



**CALIFORNIA
ENERGY COMMISSION**



**California Energy Commission
May 8, 2024 Business Meeting
Backup Materials for GoPowerEV, Inc.**

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

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

[PROPOSED]

RESOLUTION NO: 24-0508-03eiv

STATE OF CALIFORNIA

**STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION**

RESOLUTION: GoPowerEV, Inc.

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

RESOLVED, that the CEC approves agreement ZVI-23-023 with GoPowerEV, Inc. for a \$2,146,717 grant to install at least 528 EV charging ports (176 Level 2 and 352 Level 1) across nine MFH sites in Northern California to increase EV charging access for MFH residents; 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 May 8, 2024.

AYE:

NAY:

ABSENT:

ABSTAIN:

Dated:

Kristine Banaag
Secretariat



GRANT REQUEST FORM (GRF)

A. New Agreement Number

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

New Agreement Number: ZVI-23-023

B. Division Information

1. Division Name: Fuels and Transportation Division
2. Agreement Manager: Danny Leung
3. MS-: Not applicable
4. Phone Number: 916-637-8124

C. Recipient's Information

1. Recipient's Legal Name: GoPowerEV, Inc.
2. Federal ID Number: 84-3603666

D. Title of Project

Title of project: NorCal-GoPowerEV

E. Term and Amount

1. Start Date: 5/8/2024
2. End Date: 11/17/2027
3. Amount: \$2,146,717

F. Business Meeting Information

1. Are the ARFVTP agreements \$75K and under delegated to Executive Director? No
2. The Proposed Business Meeting Date: 5/8/2024
3. Consent or Discussion? Consent
4. Business Meeting Presenter Name: Danny Leung
5. Time Needed for Business Meeting: N/A
6. The email subscription topic is: Clean Transportation Program

Agenda Item Subject and Description:

GoPowerEV, Inc. Proposed resolution approving agreement ZVI-23-023 with GoPowerEV, Inc. for a \$2,146,717 grant to install at least 528 EV charging ports (176 Level 2 and 352 Level 1) across nine MFH sites in Northern California to increase EV charging access for MFH residents and adopting staff's determination that this action is exempt from CEQA.

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: If Agreement is considered a "Project" under CEQA skip to question 2. Otherwise, provide explanation.

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: 14 CCR §§ 15301, 15303, 15304

Cal. Code Regs., Title 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 responsible agency's determination, are categorically exempt from the provisions of the California Environmental Quality Act. The project involves installation of electric vehicle supply equipment (EVSE) across 9 existing multi-family housing sites. The components for the EVSE will result in only minor alteration of the existing structures and facilities at the sites. The sites will require no infrastructure upgrades aside from the EVSE installations. Therefore, this project falls within section 15301 and will not have a significant effect on the environment.

Cal. Code Regs., tit. 14, sec. 15303 provides that projects 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. The proposed project activities consist of minor alterations to existing facilities. EVSE will be installed in existing parking lots. Existing electric infrastructure will be used to power EV charging. The sites will require no infrastructure upgrades aside from the charger installations. Therefore, the project falls within section 15303.



Cal. Code Regs., tit. 14, sec. 15304 provides that projects which consist of minor public or private alterations in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees except for forestry and agricultural purposes are categorically exempt from the provisions of CEQA. In this project, the EVSE will be installed at fully developed sites. EVSEs will be installed in existing parking lots. These areas currently do not support riparian habitat, federally protected wetlands, or migratory corridors. Additionally, special status plants, animals, or natural communities are not expected to be found within close proximity to the affected facilities. The sites will require no infrastructure upgrades aside from the charger installations. Therefore, the project falls within section 15304.

The project will not impact an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law by federal, state, or local agencies; does not involve any cumulative impacts of successive projects of the same type in the same place that might be considered significant; does not involve unusual circumstances that might have a significant effect on the environment; will not result in damage to 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.

For these reasons, the proposed work will not have any significant effect on the environment and falls under sections 15301, 15303, and 15304.

