed and operated by the project
    - Description of use cases and duty cycles of equipment
    - Equipment performance analysis
    - Overview of successes in the deployment of equipment, including permitting, power availability, and installation challenges
    - Overview of challenges in obtaining, deploying, and operating equipment
    - Overview of opportunities and lessons learned
    - Identification of best practices that can streamline the adoption of similar equipment
    - Identification of available equipment and related manufacturers, dealers, and installers
    - Best practices for working with utilities to install charging infrastructure
- Prepare and provide an *Outline of Toolkit* to the CAM and CARB Project Liaison.
- Prepare and provide a *Draft Toolkit* to the CAM and CARB Project Liaison.
- Prepare and provide a *Final Toolkit* to the CAM and CARB Project Liaison.
- Post the Toolkit for free download by the public on the Recipient and Project Partner websites. Provide a *Notification of Toolkit Posting on Recipient and Partner Websites* to the CAM and CARB Project Liaison within at least 5 days of publishing.
- Develop a one-page *Toolkit Fact Sheet* to be shared with the CAM, CARB Project Liaison, and US DOE's Clean Cities Coalition Network. The fact sheet will include but is not limited to summaries of the project and content provided in the Final Toolkit and information on how to access the Final Toolkit.
- Alert the public of availability of the free toolkit via promotional materials, including a press release, social media posts, and a one-page toolkit fact sheet.
    - Promotional materials will be shared via partner listservs.
    - Press releases must be submitted to CAM for CEC Media Office review and approval 30 days prior to release.
- Provide CAM and CARB Project Liaison with copies of *Toolkit Promotional Materials.*

Products:

- Outline of Toolkit
- Draft Toolkit
- Final Toolkit
- Notification of Toolkit Posting on Recipient and Partner Websites
- Toolkit Fact Sheet
- Copies of Toolkit Promotional Materials

[CPR WILL BE HELD IN THIS TASK. See Task 1.2 for details]

TASK 9 INFRASTRUCTURE 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 9.1 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 9.2 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 for networked chargers 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 for Networked Chargers

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 9.3 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 or charging port 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 9.4.

Products:

- Maintenance section of Quarterly Report on Charger and Charging Port Reliability and Maintenance described in Task 9.4

Task 9.4 Reporting

The goal of this task is to provide 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. 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.

2. **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 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 and include in 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 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.
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 chargers(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:

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

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 10 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 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.

Recipient Product:

- Electric Vehicle Charger Inventory Report

TASK 11 WORKFORCE TRAINING AND DEVELOPMENT DATA COLLECTION (CARB FUNDED TASK)

The goal of this task is to collect and report on workforce training and development data points required by CARB's Greenhouse Gas Reduction Fund reporting requirements. Note that products required under this task will also be sent to the CEC CAM.

The Recipient shall:

- Track and report information on employment outcomes from the project, including:
  - Project Reporting
    - Job classifications or trades
    - Job training credentials
    - Number of jobs provided (in full and for priority populations)
    - Total project work hours (in full and for priority populations)
    - Average hourly wage (in full and for priority populations)
    - Total number of workers that completed job training (in full and for priority populations)
    - Description of job quality (e.g., benefits provided such as health care and paid time off)
    - Targeted hiring strategy
    - Census tracts of education and training(s), outreach, and partner organizations

        - Location of trainees/participants (low-income and/or disadvantaged communities)
        - Race/ethnicity of trainees/participants
        - Number of trainees/participants in training program, and total hours of training provided
        - Number of trainees/participants completing training program (including number of certifications received)
        - Employment status, job titles, occupations, and salary wages of trainees/participants
        - Level of trainee involvement in training and curriculum design
        - Expected wages participants could receive as a result of training
        - Expected wages that participants will receive as a result of the training or for developing the relevant expertise
    - Program benefits reporting shall include, but is not limited to:
        - Geographic distribution of workforce training, curriculum, and program offerings
        - Increased connections to ZEV technology employers and industries
        - Number of job placements, including full- and part-time jobs, and paid internships or apprenticeships
        - Number of new full- and part-time jobs created and retained
        - Development of new partnerships with local and regional workforce entities, and economic/business development entities
        - Connections between training and education programs and small, women, minority, disadvantaged, and certified business employment or support in priority communities
        - Replication of concepts and program outcomes in other priority communities
        - Community education events by type of event and attendance
        - Direct address of community-specific workforce training and development needs
    - Program participant progress reporting shall include, but is not limited to:
        - Participant's level of satisfaction in their preparation for ZEV industry jobs and careers provided by the ZEV education and training program curriculum.
        - Participant's current employment status (part- or full-time employment, or unemployed)
        - Participant's level of satisfaction with services provided, including increased access to potential economic opportunities. (For example: improved outcomes over program expenses or investments, willingness to recommend the program to others)

        - Participant's level of satisfaction with accessibility and ease of training program
        - Participant's level of satisfaction with program workforce, career development, and job placement support and opportunities
        - Portal or other resources for existing trainees to provide their experiences and feedback loops to ensure changes to programs are made over time to best meet needs and boost new student recruitment
- Report data above in a *Workforce Training and Development Report.* Provide the report to the CARB Project Liaison and CAM.

Products:

- Workforce Training and Development Report

TASK 12 EV DATA COLLECTION AND ANALYSIS (MATCH FUNDED TASK)

The goal of this task is to collect operational data from the 11 EVs funded by the project and to analyze that data. Note that products required under this task will also be sent to the CEC CAM.

