



**CALIFORNIA
ENERGY COMMISSION**



**California Energy Commission
July 10, 2024 Business Meeting
Backup Materials for The Regents of The University of California, on behalf of the
San Diego campus**

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: 24-0710-03d

STATE OF CALIFORNIA

**STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION**

RESOLUTION: The Regents of The University of California, on behalf of the San Diego campus

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 ARV-24-003 with The Regents of the University of California, on behalf of the San Diego campus, for a \$7,030,648 grant. This agreement will install at least 653 Level 2 EV charging ports to support convenient, high-visibility, low-cost Level 2 EV charging sites at approximately four locations within a 1.5-mile radius, on or near the University of California San Diego campus; 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 July 10, 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: ARV-24-003

B. Division Information

1. Division Name: Fuels and Transportation Division
2. Agreement Manager: Sarah Birnbaum
3. MS-: N/A
4. Phone Number: 916-664-6562

C. Recipient's Information

1. Recipient's Legal Name: The Regents of the University of California, on behalf of the San Diego campus
2. Federal ID Number: 95-6006144

D. Title of Project

Title of project: Postcard from 2030

E. Term and Amount

1. Start Date: 7/10/2024
2. End Date: 5/31/2027
3. Amount: \$7,030,648

F. Business Meeting Information

1. Are the ARFVTP agreements \$75K and under delegated to Executive Director?
 - a. No
2. The Proposed Business Meeting Date: 7/10/2024
3. Consent or Discussion? Consent
4. Business Meeting Presenter Name: N/A
5. Time Needed for Business Meeting: N/A
6. The email subscription topic is: Clean Transportation Program

Agenda Item Subject and Description:

The Regents of The University of California, on behalf of the San Diego campus. Proposed resolution approving agreement ARV-24-003, (GFO-22-610) with The Regents of the University of California, on behalf of the San Diego campus, for a \$7,030,648 grant, and adopting staff's determination that this action is exempt from CEQA. This agreement will install at least 653 Level 2 EV charging ports to support convenient, high-visibility, low-cost Level 2 EV charging sites at approximately four locations within a 1.5-mile radius, on or near the University of California San Diego campus. (Clean Transportation Program Funding) Contact: Sarah Birnbaum

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 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 Sections 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 responsible agency's determination, are categorically exempt from the provisions of CEQA. The project involves the installation of at least 653 charging ports. Charging ports will be installed on existing pavement and will not have a significant impact on the environment. All project sites are located on existing facilities. Sites are located either in existing parking lots or garages within a 1.5-mile radius on or near The University of California, San Diego's main campus. Therefore, the project falls under Section 15301 and will not have a significant impact on the environment.

Cal. Codes Regs, Title 14 Sec. 15303 provides that projects which consist of construction and location of limited numbers of new, small facilities or structures; installation of small new equipment and facilities in small structures, and the conversion of existing small structures from one use to another where only minor modifications are made in the exterior of the structure, are categorically exempt from the provisions of CEQA. This project will result in the installation of small equipment, approximately the size of a payphone (24.6"x12.6"x6.7"). All equipment will be located on existing parking lots or garages. Therefore, the project falls under Section 15303 and will not have significant impact on the environment.

Cal. Code Regs., Title 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, minor trenching may be necessary for existing or new electrical infrastructure. Trenching will take place on parking lots or garages with existing pavement. Any alterations to pavement will be restored. Alterations will not be deemed to be significant. Therefore, the projects fall within section 15304.

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

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

No

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

Not applicable

b) Agreement **IS NOT** exempt.

IMPORTANT: consult with the legal office to determine next steps.

No

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

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

H. 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 Competitively Procured General Contractor & Electrical Contractor	\$2,306,802	\$805,079



Subcontractor Legal Company Name	CEC Funds	Match Funds
TBD Field Services	\$80,000	\$0
TBD Electrical/Design Eng	\$94,423	\$132,960
The Engineering Partners, Inc. (EPI)	\$96,000	\$0
TBD Competitively Procured General Contractor and Electrical Contractor – contingency	\$0	\$311,312