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. 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
TBD (Electricians/Contractors for EVSE Installation)	\$270,000	\$0

I. 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
TBD (Electrical Equipment Provider)	\$110,000	\$0
TBD (Pre-Wired Outlet Bases Provider)	\$52,800	\$0
Seacomp Displays Inc.	\$88,000	\$0
Kosse Partners I, LLC	\$8,580	\$0
TBD (Engineer)	\$16,875	\$0
TBD (Signage)	\$4,320	\$0
TBD (Permitting at Local Jurisdictions)	\$0	\$8,100
TBD (Shipping Costs for Load Study Equipment Rentals from Local Utility)	\$4,500	\$0

J. 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

K. Budget Information

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



Funding Source	Funding Year of Appropriation	Budget List Number	Amount
General Fund	21/22	601.211EC	\$2,146,717

TOTAL Amount: \$2,146,717

R&D Program Area: Not Applicable

Explanation for "Other" selection: Not Applicable

Reimbursement Contract #: Not Applicable

Federal Agreement #: Not Applicable

L. Recipient's Contact Information

1. Recipient's Administrator/Officer

Name: Mike Weseloh

Address: 2935 Alexis Dr.

City, State, Zip: Palo Alto, CA 94304

Phone: (408) 839-7631

E-Mail: mike.weseloh@gopowerev.com

2. Recipient's Project Manager

Name: Miguel Martinez

Address: 2935 Alexis Dr.

City, State, Zip: Palo Alto, CA 94304

Phone: (650) 580-4956

E-Mail: miguel.martinez@gopowerev.com

M. Selection Process Used

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

Selection Process	Additional Information
Competitive Solicitation #	GFO-22-614
First Come First Served Solicitation #	Not Applicable
Other	Not Applicable

N. Attached Items

- 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: Danny Leung

Approval Date: 1/22/2024

Office Manager: Jaron Weston

Approval Date: 3/14/2024

Deputy Director: Jen Kalafut

Approval Date: 3/22/2024

Exhibit A SCOPE OF WORK

TECHNICAL TASK LIST

Task #	CPR	Task Name
1		Administration
2	X	Design and Planning
3	X	Installation
4		Engagement and Outreach
5		Operations and Reliability
6		Semi-Annual Electric Vehicle Charger Inventory Reports
7		Data Collection and Analysis
8		Project Fact Sheet

KEY NAME LIST

Task #	Key Personnel	Key Subcontractor(s)	Key Partner(s)
1	Miguel Martinez - GoPowerEV John Reister - GoPowerEV Peter Dayton - GoPowerEV Mike Weseloh - GoPowerEV Rachel Corn - GoPowerEV Harrison Waschura - GoPowerEV		
2	Mike Weseloh - GoPowerEV Charlie Denues - GoPowerEV Julia McCallen - GoPowerEV		
3	Mike Weseloh - GoPowerEV Charlie Denues - GoPowerEV Julia McCallen - GoPowerEV		
4	Miguel Martinez - GoPowerEV John Reister - GoPowerEV Rachel Corn - GoPowerEV		
5	Mike Weseloh - GoPowerEV Charlie Denues - GoPowerEV Julia McCallen - GoPowerEV Harrison Waschura - GoPowerEV		
6	Miguel Martinez - GoPowerEV Peter Dayton - GoPowerEV Harrison Waschura - GoPowerEV		
7	Miguel Martinez - GoPowerEV Peter Dayton - GoPowerEV Rachel Corn - GoPowerEV		

Task #	Key Personnel	Key Subcontractor(s)	Key Partner(s)
	Harrison Waschura - GoPowerEV		
8	Miguel Martinez - GoPowerEV John Reister - GoPowerEV Peter Dayton - GoPowerEV Mike Weseloh - GoPowerEV Rachel Corn - GoPowerEV Harrison Waschura - GoPowerEV		

GLOSSARY

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

Term/ Acronym	Definition
AC charging	A charger that operates on a circuit greater than 200 volts and transfers alternating-current (AC) electricity to a device in an electric vehicle (EV) that converts AC to direct current to charge an EV battery.
AHJ	Authority Having Jurisdiction
CAM	Commission Agreement Manager
CAO	Commission Agreement Officer
CEC	California Energy Commission
CTP	Clean Transportation Program
CPR	Critical Project Review
Charger	A device with one or more charging ports and connectors for charging EVs. Also referred to as Electric Vehicle Supply Equipment (EVSE).
Charger 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 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	Part of a transaction during which the EV is allowed to request energy.
Charging Station	The area in the immediate vicinity of a group of 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.
Connector	The device that attaches an EV to a charging port in order to transfer electricity.
Corrective Maintenance	Maintenance which is carried out after failure detection and is aimed at restoring an asset to a condition in which it can perform its intended function.

