California Energy Commission
September 11, 2024 Business Meeting
Backup Materials for Zero6 EV Charging CA | LLC

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: 24-0911-13c

STATE OF CALIFORNIA

STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION

RESOLUTION: Zero6 EV Charging CA | LLC

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 RNEV-24-003 with Zero6 EV Charging CA I LLC for a $3,675,000 grant. This agreement will install, operate, and maintain public EV direct current fast charging stations compliant with NEVI Program requirements along Interstate 5 from Sacramento to Kettleman City; 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 September 11, 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: RNEV-24-003

B. Division Information

1. Division Name: Fuels and Transportation
2. Agreement Manager: Jane Berner
3. MS-6
4. Phone Number: 916-903-4286

C. Recipient's Information

1. Recipient's Legal Name: Zero6 EV Charging CA I LLC
2. Federal ID Number: 93-4935713

D. Title of Project

Title of project: California NEVI Phase 1 - Corridor Group 6A

E. Term and Amount

1. Start Date: 9/11/2024
2. End Date: 3/31/2031
3. Amount: $3,675,000

F. Business Meeting Information

1. Are the ARFVTP agreements $75K and under delegated to Executive Director? No
2. The Proposed Business Meeting Date: 09-11-24
3. Consent or Discussion? Discussion
4. Business Meeting Presenter Name: Jane Berner
5. Time Needed for Business Meeting: 5 minutes.
6. The email subscription topic is: National Electric Vehicle Infrastructure Formula Program

Agenda Item Subject and Description:

Zero6 EV Charging CA I LLC. Proposed resolution approving agreement RNEV-24-003 with Zero6 EV Charging CA I LLC for a $3,675,000 grant and adopting staff's recommendation that this action is exempt from CEQA. This project will install, operate, and maintain public electric vehicle direct current fast charging stations compliant with the National Electric Vehicle Infrastructure (NEVI) Formula Program requirements along the section of Interstate 5 designated as Corridor Group 6A under GFO-23-601, from Sacramento to Kettleman City. (NEVI Formula Program Funding) Contact: Jane Berner (Staff Presentation: 5 minutes)

G. California Environmental Quality Act (CEQA) Compliance

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

   Yes

Statutory Exemption?

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: CCR tit. 14, §§ 15301, 15303

This project involves the installation of eight electric vehicle fast charging station sites with a combined 49 charging ports along the Interstate 5 corridor in San Joaquin, Stanislaus, Merced, and Fresno counties. All installation sites will be within one mile of the freeway corridor at existing Love’s Travel Stops or in the existing parking lots of commercial properties. Minor modifications to the sites will be needed such as trenching to run electrical wire to connect the charging dispensers to the equipment pads for the transformer and switchgear.

This project is therefore categorically exempt from environmental review pursuant to section 15301 of the CEQA Guidelines because it consists of the minor alteration of existing structures, facilities, mechanical equipment, or topographical features involving negligible or no expansion of existing or former use at the sites.

The project is also categorically exempt pursuant to section 15303 of the CEQA Guidelines because it consists of the construction and location of limited numbers of new, small structures and/or the installation of small new equipment in small structures with only minor modifications to the structures. Each dual-port charger is approximately 8 feet tall by 3 feet wide by 2 feet deep. Each charging station site will have between 4 and 11 charging ports installed. The total footprint of each station site’s charging and electrical equipment will be approximately 200 square feet. This project is therefore categorically exempt from environmental review pursuant to section 15303 of the CEQA Guidelines because it consists of construction and location of limited numbers of new, small facilities or structures and installation of small new equipment.

The project does not involve any unusual circumstances, will not result in damage to any scenic resources within a highway officially designated as a state scenic highway, none of the sites are included on any list compiled pursuant to Government Code section 65962.5, and the project will not cause a substantial adverse change in the significance of a historical resource. The project, when considered as a whole, will not result in a cumulative impact that is significant on the environment. Therefore, none of the exceptions to exemptions listed in CEQA Guidelines section 15300.2 apply to this project and this project will not have a significant effect on the environment.

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

No

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

Not applicable.

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

No

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

Additional Documents	Applies
Initial Study	No
Negative Declaration	No
Mitigated Negative Declaration	No
Environmental Impact Report	No
Statement of Overriding Considerations	No
None	Yes

H. Is this project considered "Infrastructure"?

Yes

I. Subcontractors

List all Subcontractors listed in the Budget(s) (major and minor). Insert additional rows if needed. If no subcontractors to report, enter "No subcontractors to report" and "0" to funds. **Delete** any unused rows from the table

Subcontractor Legal Company Name	CEC Funds	Match Funds
Faith Technologies, Inc.	$ 97,247	$ 204,070

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
ChargePoint, Inc.	$3,280,673	$3,280,673

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
Love’s Country Stores of California

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
ARFVTF	23/24	901.004	$3,675,000.00

TOTAL Amount: $3,675,000.00

R&D Program Area: None

Reimbursement Contract #: RMB600-23-001

Federal Agreement # (between Caltrans and FHWA): NEVIL-7516(003)

M. Recipient's Contact Information

1. Recipient's Administrator/Officer

Name: Jared Klapperich

Address: 470 W 78th St, Suite 250

City, State, Zip: Chanhassen, MN 55317

Phone: (952) 923-1187

E-Mail: jklapperich@zero6energy.com

2. Recipient's Project Manager

Name: Jared Klapperich

Address: 470 W 78th St, Suite 250

City, State, Zip: Chanhassen, MN 55317

Phone: (952) 923-1187

E-Mail: jklapperich@zero6energy.com

N. Selection Process Used

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

Selection Process	Additional Information
Competitive Solicitation #	GFO-23-601
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	No