The Recipient shall:

- Collect and report to the CARB Project Liaison and CAM, at a minimum, data including:
    - Vehicle Specification
        - Vehicle Specification (e.g., manufacturer, model, model year, gross vehicle weight, fuel capacity, etc.)
        - Full propulsion system specification, including legible CARB and federal certification label photos
    - Vehicle Operation
        - Description of daily use of vehicles; duty cycle
        - Vehicle usage, e.g., hours of operation per day, days of operation per year, odometer reading, GPS data (must be able to distinguish between key off and key on but not moving)
        - Origin and destination on a per-trip basis
        - Miles traveled per trip
        - Average speed
        - Weight of load
        - Duration of trip
        - Driver experience
    - Vehicle Performance

        - Miles between road calls, if applicable
        - Number of road calls (including propulsion-related, energy storage system-related)
        - Maintenance staff experience
        - Vehicle availability
        - Vehicle zero-emission range
    - Energy Consumption
        - Amount of electricity; odometer reading; date; fuel price per unit when a vehicle is fueled (include electricity rates as applicable)
        - State of charge (SOC), if applicable
        - Charging time
        - Distance traveled to charge
        - Charging source (e.g., on-site energy storage, grid, delivery, etc.)
        - Off-peak and/or renewable energy load shifting potential (e.g., battery recharging optimization with smart meter)
        - Charge frequency
        - Energy consumption rate per distance driven
        - Energy consumption while idling (if applicable)
    - Maintenance
        - Type of maintenance: scheduled, unscheduled, configuration change
        - Repairs: date, description of problem, description of repair performed, parts replaced, costs of parts replaced, costs of labor, odometer reading
        - Time out of service with an explanation of the reason for any extended delay
        - Maintenance schedule or plan
        - Maintenance and repair cost analysis and optimization
    - Operating and Maintenance Costs
        - Detailed operating costs for both baseline and advanced technology vehicles and equipment
        - Detailed maintenance costs for both baseline and advanced technology vehicles and equipment, including parts and labor (total labor cost and mechanic labor cost in $/hour)

        - Charging infrastructure and maintenance bay operation and maintenance costs (e.g., type of maintenance, costs for parts and labors, problems)
        - Comparison of operating and maintenance costs for advanced technology vehicles and equipment to baseline options, including consideration of any cost savings or efficiencies
    - Service Calls
        - Date of service call, length of repair, description of problem, description of repair performed, parts replaced, odometer reading
        - Time out of service
        - Service response time to new trouble call
        - Service history of equipment
        - Analysis of service and repair costs and optimization
        - Customer feedback on service and repair experience
    - Safety
        - Description of any accidents or incidents, including collisions, maintenance and charging incidents
        - Safety policies and procedures
        - Safety inspections and audits
    - Capital Costs
        - Capital costs for advanced technology vehicles and baseline vehicles, or cost of vehicle upgrade
        - Infrastructure/facility capital costs, or cost of facility modification/upgrade, for both charging station and maintenance bay
        - Identification of funding sources for capital costs, including government grants, loans, and private investments
        - Evaluation of the scalability of capital costs and the potential for cost reductions through increased production and economies of scale
    - User/Fleet Experience Survey
        - User/fleet experience of the advanced technology vehicles/equipment, e.g., vehicle availability, power, capacity to meet fleet operation demand, operations and maintenance challenges, service parts availability, perceived safety, charging experience and any barriers

        - Describe the workforce training programs, if any, related to the use and maintenance of the advanced technology vehicles. Evaluate the effectiveness of such programs and the costs associated with them.
        - Describe warranty claims and insurance policies, as well as the experience of working with vehicle/equipment manufacturers in the instance of an accident or a major period of unexpected down time (as applicable).
        - The vehicle or equipment manufacturer's response/service for warranty claims and/or troubleshooting
        - Identify any opportunities for improvement in the use or maintenance of advanced technology vehicles or equipment, and provide recommendations for addressing these issues
    - Report data above in an *Electric Vehicle Performance Report.* Provide the report to the CARB Project Liaison and CAM.

Products:

- Electric Vehicle Performance Report

TASK 13 INFRASTRUCTURE 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:

- Develop and provide to the CAM a *Data Collection Plan* to collect the data discussed in this task.
- 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 maintenance 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.
- 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.

- 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 a *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 multi-unit housing.
  - 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.

- 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 session, 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)
    - Maximum capacity of the new fueling system
    - 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
    - Duty cycle of the current fleet and the expected duty cycle of future vehicle acquisitions
- Identify any current and planned use of renewable energy at the facility.
- Identify the source of the alternative fuel.
- Describe any energy efficiency measures used in the facility that may exceed Title 24 standards in Part 6 of the California Code Regulations.

- Provide data on potential job creation, economic development, and increased state revenue as a result of expected future expansion.
- Provide a quantified estimate of the project's carbon intensity values for life-cycle greenhouse gas emissions.
- Compare any project performance and expectations provided in the proposal to CEC with actual project performance and accomplishments.
- Provide an *Infrastructure Data Collection and Information Analysis Report* that lists and analyzes all the data and information described above.

Products:

- Data Collection Plan
- AB 126 Data Reports
- Infrastructure Data Collection and Information Analysis Report

TASK 14 PROJECT FACT SHEET

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 describes the project, the actual benefits resulting from the project, and lessons learned from implementing the project. Use the format provided by the CAM.

Products:

- Initial Project Fact Sheet
- Final Project Fact Sheet