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	Downtime is any period of time that a charger is not operational.
Electric Vehicle (EV)	A motor vehicle that is either partially or fully powered on electric power received from an external power source. For the purposes of this solicitation, this definition does not include golf carts, electric bicycles, or other micromobility devices.
Excluded Downtime	Excluded Downtime is downtime that is caused by events outside of the control of the funding recipient and is subtracted from total downtime when calculating uptime percentages.
FTD	Fuels and Transportation Division
Hardware	The machines, wiring, and other physical components of an electronic system including onboard computers and controllers.
Installed	Attached or placed at a location and available for use for a charging session.
Interoperability	Successful communication between the software controlling charging on the EV and the software controlling the charger. Interoperability failures are communication failures between the EV and charger that occur while the software of each device is operating as designed.
Maintenance Event	Any instance in which preventive or corrective maintenance is carried out on equipment.
MFH	Multi-family housing
Operational	A charging port is considered operational or "up" when its hardware and software are both online and available for use, or in use, and the charging port successfully dispenses electricity as expected.
Operative	A state indicating the charger is operational and available to charge or currently charging.
Operative Status	A status reported by the charger’s onboard software indicating whether the charger is in an operative state. The status may directly report ‘Operative’ or some other status that indirectly indicates the charger is in an operative state. Conversely, the charger may report ‘Inoperative’ or some other status indicating that it is not in an operative state.
Preventive Maintenance	Maintenance that is regularly and routinely performed on physical assets to reduce the chances of equipment failure and unplanned machine downtime.
Private	Charging ports located at parking space(s) that are privately owned and operated, often dedicated to a specific driver or vehicle (for example, a charging port installed in a garage of a single-family home).
Public	Charging ports located at parking space(s) designated by the property owner or lessee to be available to and accessible by the public.
Recipient	GoPowerEV, Inc.

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.
Uptime	The time when a charger’s hardware and software are both online and available for use, or in use, and it successfully dispenses electricity as expected. Uptime is the percentage of time when a charging port is “up.”

Background

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

The Budget Act of 2022 (Senate Bill (SB) 154, Skinner, Chapter 43, Statutes of 2022, as amended by Assembly Bill (AB) 178, Ting, Chapter 45, Statutes of 2022 and AB 179, Ting, Chapter 249, Statutes of 2022); AB 211 (Committee on Budget, Chapter 574, Statutes of 2022); and AB 181 (Committee on Budget, Chapter 52, Statutes of 2022) appropriated \$1,129,000,000 from the General Fund to support infrastructure deployments, emerging opportunities, and manufacturing projects for zero-emission light-duty and medium- and heavy-duty vehicles.

AB 118 (Núñez, Chapter 750, Statutes of 2007), created the Clean Transportation Program. The statute authorizes the California Energy Commission (CEC) to develop and deploy alternative and renewable fuels and advanced transportation technologies to help attain the state’s climate change, clean air, and alternative energy policies. AB 8 (Perea, Chapter 401, Statutes of 2013) re-authorizes the Clean Transportation Program through January 1, 2024. The Clean Transportation Program has an annual budget of approximately \$100 million and provides financial support for projects that:

- Reduce California’s use and dependence on petroleum transportation fuels and increase the use of alternative and renewable fuels and advanced vehicle technologies.
- Produce sustainable alternative and renewable low-carbon fuels in California.
- Expand alternative fueling infrastructure and fueling stations.
- Improve the efficiency, performance and market viability of alternative light-, medium-, and heavy-duty vehicle technologies.
- Retrofit medium- and heavy-duty on-road and non-road vehicle fleets to alternative technologies or fuel use.
- Expand the alternative fueling infrastructure available to existing fleets, public transit, and transportation corridors.
- Establish workforce training programs and conduct public outreach on the benefits of alternative transportation fuels and vehicle technologies.