Approved By

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

Agreement Manager: Jane Berner

Approval Date: 7/19/2024

Unit Supervisor: Ben De Alba

Approval Date: 7/21/2024

Office Manager: Charles Smith

Approval Date: 7/23/2024

Deputy Director: Melanie Vail

Approval Date: 7/26/2024

Exhibit A
SCOPE OF WORK

TECHNICAL TASK LIST

Task #	CPR	Task Name
1		Administration
2	X	Environmental Review and Engineering
3	X	Right-of-Way
4		Site Preparation and Equipment Procurement
5	X	Charging Station Construction and Commissioning
6	X	Operations and Reliability
7		Semi-Annual Electric Vehicle Charger Inventory Reports
8		Data Collection and Analysis
9		Federal Data Reporting
10		Project Fact Sheet

KEY NAME LIST

Task #	Key Personnel	Key Subcontractor(s)	Key Partner(s)
1	Jared Klapperich		
2	Austin MacDonald	Faith Technologies, Inc.	
3	Austin MacDonald	Faith Technologies, Inc.	
4	Craig Delahaut	Faith Technologies, Inc.	
5	Josh Shamhart	Faith Technologies, Inc.	
6	Alex Gorcyca	Faith Technologies, Inc.	
7	Jared Klapperich		
8	Jared Klapperich		
9	Jared Klapperich		
10	Jared Klapperich/Joe Vancik	Faith Technologies, Inc.	

GLOSSARY

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

Term/ Acronym	Definition
ADA	Americans with Disabilities Act

Term/ Acronym	Definition
Application Programming Interface (API)	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
Caltrans	California Department of Transportation
CAO	Commission Agreement Officer
CCS	Combined Charging System
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CHAdeMO	A charging port standard for fast charging of electric vehicles
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).
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.

Term/ Acronym	Definition
Charging Session	The period after a charge attempt during which the electric vehicle is allowed to request energy. Charging sessions can be terminated by the customer, the electric vehicle, the charger, the charging station operator, or the charging network provider.
Charging Station	The area in the immediate vicinity of one or more chargers and includes the chargers, supporting equipment, parking areas adjacent to the chargers, and lanes for vehicle ingress and egress. A charging station could comprise only part of the property on which it is located.
Charging Station Management System	A system that may be used to operate a charger, to authorize use of the charger, or to record or report charger data, such as by using OCPP.
Charging Station Operator	The entity that owns the chargers and supporting equipment and facilities at one or more charging stations. Although this entity may delegate responsibility for certain aspects of charging station operation and maintenance to subcontractors, this entity retains responsibility for operation and maintenance of chargers and supporting equipment and facilities. In some cases, the charging station operator and the charging network provider are the same entity.
Connector	The device that attaches an EV to a charging port 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
DC	Direct Current
Downtime	A period of time that a charger is not capable of successfully dispensing electricity or otherwise not functioning as designed. Downtime is calculated pursuant to Task 6.4.
E-76	Federal-aid program form titled Authorization to Proceed. It provides federal authorization to begin reimbursement work for a specific phase of work.
EV	Electric Vehicle
EV-ChART	Electric Vehicle Charger Analytics and Reporting Tool
EVITP	Electric Vehicle Infrastructure Training Program
FHWA	Federal Highway Administration
FTD	Fuels and Transportation Division
Hardware	The machines, wiring, and other physical components of an electronic system including onboard computers and controllers.

Term/ Acronym	Definition
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.
kW	Kilowatt
kWh	Kilowatt-hour
Maintenance	Any instance in which preventive or corrective maintenance is carried out on equipment.
NACS	North American Charging Standard
NEPA	National Environmental Policy Act
Networked	A charger that 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.
NEVI	National Electric Vehicle Infrastructure
Open Charge Point Protocol or OCPP	An open-source communication protocol that governs the communication between chargers and the charging networks that remotely manage the chargers.
Operational	A charging port's hardware and software are both online and available to 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.
Recipient	Zero6 EV Charging CA I LLC
SCAR	Successful Charge Attempt Rate
Software	A set of instructions, data, or programs used to operate computers and execute specific tasks.
Solicitation	GFO-23-601 California's National Electric Vehicle Infrastructure Formula Program

Term/ Acronym	Definition
Successful Charging Session	Following a charging attempt, a customer's EV battery is charged to the state of charge the customer desires and is disconnected manually by the customer or by the EV's onboard software system terminating the charging session, without an additional charge attempt.
Uptime	The time that a charger is installed during a reporting period excluding downtime pursuant to Task 6.4.

Background

President Joseph R. Biden Jr. signed the Infrastructure Investment and Jobs Act into law in November 2021 (Public Law 117-58). The law authorizes hundreds of billions of dollars in new investments in a wide array of infrastructure categories, including roads and bridges, water infrastructure, passenger rail, energy, and broadband internet. Electric vehicle (EV) charging infrastructure will see significant new funding, with $5 billion to accelerate EV infrastructure deployment nationally under the National Electric Vehicle Infrastructure (NEVI) formula program. California's share is expected to be $384 million, allocated over 5 years.

NEVI is an initiative to create a coast-to-coast network of EV chargers focused on major highways that support the majority of long-distance trips. This national network will give drivers confidence they can always find a place to charge, jump start private investment in charging infrastructure and EVs, and support President Biden's goal of at least 50% of vehicle sales to be electric by 2030[1].

The California Energy Commission (CEC) is collaborating with the California Department of Transportation (Caltrans) on charging infrastructure deployment and has entered into an agreement with Caltrans to implement and administer California's NEVI formula program.

On October 26, 2023, the CEC released a Grant Funding Opportunity (GFO) entitled "California's National Electric Vehicle Infrastructure Formula Program." This competitive grant solicitation aims to install high-powered direct current (DC) fast charging stations along California's alternative fuel corridors which will help establish a coast-to-coast network of EV charging stations to support long-distance travel. In response to GFO-23-601, the Recipient submitted application #1, which was proposed for funding in the CEC's Notice of Proposed Awards on June 3, 2024. GFO-23-601 and Recipient's application are hereby incorporated by reference into this Agreement in their entirety. This project is listed as Federal Project #NEVIL-7516(003) in Caltrans records.