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
The University of California, San Diego Capital Planning and Management (UCSD C&P): Fire Marshal	\$0	\$6,000
(UCSD C&P): Electrical Inspector	\$0	\$15,000
(UCSD C&P): Contract Support	\$15,000	\$0
(UCSD C&P): Executive Support Project Management	\$0	\$3,000
(UCSD C&P): Project Admin Support	\$0	\$4,000
(UCSD C&P): Facilities Management Support	\$0	\$5,000
Powerflex Systems, LLC	\$2,042,401	\$744,692
TBD Stub Outs	\$44,000	\$0
UC San Diego Transportation Services	\$97,950	\$0
TBD Security Cameras	\$70,000	\$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
The University of California, San Diego, Fire Marshal
The University of California, San Diego, Electrical Inspector
The University of California, San Diego, Capital Management



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
ARFVTF	2020/2021	601.118M	\$7,030,648

TOTAL Amount: \$7,030,648

R&D Program Area: N/A

Explanation for "Other" selection N/A

Reimbursement Contract #: N/A

Federal Agreement #: 95-6006144

L. Recipient's Contact Information

2. Recipient's Administrator/Officer

Name: Oudone Sisanachandeng

Address: 9500 Gilman Drive, Mail Code 0934

City, State, Zip: La Jolla, California 92093-0934

Phone: (858)-534-2230

E-Mail: osisanachandeng@ucsd.edu

3. Recipient's Project Manager

Name: Bryon Washom

Address: 9500 Gillman Drive, Mail Code 0057

City, State, Zip: La Jolla, California 92093-0057

Phone: 808-757-5376, Fax: 858-534-9836

E-Mail: bwashom@ucsd.edu

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-22-610
First Come First Served Solicitation #	Not Applicable
Other	Not Applicable



N. 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: Sarah Birnbaum

Approval Date: 5/3/2024

Office Manager: N/A

Approval Date: [OBJ] Deputy Director: Jennifer Kalafut

Approval Date: [OBJ] 6/4/2024

Exhibit A SCOPE OF WORK

TECHNICAL TASK LIST

Task #	CPR	Task Name
1		Administration
2		Site Design
3		Allocation of Funding
4	x	Procurement, Installation & Commissioning
5		Semi-Annual Electric Vehicle Charger Inventory Reports
6		Community Outreach
7		Operations and Reliability
8		Data Collection and Analysis
9		Project Fact Sheet

KEY NAMES LIST

Task #	Key Personnel	Key Subcontractor(s)	Key Partner(s)
1	Taylor Kempf, UCSD and Project Policy Analyst III (TBN) and Josh Kavanagh		
2	Nicole Cheng Chuck Weber Wes Winkless	Engineering Partners Inc. (EPI)	UCSD Fire Marshal, UCSD Electrical Inspector, UCSD Capital Management
3	Financial Analyst III TBN		
4	Kevin Norris and Nicole Cheng	PowerFlex and TBN	
5	Byron Washom		
6	Rachel Vensand		
7	Kevin Norris and Project Policy Analyst III (TBN)		
8	Byron Washom and Research Scientists (TBN)		
9	Rachel Vensand and Byron Washom		

GLOSSARY

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

Term/ Acronym	Definition
AC Charging	means a charger that operates on a circuit greater than 200 volts and transfers alternating-current (AC) electricity to a device in an EV that converts alternating current to direct current to charge an EV battery.
CAM	Commission Agreement Manager
CAO	Commission Agreement Officer
CEC	California Energy Commission
Central System	Charge Point Management System: the central system that manages Charge Points and has the information for authorizing users for using its Charge Points
Charge Point	The Charge Point is the physical system where an electric vehicle can be charged. A Charge Point has one or more connectors.
Charging Port	Any connector that can independently provide charge to an on-road electric vehicle (EV) regardless of whether the other connectors associated with a Charge Point are simultaneously charging.
Charging Session	Part of a transaction during which the EV is allowed to request energy.
Charging Station	A physical location with any number of Charge Point(s) and Connector(s) with a unique address. For a charger to be part of a charging station, it must not be further than 0.125 miles (660 feet) from any other charger that is also considered to be part of the same charging station.
Connector	The term “Connector”, as used in this specification, refers to an independently operated and managed electrical outlet on a Charge Point. This usually corresponds to a single physical connector, but in some cases a single outlet may have multiple physical socket types and/or tethered cable/connector arrangements to facilitate different vehicle types (e.g. four-wheeled EVs and electric scooters).
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.
CTP	Clean Transportation Program
CPR	Critical Project Review
DAC	Disadvantaged Community
Depot	means type of “home base” behind-the-fence location where a vehicle is typically kept when not in use (usually parked on a nightly basis).