On April 26, 2023, the CEC released a Grant Funding Opportunity (GFO) entitled “Reliable, Equitable, and Accessible Charging for multi-family Housing 2.0 (REACH 2.0).” This competitive March 2024

grant solicitation was to fund projects that will increase electric vehicle (EV) charging access for multi-family housing (MFH) residents by demonstrating replicable and scalable business and technology models for large-scale deployment of EV charging infrastructure. Infrastructure must be capable of maximizing access and EV travel for MFH residents. In response to GFO-22-614, GoPowerEV, Inc. (Recipient) submitted application #30 which was proposed for funding in the CEC's Notice of Proposed Awards on December 4, 2023. GFO-22-614 and Recipient's application are hereby incorporated by reference into this Agreement in their entirety.

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

Problem Statement:

The rapid growth of electric vehicle (EV) adoption in California has highlighted the need for accessible and efficient EV charging infrastructure, especially in Multi-Family Housing (MFH) units. While single-family homeowners often have the luxury of private charging stations, residents of MFH units, including those in below-market-rate housing, face challenges in accessing convenient and affordable charging solutions. The current market offers limited EV charging solutions tailored to the unique needs of MFH units, resulting in a significant barrier to the broader adoption of EVs among this demographic. Additionally, there's a knowledge gap among property managers about the benefits and implementation of EV charging solutions, further exacerbating the problem. The marketplace has yet to address these challenges comprehensively, leaving a significant portion of California's residents underserved in the transition to green transportation.

- **Scientific and Technological:** Many existing EV charging solutions are not tailored for the unique needs of MFH units. There's a lack of interoperability with various EV models, including micro-mobility solutions. This results in systems that may not be universally compatible, leading to reduced utilization and inefficiencies.
- **Market:** The ideal scenario for many EV owners is personalized at-home charging in their designated parking spot. However, the current market solutions often don't cater to this need, leading to a mismatch between consumer demand and available infrastructure. Shared ports with idle fees are very inconvenient for at-home charging, and lead to tenant arguments and unhappiness.
- **Institutional:** Property owners are often hesitant to invest in comprehensive EV charging infrastructure upfront, given the uncertainty around future EV adoption rates. They require solutions that can scale with growing demand without incurring significant future installation costs.
- **Cost and Financial Hurdles:** Traditional EV charging installations in MFH settings can be expensive. The high cost of installation, coupled with concerns about maintenance and reliability, makes many property managers and owners hesitant to invest.

Goals of the Agreement:

The goal of this project is to provide a comprehensive, cost-effective, and scalable EV charging solution tailored specifically for Multi-Family Housing units in California. By leveraging GoPowerEV's expertise and innovative products, the project aims to bridge the current gap in the market, ensuring residents of MFH units, including those in below-market-rate housing, have convenient and affordable access to reliable EV charging infrastructure. Additionally, the project seeks to educate and empower property managers with the knowledge and tools needed to support and promote EV adoption among their residents.

Objectives of the Agreement:

The objectives of this Agreement are to:

- Install the GoPowerEV Charging System at MFH sites quickly and inexpensively
 - Track the total cost to install at each site, and the overall project schedule from kickoff to go-live.
- Maximize Charger Uptime

- Monitor and respond to system and user issues to ensure uptime exceeds 97% per port
- Optimize Energy Delivery
 - Monitor energy usage over TOU rates with the objective of delivering less than 15% of total energy during peak rates
- Increase EV Adoption to 50% over 6 years
 - Aggregate charging data to track the rate of EV adoption at each MFH site

TASK 1 ADMINISTRATION

Task 1.1 Attend Kick-off Meeting

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

The Recipient shall:

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

- Final Report (Task 1.6)

Recipient Products:

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

Commission Agreement Manager Product:

- Kick-Off Meeting Agenda

Task 1.2 Critical Project Review (CPR) Meetings

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

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

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

The CAM shall:

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

The Recipient shall:

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

CAM Products:

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

Recipient Product:

- CPR Report(s)

Task 1.3 Final Meeting

The goal of this task is to closeout this Agreement.