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.

1 (FACT SHEET: Biden-Harris Administration Announces New Standards and Major Progress for a Made-in-America National Network of Electric Vehicle Chargers, 2023) https://www.whitehouse.gov/briefing-room/statements-releases/2023/02/15/fact-sheet-biden-harris-administration-announces-new-standards-and-major-progress-for-a-made-in-america-national-network-of-electric-vehicle-chargers/

Problem Statement:

California's transportation sector accounts for about 50 percent of the state's greenhouse gas emissions, nearly 80 percent of nitrogen oxide pollution, and 90 percent of diesel particulate matter pollution. Transitioning drivers from conventional vehicles to EVs is a key step in helping the state reach its climate change goals and clean air standards. Lack of infrastructure is a major barrier to widespread adoption of EVs and California's ability to meet zero-emission vehicle targets, which estimate 1.01 million chargers are needed by 2030 for light-duty vehicles, including 39,000 DC fast chargers.

A market barrier also exists where non-EV drivers may lack confidence in being able to drive longer distances and DC fast charge due to reliability concerns, station downtime, and confusion surrounding different connector types such as the Combined Charging System (CCS), CHAdeMO, and the North American Charging Standard (NACS). While California has been a leader in making progress towards building out its interstates and highways, a national minimum standard now exists with the Federal Highway Administration (FHWA)'s creation of Title 23, Section 680 of the Code of Federal Regulations (CFR), National Electric Vehicle Infrastructure Standards and Requirements. California, along with 49 other states, the District of Columbia, and Puerto Rico will be investing up to $5 billion to bring their designated Alternative Fuel Corridors to fully built out status.

Goals of the Agreement:

The goal of this Agreement is to deploy an interconnected network of EV charging infrastructure that will support the development of convenient, accessible, reliable, and equitable EV charging along Corridor Group 6A, defined below.

Objectives of the Agreement:

The objectives of this Agreement are to*:*

- Complete, in conjunction with other existing and planned NEVI-compliant EV charging stations, the buildout of Corridor Group 6A to meet all NEVI Formula Program requirements. Together, all existing and planned NEVI-compliant EV charging stations must be spaced at a maximum distance of 50 miles apart and within 1 mile of the designated roadway. Each EV charging station must be publicly accessible, include at least four 150+ kilowatt (kW) DC fast chargers with CCS ports, be capable of simultaneously charging four EVs at 150 kW or above at each port with a minimum station power capability at or above 600 kW, and meet the minimum standards and requirements of 23 CFR 680.

  Corridor Group 6A is described in Table 1.

Table 1

Corridor Group	Corridor Segment
6A	I-5: South of Sacramento to Kettleman City

- Deploy 8 NEVI-compliant EV charging stations at the following locations and with the designated number of charging ports specified in Table 2. The number of charging ports totals 49. Each charging port will be equipped with one CCS and one NACS connector.

Table 2

Station Address	# New Charging Ports
15050 North Thornton Rd, Lodi, CA 95242	4
15250 North Thornton Rd, Lodi, CA 95242	6
10850 Trinity Parkway, Stockton, CA 95219	8
613 Carolyn Weston Blvd, Stockton, CA 95206	4
16542 Golden Valley Parkway, Lathrop, CA 95330	4
55 Rogers Road, Patterson, CA 95363	6
29025 Plaza Drive, Santa Nella, CA 95322	6
25430 West Dorris Ave, Coalinga, CA 93210	11

The total number of charging ports and the number of ports per station to be installed may be changed with prior CAM written approval. The CEC reserves the right to reduce the total grant amount in proportion to any reduction of the total number of charging ports to be installed.

- Operate each of the sites for a minimum of five (5) years after the beginning of operation.
- Provide maintenance and support throughout the grant term with a warranty and maintenance program that achieves a minimum 97% station uptime.
- Provide at least 50 percent of station locations in California designated disadvantaged communities or low-income communities, and 40 percent in federally designated Justice40 communities.
- Achieve 25 percent small business participation.

TASK 1 ADMINISTRATION

Task 1.1 Attend Kick-off Meeting

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

The Recipient shall:

- Attend a “Kick-Off” meeting that includes the CAM and may include the Commission Agreement Officer (CAO) and a representative of the CEC Accounting Office. The Recipient shall bring their Project Manager, Agreement Administrator, Accounting Officer, and any others determined necessary by the Recipient or specifically requested by the CAM to this meeting.
- Provide a written statement of project activities that have occurred after the notice of proposed awards but prior to the execution of the agreement using match funds. If none, provide a statement that no work has been completed using match funds prior to the execution of the agreement. All pre-execution match expenditures must conform to the requirements in the Terms and Conditions of this Agreement.

- Discuss the following administrative and technical aspects of this Agreement:
    - Agreement Terms and Conditions
    - Critical Project Review (Task 1.2)
    - Match fund documentation (Task 1.7) No reimbursable work may be done until this documentation is in place
    - Permit documentation (Task 1.8)
    - Subawards needed to carry out project (Task 1.9)
    - Federal requirements including Davis Bacon documentation (Task 1.10)
    - The CAM's expectations for accomplishing tasks described in the Scope of Work
    - An updated Schedule of Products and Due Dates
    - Monthly Calls (Task 1.4)
    - Quarterly Progress Reports (Task 1.5)
    - Technical Products (Product Guidelines located in Section 5 of the Terms and Conditions)
    - Final Report (Task 1.6)

Recipient Products:

- Updated Schedule of Products
- Updated List of Match Funds
- Updated List of Permits
- Written Statement of Match Share Activities

Commission Agreement Manager Product:

- Kick-Off Meeting Agenda

Task 1.2 Critical Project Review (CPR) Meetings

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

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

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

The CAM shall:

- Determine the location, date, and time of each CPR meeting with the Recipient. These meetings generally take place at the CEC, but they may take place at another location or remotely.