Direct Current Fast Charger (DCFC)	(DCFC) means 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.
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	means 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.
LIC	Low-income Community
Maintenance Event	Any instance in which preventive or corrective maintenance is carried out on equipment.
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 in 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	means charging ports located at parking space(s) designated by the property owner or lessee to be available to and accessible by the public.
Public	means charging ports located at parking space(s) designated by the property owner or lessee to be available to and accessible by the public.
Recipient	An Applicant awarded a grant under a CEC solicitation.
Shared Private	means 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	A charging port is considered “up” when its hardware and software are both online and available for use, or in use, and the charging port successfully dispenses electricity in accordance with requirements for minimum power level. Uptime is the percentage of time a charging port is “up”.
UC	University of California
UCSD	University of California, San Diego

Background

Assembly Bill (AB) 118 (Nuñez, Chapter 750, Statutes of 2007), created the Clean Transportation Program. The statute authorizes the CEC to develop and deploy alternative and renewable fuels and advanced transportation technologies to help attain the state’s climate change and clean air goals. AB 126 (Reyes, Chapter 319, Statutes of 2023) reauthorized the funding program through July 1, 2035 and focused the program on zero-emission transportation.

The Clean Transportation Program has an annual budget of approximately \$100 million and provides financial support for projects that:

- Develop and deploy zero-emission technology and fuels in the marketplace where feasible and near-zero-emission technology and fuels elsewhere.
- Produce alternative and renewable low-carbon fuels in California.
- Deploy zero-emission fuel infrastructure, fueling stations, and equipment where feasible and near-zero-emission fuel infrastructure, fueling stations, and equipment elsewhere.
- Establish workforce training programs and conduct public outreach on the benefits of alternative transportation fuels and vehicle technologies.

On March 23, 2023, the CEC released a Grant Funding Opportunity (GFO) entitled “Convenient, High-Visibility, Low-Cost Level 2 Charging.” This competitive grant solicitation was to enhance perception of Level 2 charging access and test and demonstrate business models for Level 2 charging through high-density Level 2 charger installations. In response to GFO-22-610, the Recipient submitted application # 06 which was proposed for funding in the CEC’s Notice of Proposed Awards on August 29, 2023. GFO-22-610 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 CEC’s Award, CEC’s Award shall control. Similarly, in the event of any conflict or inconsistency between the terms of this Agreement and the Recipient’s Application, the terms of this Agreement shall control.

Problem Statement:

There currently exists a lack of convenient, high-visibility, low-cost Level 2 (L2) charging sites in the State of California. Existing charging sites are plagued by reliability issues and high costs which create a barrier to electrification of transportation, especially in low-income and disadvantaged communities. There is a lack of replicable and scalable business and technology models to deploy Level 2 EV chargers at scale. Rather deployment tends to be incremental and is associated with high fixed costs. The scattered nature and lack of reliability of charging stations create a lack of confidence in being able to quickly find an operable and available charging site at a particular destination. This issue is exacerbated in low-income communities.

Goals of the Agreement: The goal of this Agreement is to develop a convenient, high-visibility, low-cost L2 charging hub that provides simple, accessible charging in La Jolla, California. At least 653 Level 2 charging ports will be installed across approximately four existing sites within a 1.5 mile radius, on or near the University of California, San Diego campus. At least 327 charging ports will be installed in low-income or disadvantaged communities (DAC).

Objectives of the Agreement:

The main objective of this Agreement is to design, install, commission, and operate the highest density public L2 charging hub in the State of California. Specifically, the objectives are:

1. Objective #1 is to lower the capital expenditure (CAPEX) first costs and operating expenditure (OPEX) annual cost by a factor of two over that would be equally applicable to three different ownership models. The lowering of the CAPEX first cost will be met by bundling of installation tasks and reducing the required interconnection capacity using adaptive load management. The lowering of the annual OPEX will be met by participation in demand response markets and demand charge management through adaptive load management. The stacking of performance and incentive revenues will additionally provide a 20% offset to the annual operating costs.
2. Objective #2 is to demonstrate replicable and scalable business and technology models to deploy Level 2 electric vehicle (EV) chargers. Business models will be met by improved charger utilization and kWh served, and technology models will be met by demonstrating adaptive load management at scale.
3. Objective #3 is to improve public awareness of and confidence in Level 2 charging access through convenient, high-density, high-visibility installations. A high density of chargers will be met by equipping all available parking facilities in a neighborhood with a large amount of EV chargers. Improving convenience in charging will be met by permitting long dwell times and increasing the visibility of chargers will be met by signage and outreach.
4. Objective #4 is to provide Level 2 charging access in disadvantaged or low-income communities. Increasing charging access in low-income communities will be achieved by installing at least 653 chargers in a low-income census tract. Increasing charging access for low-income drivers will be met by incentive programs for bundled EV purchases through fleet sales.
5. Objective #5 is to provide reliable and readily accessible chargers. The goal of increasing the reliability of chargers will be met by an enterprise remote monitoring and service agreement with 24/7 response and the goal of increasing the accessibility of chargers will be met by heavily marketing the chargers on social media and charging station location services.