The Recipient shall:

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

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

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

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

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

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

Products:

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

Task 1.4 Monthly Calls

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

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

The CAM shall:

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

The Recipient shall:

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

Product:

- Email to CAM concurring with call summary notes.

Task 1.5 Quarterly Progress Reports

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

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

The Recipient shall:

- Prepare a Quarterly Progress Report which summarizes all Agreement activities conducted by the Recipient for the reporting period, including an assessment of the ability to complete the Agreement within the current budget and any anticipated cost overruns. Progress reports are due to the CAM the 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 detailing that match funds were reduced (if applicable)

Task 1.8 Identify and Obtain Required Permits

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

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

The Recipient shall:

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

Products:

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

- Updated schedule for acquiring permits as changes occur during the term of the Agreement (if applicable)
- A copy of each final approved permit (if applicable)

Task 1.9 Obtain and Execute Subawards

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

The Recipient shall:

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

Products:

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

TECHNICAL TASKS

TASK 2 Design and Planning

The goal of this task is to ensure the efficient and effective installation of at least 176 PowerPort3s at approximately 9 MFH sites located in disadvantaged communities, low-income communities, and/or affordable housing, by performing all necessary preliminary work, coordination, and planning activities. These activities will be performed for each installation site.

The Recipient shall:

- **Conduct Site Survey:** Capture photographs of the parking area and access, gather on-site physical measurements, and evaluate building conditions.
- **Perform Load-Study:** If necessary, conduct a load study to determine the type and availability of power. This includes procuring load study equipment and ensuring its installation by a licensed contractor.
- **Gather Utility Data:** Acquire information related to the transformer and feeder size serving the property.
- **Design:** Oversee the development of the installation plan, ensuring property owner approval. This may require travel to the installation site to finalize plans and costs. Ensure plans are stamped by a licensed electrician or professional engineer and that all city and utility prerequisites are met.

- Submit for permit: Complete and submit the permit application and address any questions from the AHJ or Utility to receive approved building plans.
- Manage Material Logistics: Create a materials list for each property. Forecast, order, and assemble necessary components, ensuring timely delivery to installation sites. This includes EVReadiBases, PowerPorts, LCUs, and other 3rd party materials.
- Coordinate with Electricians: Engage with electricians, obtain bids, validate licenses & insurance, and review proposals for accuracy and completeness.

Products:

- Plans stamped by a licensed electrician or professional engineer
 - Permitted Building Plans
- [CPR WILL BE HELD IN THIS TASK. See Task 1.2 for details]

TASK 3 Installation

The goal of this task is to ensure the successful installation of the EV charging infrastructure at the designated MFH sites. This includes installation of at least 176 PowerPort3s which will result in installation of at least 176 Level 2 and 352 Level 1 charging ports.

The Recipient shall:

- **Oversee Installation:** Ensure that licensed contractors carry out the installation process according to the highest industry standards and all requirements of this Agreement, adhering to all safety and regulatory guidelines.
- **Liaise with Utilities and Property Managers:** Ensure smooth communication between all parties involved, addressing any concerns or requirements that may arise during the installation process.
- **Manage Inspections and Utility Turnup:** Coordinate the necessary inspections and facilitate the utility turnup process to ensure the charging infrastructure is operational and compliant.
- **Final Permits:** [Verify inspection has been completed and permits are closed.](#)
- **Handle Commissioning:** Oversee the commissioning process, ensuring that all components of the EV charging system, including networking, cloud functions, and payment functionalities for charging, are set up correctly and functioning as intended.
- Take photos of completed installations.
- Document commissioning of EVSE including summary tables of devices installed.

- 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.

Products:

- Photos of completed installations
 - Final Permits
 - AB 841 Certification/EVITP Certification Numbers
- [CPR WILL BE HELD IN THIS TASK. See Task 1.2 for details]

TASK 4 Engagement and Outreach

The goal of this task is to promote and educate residents and property managers about the benefits and functionalities of the newly installed EV charging system, fostering a community that is well-informed and enthusiastic about the transition to electric vehicles.