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

The Recipient shall:

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

CAM Products:

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

Recipient Product:

- CPR Report(s)

Task 1.3 Final Meeting

The goal of this task is to closeout this Agreement.

The Recipient shall:

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

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

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

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

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

- Prepare a schedule for completing the closeout activities for this Agreement.

Recipient Products:

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

Task 1.4 Monthly Calls

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

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

The CAM shall:

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

The Recipient shall:

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

Product:

- Email to CAM concurring with call summary notes

Task 1.5 Quarterly Progress Reports

The goal of this task is to periodically verify that satisfactory and continued progress is made towards achieving the objectives of this Agreement on time and within budget.

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

The Recipient shall:

- Prepare a Quarterly Progress Report which summarizes all Agreement activities conducted by the Recipient for the reporting period, including an assessment of the ability to complete the Agreement within the current budget and any anticipated cost overruns. Progress reports are due to the CAM the 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, if requested by the CAM.
- Prepare a Draft Final Report complying with ADA requirements and following the latest version of the Final Report guidelines which will be provided by the CAM. The CAM shall provide written comments on the Draft Final Report within fifteen (15) working days of receipt. The Final Report must be completed at least 60 days before the end of the Agreement Term.
- Submit Final Report in Microsoft Word format or similar electronic format as approved by the CAM.

Products:

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

Task 1.7 Identify and Obtain Matching Funds

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

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

The Recipient shall:

- Prepare a letter documenting the match funding committed to this Agreement and submit it to the CAM at least 2 working days prior to the kick-off meeting. If no match funds were part of the proposal that led to the CEC awarding this Agreement and none have been identified at the time this Agreement starts, then state such in the letter. If match funds were a part of the proposal that led to the CEC awarding this Agreement, then provide in the letter a list of the match funds that identifies the:
    - Amount of each cash match fund, its source, including a contact name, address and telephone number and the task(s) to which the match funds will be applied.
    - Amount of each in-kind contribution, a description, documented market or book value, and its source, including a contact name, address and telephone number and the task(s) to which the match funds will be applied. If the in-kind contribution is equipment or other tangible or real property, the Recipient shall identify its owner and provide a contact name, address and telephone number, and the address where the property is located.
- Provide a copy of the letter of commitment from an authorized representative of each source of cash match funding or in-kind contributions that these funds or contributions have been secured. For match funds provided by a grant, a copy of the executed grant shall be submitted in place of a letter of commitment.

- Discuss match funds and the implications to the Agreement if they are reduced or not obtained as committed, at the kick-off meeting. If applicable, match funds will be included as a line item in the progress reports and will be a topic at CPR meetings.
- Provide the appropriate information to the CAM if during the course of the Agreement additional match funds are received.
- Notify the CAM within 10 days if during the course of the Agreement existing match funds are reduced. Reduction in match funds must be approved through a formal amendment to the Agreement and may trigger an additional CPR meeting.

Products:

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

Task 1.8 Identify and Obtain Required Permits

The goal of this task is to obtain all permits required for work completed under this Agreement in advance of the date they are needed to keep the Agreement schedule on track.

Permit costs and the expenses associated with obtaining permits are not reimbursable under this Agreement. Although the CEC budget for this task will be zero dollars, the Recipient may budget match funds for any expected expenditures associated with obtaining permits. Permits must be identified in writing and obtained before the Recipient can make any expenditure for which a permit is required.

The Recipient shall:

- Prepare a letter documenting the permits required to conduct this Agreement and submit it to the CAM at least 2 working days prior to the kick-off meeting. If there are no permits required at the start of this Agreement, then state such in the letter. If it is known at the beginning of the Agreement that permits will be required during the course of the Agreement, provide in the letter:
    - A list of the permits that identifies the:
        - Type of permit
        - Name, address and telephone number of the permitting jurisdictions or lead agencies
    - The schedule the Recipient will follow in applying for and obtaining these permits.
- Coordinate with CEC and Caltrans staff to verify if encroachment, right-of-way, or any other Caltrans permits will be required for any of the charging stations.

- Discuss the list of permits and the schedule for obtaining them at the kick-off meeting and develop a timetable for submitting the updated list, schedule, and the copies of the permits. The implications to the Agreement if the permits are not obtained in a timely fashion or are denied will also be discussed. If applicable, permits will be included as a line item in the Progress Reports and will be a topic at CPR meetings.
- If during the course of the Agreement additional permits become necessary, provide the appropriate information on each permit and an updated schedule to the CAM.
- As permits are obtained, send a copy of each approved permit to the CAM.
- If during the course of the Agreement permits are not obtained on time or are denied, notify the CAM within 5 working days. Either of these events may trigger an additional CPR.

Products:

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

Task 1.9 Obtain and Execute Subawards

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

The Recipient shall:

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

Products:

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

- Final subawards (if requested)

Task 1.10 Compliance with Federal Requirements

The goal of this task is to ensure compliance with all the federal requirements for work completed under this Agreement in a timely fashion to keep the Agreement on track. Failure to comply with federal requirements including Davis-Bacon Act may require repayment of grant funds under this Agreement.