6. Objective #6 is to provide outreach. The goal of increasing outreach to the immediate LIC will be achieved through advertising charging benefits to resident students and unaffiliated local community-based organizations, and other project supporters.

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 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 SITE DESIGN

The goal of this task is to design a Level 2 charging network of at least 653 ports at approximately four sites within a 1.5 mile radius, on or near the UC San Diego campus.

The Recipient shall:

- Prepare and submit a detailed site design package that includes structural, architectural, and electrical designs that accounts for at least 653 charging ports at approximately four sites, within a 1.5 mile radius, on or near the UC San Diego campus. Submit to CAM a copy of the *Final Site Design* package.
- Obtain engineering approvals and permit approval for the charging sites from Authority Having Jurisdiction (AHJ) (UC San Diego fire marshal). Submit *stamped drawings* and copies of *approved permits per Task 1.8* to the CAM.

Products:

- Stamped drawings
- Approved Permits per Task 1.8
- Copy of Final Site Designs

TASK 3 ALLOCATION OF FUNDING

CEC funding for this agreement shall not be used to fund projects from other CEC agreements. The goal of this task is to ensure proper allocation of CEC funds when more than one CEC agreement is funding projects on a site.

The Recipient Shall:

The following only applies to costs for project sites with funding from multiple CEC agreements .

- Show proof of payment for all CEC project costs; this applies to Match and CEC funds. Submit *proof of payment* to CAM with the quarterly progress report (QPR) per task 1.5, as QPR Attachment 1.
- Show proof of allocation of CEC funding for any aspects of CEC projects that may overlap. For example, if trenching is a common project cost, funding should be divided by line items stating \$X for agreement ARV-XX-XX1 and \$Y for agreement ARV-XX-XX2. Submit *proof of allocation* to CAM with the quarterly progress report per task 1.5, as QPR Attachment 2.

Products:

- Proof of Payment, QPR Attachment 1 of the Quarterly Progress Report per task 1.5.
- Proof of Allocation, QPR Attachment 2 of the Quarterly Progress Report per task 1.5.

TASK 4 PROCUREMENT, INSTALLATION, AND COMMISSIONING

The goal of this task is to procure, install, and commission at least 653 L2 chargers at approximately four sites.

The Recipient shall:

- Procure at least 653 PowerFlex JT48 L2 chargers, and at least 327 dual mounted pedestals.
- Procure 10 PowerFlex Nexus controllers for adaptive load management and 16 Nexus Remotes.
- Install Signage
- Install at least 327 pedestals, at least 653 L2 chargers, and 10 Nexus controllers and 16 Nexus Remotes. At least 327 of the 653 charging ports will be installed in low-income or disadvantaged communities (DAC). Submit to CAM *high quality photographs of completed charger installation. including signage.*
- Install safety features and add lighting at the charging sites to deter vandalism and increase public safety.
- Commission and test at least 653 L2 chargers and interface to the UC San Diego microgrid. Resolve any issues that arise in the commissioning process. Summarize findings in a Commissioning Report, which will include the work required to install the chargers, the commissioning and testing of the chargers, and any issues that arose during the process, and submit to CAM. Submit to CAM a *Commissioning Report*.

- Submit to 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 certification shall be signed by Recipient's authorized representative.
- Submit to CAM *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.
- Deploy stub outs if determined feasible.
- Record a charging timeseries for at least 653 charging ports. Submit to the CAM the *sample charging timeseries report*.

Products:

- High quality photographs of completed charger installation, including signage
- AB 841 Certification
- EVITP Certification Numbers
- Sample charging timeseries report
- Commissioning Report

CPR Meeting will be held in this task, refer to Task 1.2 for details

TASK 5 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* 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 6 COMMUNITY OUTREACH

The goal of this task is to reach out to potential charging customers to increase charging station utilization.