The Recipient shall:

- Provide Information: Offer the property manager up-to-date information on EV/PHEV pricing, incentives, model availability, and estimates of Total Cost of Ownership.
- Engage in Community Outreach: Identify and participate in community EV promotional events, aiming to raise awareness and encourage adoption among residents.
- Document engagement activities including events, attendance, and outcomes.
- Develop and Distribute FAQs: Create a comprehensive FAQ document to assist the property manager in marketing "Personal EV Charging" to both new and existing residents, addressing common questions and highlighting the benefits of the installed system.
- Promote Interoperability: Emphasize the system's compatibility with all types of EVs, including micro-mobility solutions, ensuring residents understand the flexibility and inclusivity of the charging infrastructure.
- Feedback Collection: Establish a mechanism for residents and property managers to provide feedback on the charging system, ensuring continuous improvement and addressing any concerns promptly. No confidential information, including personal information as described under the Information Practices Act (Civil Code § 1978 et seq.), shall be collected under this Agreement.

Products:

- Comprehensive FAQ document for "Personal EV Charging".
- Documentation of engagement activities, including event summaries and feedback reports.

TASK 5 OPERATIONS AND RELIABILITY

Recipient 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 5.1 Operations

The Recipient shall:

- Operate the installed chargers during the term of this agreement.
- For any charging station with fewer than 40 **charging ports** at which chargers are installed and operated under this agreement, ensure that the charger 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.
- For any charging station with 40 or more chargers at which chargers are installed and operated under this agreement, ensure that the charger uptime for each **charging port** installed in the project is operational at least 80 percent of a charging site's standard hours of operation of each year for six years after the beginning of operation, and ensure that station uptime is at least 97 percent.
- 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 operability for six years after commissioning shall survive the completion or termination date of this agreement. In addition to other requirements in the Terms and Conditions of this agreement, all CEC-reimbursable expenditures must be incurred within the agreement term.

Task 5.2 Recordkeeping

The goal of this task is to collect and maintain records of charger operation and reliability. The Recipient shall collect and retain the remote monitoring and maintenance records specified in this section. The Recipient shall collect and retain records for each charger installed and operated as part of this agreement. The Recipient shall retain records for each charger for nine years from the date the charger begins operation. **The Recipient shall collect records for each charger installed and operated as part of this agreement for six years after the chargers begin operation.**

The Recipient Shall:

- Collect and retain the Remote Monitoring data below for each networked charger and Maintenance data below for each charger installed and operated as part of this Agreement.
- Retain the data below for nine years from the date the charger begins operation. Provide records provided 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.

Remote Monitoring Data

The records described in items 1-3 of this section are only required to be collected for networked chargers.

1. Connector operative status and error codes on a 60-minute interval including charger identification number and date-time stamp.
 - a. If the Recipient uses OCPP 1.6 to communicate between the charger and central system, the recipient shall collect the OCPP 1.6 Protocol Data Unit (PDU) Status Notification.
2. A record of each customer attempt to initiate a charge including charger identification number, transaction identification number, and date-time stamp.
3. A record of each failed attempt to charge including charger identification number, transaction identification number, and date-time stamps and reason for failure.

Maintenance Data

1. Reports of inoperative chargers or charger failures resulting in inability to charge, such as a customer complaint, internal diagnostics, or inspection.
2. Records of any maintenance conducted on chargers 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 charger was in an inoperative state prior to maintenance.
 - d. Whether the charger was in an operative state following maintenance

Products:

- Remote Monitoring Records
- Maintenance Records
- Data Dictionary

Task 5.3 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 manufacturer-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 10 business days of the beginning of a time when the charger is inoperative or exhibiting failures that result in an inability to charge.

- Report on preventive and corrective maintenance in each annual reliability report described in Task 5.4.

Products:

- Maintenance section of annual report described in Task 5.4

Task 5.4 Reporting

The goal of this task is to provide an annual report on charger reliability and maintenance.