The Recipient shall:

- Ensure that all laborers and mechanics employed by the Recipient, subrecipients, or vendors in the performance of construction, alteration, or repair work in excess of $2000, funded directly by or assisted in whole or in part by funds made available under this Agreement, shall be paid wages at rates not less than those prevailing on similar projects in the locality, as determined by the Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code commonly referred to as the "Davis-Bacon Act" (DBA).
- Obtain wage determinations from the Secretary of Labor as needed.
- Collect, verify and submit *weekly certified payrolls* for all laborers and mechanics employed or working on the project under this Agreement, including those employed by the Recipient and any subrecipients or vendors.
- Ensure compliance with all applicable federal requirements under this Agreement.
- Collect, verify, and submit *other documentation of compliance with federal requirements*, as applicable and as needed.

Products:

- Copies of weekly certified payrolls.
- Other documentation of compliance with federal requirements as needed.

TECHNICAL TASKS

TASK 2 ENVIRONMENTAL REVIEW AND ENGINEERING

Work on this task may not begin until the Recipient receives written notification from the CAM that E-76 approval for this task has been received.

The goal of this task is to coordinate environmental review and charging station engineering among all project subrecipients and other project participants for each charging station.

Site Changes: The CAM must approve any requested site changes.

[A CPR meeting is scheduled to be held during this task and additional CPR meetings may be scheduled if necessary.]

The Recipient shall:

- Follow the Caltrans acquisitions process detailed in the Local Assistance Procedures Manual (LAPM) and Right of Way Manual as applicable.

- Finalize *Site Host Agreements* for each charging station.
- Submit to the CAM a copy of the Site Host Agreement for each charging station.
- Prepare and submit to the CAM a *Site Assessment* for each charging station site, which shall include, but not be limited to:
    - Evaluating site electrical capacity, including utility interconnection, service drop, transformer sizing, service activation, and billing procedures
    - Confirming optimal positioning for best visibility, safety, and minimization of install costs
    - Assuring wireless communication suitability
    - Determining utility requirements and general arrangement of units for optimal usage convenience and safety
    - As needed, perform a site survey to ensure that installation of charging equipment and associated infrastructure falls within the site host's land boundaries and does not fall within rights-of-way or easements
- Coordinate with CEC and Caltrans staff to complete all work necessary to complete the National Environmental Policy Act (NEPA) compliance. This includes but is not limited to submitting a completed PES Form/Exhibit 6-A in Caltrans' LAPM.
- Coordinate with the local permitting agency to ensure compliance with the California Environmental Quality Act (CEQA).
- Submit to the CAM *Final NEPA approvals* from Caltrans for Each Charging Station.
- Finalize and submit to the CAM an engineered and utility-approved *Site Drawing* for each charging station.
- Receive NEPA (from Caltrans) and CEQA (from local permitting jurisdiction) approvals prior to moving to right-of-way.

Products:

- Site Host Agreement for Each Charging Station
- Site Assessment for Each Charging Station
- Finalized Site Drawing for Each Charging Station
- Final NEPA Approvals for Each Charging Station

TASK 3 RIGHT-OF-WAY

Work on this task may not begin until the Recipient receives written notification from the CAM that E-76 approval for this task has been received.

The goal of this task is to conduct work to secure and finalize right-of-way easements and acquisitions as necessary for each charging station and to secure right-of-way certification from Caltrans for each charging station.

[A CPR meeting is scheduled to be held during this task and additional CPR meetings may be scheduled if necessary.]

The Recipient shall:

- Review right-of-way records and establish additional right-of-way along the entire alignment, if necessary, for each charging station.
- Identify the need for new right-of-way, permanent easements, and temporary construction easements, as needed, for each charging station.
- Coordinate with CEC, Caltrans, and other appropriate agencies to determine right-of-way impacts, such as utility right of way or relocation needs, for each charging station.
- Obtain necessary right-of-way certification required from Caltrans for each charging station.
- Prepare and submit to the CAM an *Easement Summary Report* which should include, but not be limited to, details on which easements are necessary for each charging station, the approver for each easement, and the anticipated timeline for finalizing each easement.
- Submit to the CAM the *Final Right-of-Way Certification* from Caltrans for each charging station.

Products:

- Easement Summary Report
- Final Right-of-Way Certification for Each Charging Station

TASK 4 SITE PREPARATION AND EQUIPMENT PROCUREMENT

Work on this task may not begin until the Recipient receives written notification from the CAM that E-76 approval for this task has been received.

The goal of this task is to prepare each charging station for construction.

The Recipient shall:

- Prepare and submit to the CAM an *Installation Plan* for each charging station, which shall include, but not be limited to:
    1. The site host business name
    2. The site host address
    3. The equipment being installed
    4. The name of the project manager for the site
    5. The planned installation schedule
- Procure all required equipment for installation.
- Procure all necessary materials for construction.
- Verify safety, shelter, access, ADA compliance, signage, and lighting requirements are met.
- Coordinate site project kick-off meeting with host, suppliers, subrecipients,

contractors, and local authority having jurisdiction for each charging station.

- Meet with project partners to track and evaluate project progress, goals, barriers, and project approach.
- Prepare and submit to the CAM a *Written Notification of Readiness to Begin Installation* that declares each site is completed with preconstruction and engineering activities and ready to move forward with the installations.

Products:

- Installation Plan for Each Charging Station
- Written Notification of Readiness to Begin Installation for Each Charging Station

TASK 5 CHARGING STATION CONSTRUCTION AND COMMISSIONING

Work on this task may not begin until the Recipient receives written notification from the CAM that E-76 approval for this task has been received.

The goal of this task is to construct each charging station, ensure all equipment meets the solicitation and federal NEVI requirements, and commission each charging station for public use.

[A CPR meeting is scheduled to be held during this task and additional CPR meetings may be scheduled if necessary.]