The Recipient shall:

- Prepare and submit a copy of the *Community Outreach Plan* to the CAM, which plan includes but is not limited to:
 - Provide updates on community outreach efforts during Monthly calls with the CAM.
 - Provide documentation of community outreach to CAM in the Community Outreach Report as described below.
 - Advertise charging benefits to resident and non-resident students, faculty, staff.
 - Create social media and website presence.
 - Engage with equity and environmental justice organizations and LIC and /or DAC customers. Following, the recipient shall draft a summary of conversations with equity and environmental justice organizations and submit to CAM.
- Implement the Community Outreach Plan
- Prepare and submit to CAM a *Community Outreach Report*, including but not limited to the following:
 - documentation of community outreach
 - a summary of conversations with equity and environmental justice organizations and submit to CAM
- Raise the profile of the chargers in charging wayfinder apps.
- **Products:**
 - Community Outreach Plan
 - Community Outreach Report

TASK 7 OPERATIONS AND RELIABILITY

Recipients shall comply with the reliability performance standards, recordkeeping, reporting, and maintenance requirements (henceforth, REQUIREMENTS) in this Scope of Work (SOW) for EV chargers installed as part of this Agreement. In the event the CEC adopts regulations that include REQUIREMENTS, for example as required by Assembly Bill 2061 (Ting, Chapter 345, Statutes of 2022) and/or Assembly Bill 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 7.1 Operations

The Recipient shall:

- Operate the installed chargers during the term of this agreement.
- For any charging station of fewer than 40 chargers at which chargers are installed and operated under this agreement, ensure that the charger uptime for each charger installed in the project is at least 97 percent of each year for six years after the beginning of operation.

- For any charging station of 40 or more chargers at which chargers are installed and operated under this agreement, ensure that the charger uptime for each charger 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 7.2 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 9 years from the date the charger begins operation.

The Recipient Shall:

- Collect and retain the Remote Monitoring and Maintenance Data below from each charger installed and operated as part of this Agreement.
- Retain the data below for 9 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

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:

1. Remote Monitoring Records
2. Maintenance Records
3. Data Dictionary

Task 7.3 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 *Quarterly Report on Charger Reliability and Maintenance* described in Task 7.4.

Products:

- Maintenance section of *Quarterly Report on Charger Reliability and Maintenance* described in Task 7.4

Task 7.4 Reporting

The goal of this task is to provide a quarterly report on charger reliability and maintenance.

The Recipient shall:

- Prepare and submit to the CEC a *Quarterly 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 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 quarterly report for the CEC to review and make a determination. The CEC has sole discretion in approving downtime in this category.
- A summary and calculation of uptime. Each report shall include the quarterly uptime percentage of each charger (Charger Uptime) as well as the quarterly uptime percentage for each charging station (Station Uptime) installed and operated as part of this agreement. The quarterly uptime percentage for each charger shall be reported for the quarter ending on the most recent anniversary of the beginning of operation of the charger. The quarterly uptime percentage for each station shall be reported for the quarter 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 operational hours in the reporting period

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

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

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

U_s = Station Uptime

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

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

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

- 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 Quarterly Progress Report, described in Task 1.5

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:

- 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 grant 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 grant agreement. Once regulations are final, they will apply to work under this grant agreement irrespective of when finalized. Any updates to regulations may also be applicable to work under this grant 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 provide the following data. Please note that all data collection should be specified per charger and per charging port, where applicable

- 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 AB 126 Data Report specified by the CAM.
- 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.
- Expected air emissions reduction, for example:
 - Non-methane hydrocarbons
 - Oxides of nitrogen
 - Particulate Matter
 - Formaldehyde
- Collect and submit to the CAM, in a standard electronic file format determined by the CAM, 12 months of throughput, usage, and operations data from the project including, but not limited to, for each session:

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

Sites	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

- After 12 months of data collection, analyze and summarize the data and provide a *Data Analysis Summary* including, but not limited to:
 - Number of charging sessions
 - Average session duration
 - Average charger downtime
 - Average kWh dispensed
 - Gallons of gasoline and/or diesel fuel displaced (with associated mileage information)
 - Energy delivered back to grid or facility if a bidirectional charging use case (kWh)
 - Compare any project performance and expectations in the proposal to CEC with actual performance and accomplishments

Products:

- Charger and station information, submitted electronically in Quarterly Progress Reports as described in Task 1.5
- 12 months of throughput, usage and operations data
- Data Analysis Summary
- AB 126 Data Reports

TASK 9 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