The Recipient shall:

- Write and submit to the CEC an annual report on charger reliability and maintenance. The report shall include:
 - A summary of charger 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 events include:
 - a. For networked chargers, the time that the status or error codes returned by a charger indicate that it is in a state other than an operative state (inoperative). The duration of time counted as downtime based on remote monitoring will be the interval between the time of the first charger status record that the charger is inoperative, or the failure of the charger to send operational status on specified interval, and the subsequent status record that the charger is operative.
 - b. The time that a charger is in an inoperative state or failing to deliver charge. This may be known by consumer notification, internal diagnostics, inspection, or other methods.
 - c. In the event there is a conflict between the sections (a) and (b), the operative state of the charger shall be determined by (b).
 - A summary of Excluded Downtime, including total excluded downtime and the number and frequency of excluded downtime events, the minimum, median, mean, and maximum duration, and the causes of excluded downtime events. 'Excluded Downtime' includes:
 - a. **Grid Power Loss:** Power supplied by third-party provider is not supplied at levels required to for minimum function of chargers. This may include, but is not limited to, service outages due to utility equipment malfunction or public safety power shut-offs. This does not include power generation or storage equipment installed to serve the station exclusively. Documentation from power provider detailing outage is required to claim this as excluded time.
 - b. **Vandalism and/or Theft:** Any physical damage to the charger and / or station committed by a third-party. This may include, but is not limited to, theft of charging cables, damage to connectors from mishandling,

damage to screens, etc. A maximum of 5 calendar days may be claimed as excluded downtime for each event. The CEC may authorize additional excluded downtime for extenuating circumstances on a case-by-case basis. A police report or similar third-party documentation is required to claim this as excluded time.

- c. **Communication Network Outages:** Loss of communication due to cellular or internet service provider system outages can be claimed as excluded downtime provided the chargers revert to a free charge state during communication losses. A free charge state is when the charger is operational and dispenses energy and free of charge.
 - d. **Planned Outage for Maintenance and/or Upgrade:** Any planned maintenance or upgrade work that takes the charger offline. This must be scheduled in advance of the charger being placed in an inoperative state. The maximum downtime that can be excluded for planned maintenance and/or upgrade is 24 hours for any 12-month period.
 - e. **Force Majeure:** Downtime caused by unforeseen events, not described in (a) – (d) above, that are outside of the control of the recipient may be treated as Excluded Downtime upon approval by the CEC. For such downtime to be considered, the recipient shall include a narrative description of the event and why it was out of their control in their annual report for the CEC to review and make a determination. The CEC has sole discretion in approving downtime in this category.
- o A summary and calculation of uptime. Each report shall include the annual uptime percentage of each charger (Charger Uptime) as well as the annual uptime percentage for each charging station (Station Uptime) installed and operated as part of this agreement. The annual uptime percentage for each charger shall be reported for the year ending on the most recent anniversary of the beginning of operation of the charger. The annual uptime percentage for each station shall be reported for the year ending on the most recent anniversary of the beginning of operation of the first charger operated as part of this agreement that is part of the station. Charger and station uptime shall be calculated as:

$$U_c = \frac{T_c - D_c + E_c}{T_c}$$

U_c = Charger Uptime

T_c = Total charger minutes in the reporting period

D_c = Total charger downtime for the reporting period, in minutes.

E_c = Total charger excluded downtime in the reporting period, in minutes.

$$U_s = \frac{T_s - D_s + E_s}{T_s}$$

U_s = Station Uptime

T_s = Total hours for all chargers associated with the charging station for the reporting period ($T_s = \sum T_c$) in minutes.

D_s = Total downtime for all chargers associated with the charging station for the reporting period ($D_s = \sum D_c$), in minutes.

E_s = Total excluded downtime for all chargers associated with the charging station for the reporting period ($E_s = \sum E_c$), in minutes.

- A summary of charge data, including:
 - a. Total number of attempts to charge
 - b. Total number of failed attempts to charge
 - c. Failed attempts to charge by the following categories:
 - i. Number of charge attempts that failed due to payment system failures
 - ii. Number of charge attempts that failed due to interoperability failures
 - iii. Number of charge attempts that failed due to charger hardware or software failures
 - iv. Number of charge attempts that failed due to other reasons
 - d. A summary and explanation of “other reasons” for charge attempt failures
 - e. A description of steps taken to reduce the number of failed charge attempts, and the success rate of those steps
- 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. Details of all excluded downtime and a narrative description of events that caused the excluded downtime.