The Recipient shall:

- Utilize the *Site Assessments*, *Final Site Drawing*, and *Installation Plans* (Task 2) to prepare each charging station for installation work.
- Inform Caltrans of installation schedule to initiate preparation of highway signage.
- Install at each charging station charging equipment that meets the following specifications:
    - At least four (4) charging ports that can simultaneously supply at least 150 kW each to a vehicle, for a total of 49 charging ports across 8 charging stations.
    - Each charging port must support output voltages between 250 volts direct current (DC) and 920 volts DC.
    - Each charger deployed must be Energy Star certified. Chargers over 350 kilowatts (kW) are not required to be Energy Star certified.
    - Each charging port must have at least one permanently attached CCS connector. Additional connector types such as CHAdeMO and NACS are allowed to be installed if the previous requirement is still met.
    - Each charging port must be capable of at least 375 Amps.
    - The chargers must conform to ISO 15118-3, and hardware must be capable of implementing both ISO 15118-2 and ISO 15118-20.
    - The chargers must include all necessary software and hardware to perform Plug-and-Charge using ISO 15118-2.
    - Conformance testing for charger software and hardware should follow

ISO 15118-4 and 15118-5, respectively.

- The chargers must conform to OCPP 2.0.1 or later. Manufacturers must attest that the charger conforms to OCPP 2.0.1 or later by detailing it on a publicly available charger specification sheet.
- The charger's networking software must connect to a central management system using OCPP 2.0.1 for the purposes of charger management and data reporting, including for reliability data reporting requirements.
- The chargers must be designed to securely switch network providers without any changes in hardware.
- The chargers must be networked and must include the following three abilities:
  1. Have network connectivity with one of the following:
     - IEEE 802.11n for high-bandwidth wireless networking, or
     - IEEE 802.3 for Ethernet for local- or wide-area network applications
  2. Be able to receive remote software updates, real-time protocol translation, encryption, and decryption, including:
     - Internet Protocol (IP)-based processor which must support multiple protocols, and
     - Compliance with Transmission Control Protocol (TCP)/IP and IPv6.
  3. Be able to connect to a network's back-end software.
- An Occupational Safety and Health Administration Nationally Recognized Testing Laboratory must have certified the charging equipment.

- Submit to the CAM 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 Recipient's authorized representative shall sign the certification.
- Submit to the CAM *Electric Vehicle Infrastructure Training Program (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.
- Purchase a networking agreement for each charging port installed. The term of the networking agreement must cover at least five (5) years of operations.
- Prepare and submit to the CAM a *Build America, Buy America Compliance Report* which must document compliance with the Federal NEVI Build America, Buy America requirement.
- Assure each charging station and their associated chargers are accessible to the public 24/7/365.
- Coordinate utility interconnection, service drop, transformer sizing, service

activation, and billing.

- Create and submit a *Signage Report* which may include, but is not limited to:
  - Trailblazer signage that clearly identifies the route from the freeway to the station(s),
  - Which jurisdiction(s) and/or agency(ies) the Recipient must coordinate with to deploy the trailblazer signage for each charging station,
  - Signage that clearly identifies the charging site location to an approaching driver from any ingress,
  - Signage that identifies parking is for EVs only,
  - Signage that states non-EVs may be towed (if applicable),
  - Signage that that informs drivers of price per unit of measure,
  - Signage required for EV driver accessibility, and
  - Any additional signage that may be required by federal, state, or local laws, regulations, and ordinances.
- Send a copy of the *Signage Report* to each local jurisdiction identified in the Report.
- Make an effort to install signage in accordance with the *Signage Report*, local jurisdictions' requirements, and Caltrans requirements.
- Create and submit to the CAM *Written Training Materials* for the charging station equipment at each charging station. These materials may include, but are not limited to, how to operate the equipment, how to troubleshoot the equipment, who to contact for specific questions or issues, and site host requirements may be detailed in the site license agreement. Site host requirements may include, but not be limited to, restroom availability and cleanliness, 24/7/365 access to the charging station, keeping the charging station well-lit and clean.
- Deliver *Written Training Materials* for the charging station to each charging station site host, who should always keep the Written Training Materials at the charging station.
- Provide training to site hosts based on the *Written Training Materials*.
- Perform final inspections and make corrections if necessary.
- Commission each charging station by verifying each installation was completed in accordance with its Site Drawings and Installation Plan completed in Task 4, the Federal NEVI requirements, and overall requirements of this Solicitation.
- Submit each charging station's information to the Alternative Fuels and Data Center, at a minimum. The Recipient may provide the additional charging station location programs as seen fit.
- Prepare and submit to the CAM, the *Written Notification of Intent to Operate* for each charging station that declares installation for the site has been completed, the final inspection card has been received, the site has been commissioned, and is available to the public for use.

Products:

- Signage Report
- Written Training Materials
- Written Notification of Intent to Operate for Each Charging Station
- AB 841 Certification
- EVITP Certification Numbers
- Build America, Buy America Compliance Report

TASK 6 OPERATIONS AND RELIABILITY

The goal of this task is to reliably operate the EV charging stations and provide information such that reliability can be measured and verified.

[A CPR meeting is scheduled to be held during this task and additional CPR meetings may be scheduled if necessary.]

Task 6.1 Operations

The Recipient Shall:

- Operate the installed charging ports during the term of this agreement.
- Ensure price is communicated to customers as prescribed in 23 CFR 680.116(a).
- Ensure that the charging port uptime for each charging port installed in the project is greater than 97 percent of each year as specified in 23 CFR 680.116(b) for five (5) 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 five (5) years after the beginning of operation shall survive the completion or termination date of this agreement. In addition to other requirements in the Terms and Conditions of this agreement, all CEC-reimbursable expenditures must be incurred within the agreement term.

Task 6.2 Recordkeeping

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

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 Application Programming Interface (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. 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. 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. AuthorizeRequest shall be transmitted to the Central Management System by the charger as specified in OCPP 2.0.1 or a subsequent version of OCPP.

    b. AuthorizeResponse shall be transmitted by the Central Management System to the charger as specified in OCPP 2.0.1 or a subsequent version of OCPP.

    c. HeartbeatRequest shall be transmitted to the Central Management System by the charger on a set interval.

    d. HeartbeatResponse shall be transmitted to the charger by the Central Management System in response to any received HeartbeatResponse.

    e. 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.

    f. BootNotificationRequest shall be transmitted by the charger to the Central Management System any time the charger is powered on.

    g. BootNotificationResponse shall be transmitted by the Central Management System to the charger in response to any received BootNotificationRequest.

    h. RequestStartTransactionRequest shall be transmitted by the Central Management System to the charger as specified in OCPP 2.0.1 or a subsequent version of OCPP.

    i. TransactionEventRequest shall be transmitted to the Central Management System by the charger as specified in OCPP 2.0.1 or a subsequent version of OCPP.

        i. The optional field meterValue must be populated when the eventType field is set to either "Started" or "Ended."

        ii. When populated, the sub-subfield Value of the subfield SampledValue of the field meterValue shall be transmitted in Watt-hours (Wh).

        iii. When populated, the sub-sub-subfield unit of the sub-subfield unitOfMeasure of the subfield SampledValue of the field meterValue shall be set to the default string, "Wh."

iv. When populated, the sub-sub-subfield multiplier of the sub-subfield unitOfMeasure of the subfield SampledValue of the field meterValue shall be set to the default integer, 0 (zero).

The Recipient Shall:

- 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.
- 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.
- 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 (CSV) 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.
- Collect and retain the maintenance records specified below for each charging port installed and operated as part of this Agreement for five (5) years from the date the charging port begins operation. Provide *Maintenance Records* to the CEC within 10 business days of request.

Remote Monitoring Data

1. All instances of the following protocol data units, specified in OCPP 2.0.1, that are transmitted between the charger and the central system.
    a. AuthorizeRequest
    b. AuthorizeReponse
    c. RequestStartTransactionRequest
    d. TransactionEventRequest
    e. HeartbeatResponse
    f. StatusNotificationRequest
    g. BootNotificationRequest

Maintenance Records

1. Reports of inoperative charging ports or charging port failures resulting in inability to charge, such as a customer complaint, internal diagnostics, or inspection.
2. Records of any maintenance conducted on charging ports installed and operated as part of the agreement. Records should specify the following:
    a. Date and time of the maintenance event.
    b. Whether maintenance was corrective or preventive in nature.

c. Whether and for how long the charging port was in an inoperative state prior to maintenance.

d. Whether the charging port was in an operative state following maintenance.

Products:

- Remote Monitoring Records
- Maintenance Records
- Data Dictionary

Task 6.3 Maintenance Requirements

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

The Recipient Shall:

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

Products:

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

Task 6.4 Reporting

The goal of this task is to provide 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. 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. 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. 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 charger(s) to claim this as excluded downtime.

7. **Communication Network Outages:** Downtime caused by loss of communication due to cellular or internet service provider system outages. A Communication Network Outage can be claimed as excluded downtime provided the chargers default to a free charge state during communication losses. A free charge state is when the charger is operational and dispenses energy free of charge to any consumer.

8. **Operating Hours:** Hours in which the charging port is in an operative state but that are outside of the identified hours of operation of the charging station.

- 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.

- Prepare a charge attempt summary for each charging port and include in each Quarterly Report on Charger and Charging Port Reliability and Maintenance. The charge attempt summary shall include, as defined in this section, the total number of charge attempts, the total number of successful charge attempts, the total number of failed charge attempts, and the successful charge attempt rate for the reporting period.

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

(a) An AuthorizeResponse message transmitted by the Central Management System with the status subfield of the idTokenInfo field set to any of the following values:

i. “Accepted”

ii. “Blocked”

iii. “ConcurrentTx”

iv. “Expired”

v. “Invalid”

vi. “NoCredit”

vii. “NotAllowedTypeEVSE”

viii. “NotAtThisLocation”

ix. “NotAtThisTime”

x. “Unknown”

(b) A RequestStartTransactionResponse message transmitted by charger to the Central Management System with the status field set to “Accepted”

(c) A RequestStartTransactionResponse message transmitted by charger to the Central Management System with the status field set to “Rejected”

(d) A TransactionEventRequest message transmitted by the charger to the Central Management System with the eventType field set to “Started” and the triggerReason field set to “CablePluggedIn”

2. **Charging Session**. A charging session begins and ends as follows:

(a) A charging session begins when the charger transmits TransactionEventRequest to the Central Management System with the chargingState subfield of the transactionInfo field set to “Charging.”

i. In the event that multiple TransactionEventRequest protocol data units are transmitted with the chargingState subfield of the transactionInfo field set to 'Charging' AND identical identifier strings in the transactionId subfield of the transactionInfo field, the charging session shall begin when the first of those protocol data units are sent. Which protocol data unit was sent first shall be determined based on the lowest value in the seqNo field.

(b) A charging session ends when the charger transmits a subsequent TransactionEventRequest to the Central Management System chargingState subfield of the transactionInfo field set to any of the following values:

i. “EVConnected”

ii. “SuspendedEV”

iii. “SuspendedEVSE”

iv. “Idle”

(c) The identifier string contained in the transactionId subfield of the transactionInfo field must be identical in the messages described in (a) and (b) of this subsection.

(d) The date and time found in the timestamp field of the messages described in (a) and (b) of this subsection shall be used to determine the start and stop time of a charging session.

3. **Successful Charge Attempt.** A successful charge attempt is a charge attempt that is followed by a successful charging session, as defined in (a) of this subsection, prior to another charge attempt.

(a) A successful charging session is a charging session where the stoppedReason subfield of the transactionInfo field of the TransactionEventRequest protocol data unit ending the charging session is set to one of the following:

i. “EnergyLimitReached”

ii. “Local”

iii. “Remote”

iv. “SOCLimitReached”

AND, subsequent to the charger transmitting the TransactionEventRequest message ending the charging session, the charger transmits a StatusNotificationRequest message with the connectorStatus field set to “Available”, “Reserved”, “Unavailable”, or “Faulted”.