Products:

- Quarterly Report on Charger Reliability and Maintenance, delivered with each

TASK 6 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 7 DATA COLLECTION AND ANALYSIS

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

The Recipient shall:

- For all electric vehicle chargers and charging stations installed on or after January 1, 2024:
 - Comply with recordkeeping and reporting standards as described in CEC's regulations. These requirements are not applicable to those electric vehicle chargers and charging stations installed at residential real property containing four or fewer dwelling units.
 - Comply with all industry best practices and charger technology capabilities that are demonstrated to increase reliability, as described in CEC's regulations.
 - Without limitation to other requirements in this Agreement, Recipient shall comply with any other regulatory requirements, including but not limited to uptime requirements and operation and 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.
- Specify the cost per charging port and explain how the number of ports per charger impacts the data regarding cost per charger.
- 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
- Details regarding charger usage including:
 - Number of unique users utilizing chargers specifying the number of users overall (all EVSE in project)
 - Number of unique users per charging station
 - Number of unique users per charging port
 - Number of MFH units served by each charging station
 - Number of MFH units served that are within a low-income community, disadvantaged community, or are located at affordable housing sites
- 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
- 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 a Data Collection and Information Analysis Report that lists and analyzes all the data and information described above.
 - For networked chargers only, collect and provide 12 months of throughput, usage, and operations data from the project including, but not limited to:

Category	Field	Desired Data Type
Sites	Site ID	Hash key
Sites	Site Name	Varchar
Sites	Site Type	Varchar
Sites	EVSP	Varchar
Sites	Street Address	Varchar
Sites	City	Varchar
Sites	State	Varchar
Sites	Zip	Varchar
Sites	Latitude	Decimal
Sites	Longitude	Decimal
Sites	Number of EVSEs	Varchar
Sites	Number of Ports	Varchar
EVSE	EVSE ID	Hash key
EVSE	EVSE Manufacturer	Varchar
EVSE	EVSE Model Number	Varchar
EVSE	EVSE Maximum kW	Integer
EVSE	EVSE Number of Ports	Integer
EVSE	EVSE Power Level	Varchar

Ports	Port ID	Hash key
Ports	Port Maximum kW	Integer
Ports	Connector Type	Varchar
Sessions	Session ID	Hash key
Sessions	Charge Duration	Varchar (HH:MM:SS)
Sessions	Charge Session Start Date	Date
Sessions	Charge Session Start Time	Time
Sessions	Charge Session End Date	Date
Sessions	Charge Session End Time	Time
Sessions	Disconnect Reason	String
Sessions	Connection Duration	Varchar (HH:MM:SS)
Sessions	Idle Duration	Varchar (HH:MM:SS)
Sessions	Energy Consumed	Decimal
Sessions	Charge Peak Demand	Decimal
Sessions	Charge Average Demand	Decimal
Sessions	Total Transacted Amount (Driver)	Currency
Sessions	Payment method	Character
Sessions	Driver ID	Hash key
Sessions	Vehicle Make, if known	Varchar
Sessions	Vehicle Model, if known	Varchar
Sessions	Vehicle Year, if known	Integer
Sessions	Vehicle Type, if known	Character

- Submit the data described above electronically in a quarterly progress report throughout the duration of the agreement.
- Analyze and report on the benefits of the project, and submit to the CAM as part of the Final Report, including:
 - How the project achieved the purpose of this solicitation.
 - An evaluation of the effectiveness of the business and technology model of EV charger deployment to specifically in serving MFH residents.
 - Cost effectiveness of charger installation and charging for MFH property owners and residents.

- Benefits to disadvantaged communities and/or low-income communities and/or residents of affordable housing units.
- The proposed project results in high benefit-cost score defined as the ratio of grams of CO2 equivalent reduction per dollar of CEC investment for the proposed project term and six years of operation.

Products:

- AB 126 Data Reports
- Quarterly data collected on charger installations and charger events, submitted with Quarterly Progress Reports described in Task 1.5.
- Analysis and reporting on the benefits of the project, included in the Final Report, described in Task 1.6
- Data Collection and Information Analysis Report

TASK 8 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.
- 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