4. **Failed Charge Attempt.** A failed charge attempt is any charge attempt that is not followed by a successful charge attempt prior to a subsequent charge attempt.

5. **Successful Charge Attempt Rate.** The successful charge attempt rate for a charging port shall be calculated using the following formula:

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

(b) Where:

i. SCAR = Successful Charge Attempt Rate

ii. CA = Total Charge Attempts for the reporting period

iii. FCA = Total Failed Charge Attempts for the reporting period

- Prepare a summary of the total number of maintenance dispatch events that occurred since the last report, the number of days to complete each maintenance event reported, and a narrative description of significant maintenance issues. Include details of all excluded downtime and a narrative description of events that caused the excluded downtime. Include the summary in each Quarterly Report on Charger and Charging Port Reliability and Maintenance.

Products:

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

TASK 7 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 8 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:

- Comply with applicable recordkeeping and reporting standards as described in CEC's regulations.
- 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 applicable 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:
    - 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 an *AB 126 Data Report* submitted with the quarterly reports described in Task 1.5.
    - The source and greenhouse gas emissions intensity, on an annual basis, of the electricity used and dispensed by the EV charging station(s) at the meter, consistent with the disclosure methodology set forth in Article 14 (commencing with Section 398.1) of Chapter 2.3 of Part 1 of Division 1 of the Public Utilities Code. Data must be reported to the CEC annually in an *AB 126 Data Report* specified by the CAM.
- Collect and provide the following data:
    - Number, type, date, and location of chargers installed.
    - Nameplate capacity of the installed equipment, in kW.
    - 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 EV charging stations.
- 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 a *Data Collection and Information Analysis Report* that lists and analyzes all the data and information described above.

Products:

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

TASK 9 FEDERAL DATA REPORTING

The goal of this task is to provide and report data as specified in 23 CFR 680.

The Recipient shall:

- Collect, maintain, and report *data* for at least five (5) years to the Joint Office of Energy and Transportation as prescribed in 23 CFR 680.112. Data Submittal. The data listed below shall be submitted to the CEC via the Electric Vehicle Charger Analytics and Reporting Tool (EV-ChART) online platform. All data must be formatted and prepared in accordance with the EV-ChART Data Format and Preparation Guidance.
    - Submit the following data on a quarterly basis to EV-ChART:
        - Charging station identifier that the following data can be associated with. This must be the same charging station name or identifier used to identify the charging station in data made available to third-parties in § 680.116(c)(1).
        - Charging port identifier. This must be the same charging port identifier used to identify the charging port in data made available to third-parties in § 680.116(c)(8)(ii).
        - Charging session start time, end time, and any error codes associated with an unsuccessful charging session by charging port.
        - Energy (kWh) dispensed to EVs per charging session by charging port.
        - Peak session power (kW) by port.
        - Payment method associated with each charging session.
        - Charging station port uptime, T_outage, and T_excluded calculated in accordance with the equation in § 680.116(b) for each of the previous 3 months.
        - Duration (minutes) of each outage.
    - Submit the following data on an annual basis on or before March 1 to EV-ChART:
        - Maintenance and repair cost per charging station for the previous year.

        - For private entities identified in paragraph (c)(1) of this section, identification of and participation in any State or local business opportunity certification programs including but not limited to minority-owned businesses, Veteran-owned businesses, woman-owned businesses, and businesses owned by economically disadvantaged individuals.
    - Submit the following data one time, as soon as available, to EV-ChART:
        - The name and address of the private entity(ies) involved in the operation and maintenance of chargers.
        - Distributed energy resource installed capacity, in kW or kWh as appropriate, of asset by type (e.g., stationary battery, solar, etc.) per charging station.
        - Charging station real property acquisition cost, charging equipment acquisition and installation cost, and distributed energy resource acquisition and installation cost.
        - Aggregate grid connection and upgrade costs paid to the electric utility as part of the project, separated into:
            - Total distribution and system costs, such as extensions to overhead/underground lines, and upgrades from single-phase to three-phase lines.
            - Total service costs, such as the cost of including poles, transformers, meters, and on-service connection equipment.

- Provide *third-party data sharing* as prescribed in 23 CFR 680.116(c). Make available, free of charge, to third-party software developers, via API:
    1. Unique charging station name or identifier
    2. Address (street address, city, state, and zip code) of the property where the charging station is located
    3. Geographic coordinates in decimal degrees of exact charging station location
    4. Charging station operator name
    5. Charging network provider name
    6. Charging station status (operational, under construction, planned, or decommissioned)
    7. Charging station access information:
        (i) Charging station access type (public or limited to commercial vehicles)
        (ii) Charging station access days/times (hours of operation for the charging station
    8. Charging port information:
        (i) Number of charging ports

(ii) Unique port identifier

(iii) Connector types available by port

(iv) Charging level by port (DCFC, AC Level 2, etc.)

(v) Power delivery rating in kilowatts by port

(vi) Accessibility by vehicle with trailer (pull-through stall) by port (yes/no)

(vii) Real-time status by port in terms defined by Open Charge Point Interface 2.2.1

9. Pricing and payment information:

(i) Pricing structure

(ii) Real-time price to charge at each charging port, in terms defined by Open Charge Point Interface 2.2.1

(iii) Payment methods accepted at charging station

Products:

- Data submittals to EV-ChART
- API for third-party data sharing

TASK 10 PROJECT FACT SHEET

The goal of this task is to create 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.
- Provide at least (6) six *High Quality Digital Photographs* (minimum resolution of 1300x500 pixels in landscape ratio) of pre and post technology installation at the project sites or related project photographs.

Products:

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