California Energy Commission
November 18, 2026 Business Meeting
Backup Materials for Federal Express Corporation

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

CALIFORNIA ENERGY COMMISSION

PROPOSED RESOLUTION: Federal Express Corporation

RESOLUTION NO: 26-1118-XX

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 ZVI-26-013 with Federal Express Corporation for a $7,152,069 grant. This project will build a medium-duty EV charging network (130 Level 2 single-port chargers, ten dual-port direct current fast chargers, and three battery energy storage systems) across three of Federal Express Corporation's distribution facilities in Sacramento to support the deployment of medium-duty EVs in last-mile delivery operations; and

FURTHER BE IT RESOLVED, that the Executive Director or their designee shall execute the same on behalf of the CEC.

APPROVED AND ADOPTED this 18 day of November 2026, by the following vote:

AYE:
NAY:
ABSENT:
ABSTAIN:

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 approved and adopted by affirmative vote of the CEC at a meeting held on November 18, 2026.

Kim Todd
Secretariat

STATE OF CALIFORNIA
CALIFORNIA ENERGY COMMISSION

CEC-270 (Revised 01/2026)

GRANT REQUEST FORM (GRF)

A. New Agreement Number

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

New Agreement Number: ZVI-26-013

B. Division Information

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

C. Recipient's Information

1. Recipient's Legal Name: Federal Express Corporation

D. Title of Project

Title of project: FEC Medium Duty EV Charging Depot Sacramento

E. Term and Amount

1. Start Date: November 18, 2026
2. End Date: June 30, 2030
3. Amount: $7,152,069

F. Business Meeting Information

1. Are the ARFVTP agreements $75K and under delegated to Executive Director? No
2. The Proposed Business Meeting Date: 11-18-2026
3. Consent or Discussion? Discussion
4. Business Meeting Presenter Name: Miki Crowell
5. Time Needed for Business Meeting: 5 min
6. The email subscription topic is: Clean Transportation Program

Project Description:
Federal Express Corporation. Proposed resolution approving agreement ZVI-26-013 with Federal Express Corporation for a $7,152,069 grant, and adopting staff's recommendation that this project is exempt from CEQA. This project will build a medium-duty electric vehicle (EV) charging network (130 Level 2 single-port chargers, 10 dual-port direct current fast chargers, and 3 battery energy storage systems) across three of Federal Express Corporation's distribution facilities in Sacramento to support the deployment of medium-duty EVs in last-mile delivery operations. (Greenhouse Gas Reduction Fund Funding) Contact: Miki Crowell

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: Cal. Code Regs., tit. 14, § 15301

Cal. Code Regs., tit. 14, sec. 15301 provides that projects which consist of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, and which involve negligible or no expansion of use beyond that existing at the time of the lead agency's determination, are categorically exempt from the provisions of the California Environmental Quality Act. This project involves installation of EV chargers and battery energy storage systems at existing developed depot facilities that are previously disturbed with negligible expansion of use. Therefore, the project falls within section 15301 and will not have a significant effect on the environment.

Additionally, 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.

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

No

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

Not applicable

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

No

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

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

H. Is this project considered "Infrastructure"?

Yes

I. Subcontractors

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

Subcontractor Legal Company Name	CEC Funds	Match Funds
No subcontractors to report	$0	$0

J. Vendors and Sellers for Equipment and Materials/Miscellaneous

List all Vendors and Sellers listed in Budget(s) for Equipment and Materials/Miscellaneous. Insert additional rows if needed. If no vendors or sellers to report, enter "No vendors or sellers to report" and "0" to funds. **Delete** any unused rows from the table.

Vendor/Seller Legal Company Name	CEC Funds	Match Funds
TBD (project management)	$0	$541,800
TBD (design and engineering)	$933,753	$45,000
TBD (engineering, procurement, and construction)	$1,145,033	$526,488
TBD (engineering, procurement, and construction)	$1,145,033	$526,488
TBD (engineering, procurement, and construction)	$1,145,033	$526,488
TBD (Various equipment vendors)	$2,773,617	$1,355,381
TBD (Various materials/miscellaneous vendors)	$9,600	$57,500

K. Key Partners

List all key partner(s). Insert additional rows if needed. If no key partners to report, enter "No key partners to report." **Delete** any unused rows from the table.

Key Partner Legal Company Name
No key partners to report

L. Budget Information

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

Funding Source	Funding Year of Appropriation	Budget List Number	Amount
Greenhouse Gas Reduction Fund	2023-24	601.4CTI	$7,152,069

TOTAL Amount: $7,152,069

R&D Program Area: Not applicable

Explanation for "Other" selection Not applicable

Reimbursement Contract #: Not applicable

Federal Agreement #: Not applicable

M. Recipient's Contact Information

1. Recipient's Administrator/Officer

Name: Lonnie Mattison, Wes Kanawalsky

Address: 1000 FedEx Dr.

City, State, Zip: Moon Township, PA 15108

Phone: 412-747-8239

E-Mail: lonnie.mattison@fedex.com, wkanawalksy@fedex.com

2. Recipient's Project Manager

Name: Lonnie Mattison

Address: 1000 FedEx Dr.

City, State, Zip: Moon Township, PA 15108

Phone: 412-747-8239

E-Mail: lonnie.mattison@fedex.com

N. Selection Process Used

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

Selection Process	Additional Information
Competitive Solicitation #	GFO-24-612
First Come First Served Solicitation #	Not Applicable
Other	Not Applicable

O. Attached Items

1. List all items that should be attached to this GRF by entering “Yes” or “No”.

Item Number	Item Name	Attached
1	Exhibit A, Scope of Work/Schedule	Yes
2	Exhibit B, Budget Detail	Yes
3	CEC 105, Questionnaire for Identifying Conflicts	Yes
4	Recipient Resolution	No
5	Awardee CEQA Documentation	Yes

Approved By

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

Agreement Manager: Miki Crowell

Approval Date: 09-04-2026

Office Manager: Elizabeth John

Approval Date: 09/25/26

Deputy Director: Melanie Vail

Approval Date: 10/5/2026

Exhibit A
SCOPE OF WORK

TECHNICAL TASK LIST

Task #	CPR	Task Name
1		Administration
2		Engineering and Design
3	X	Equipment Procurement
4		Construction and Installation
5	X	Commissioning and Testing
6		Fleet Vehicle Deployment
7		Operations and Reliability
8		Other Data Collection and Analysis
9		Project Fact Sheet

KEY NAME LIST

Task #	Key Personnel	Key Subrecipient(s)	Key Partner(s)
1	Lonnie Mattison		
2	Nick Leise Greg Hudak		
3	Nick Leise Greg Hudak		
4	Nick Leise Greg Hudak Wes Kanawalsky		
5	Lonnie Mattison Nick Leise Wes Kanawlsky		
6	Lonnie Mattison		
7	Lonnie Mattison		
8	Lonnie Mattison		
9	Lonnie Mattison		

GLOSSARY

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

Term/ Acronym	Definition
AB	Assembly Bill
AC Level 1	Alternating Current. A charger that operates on a circuit from 110 volts to 126 volts and transfers AC electricity to a device in an electric vehicle (EV) that converts AC to direct current to charge an EV battery.
AC Level 2	Alternating current. A charger that operates on a circuit from 208 volts to 240 volts and transfers AC electricity to a device in an electric vehicle (EV) that converts AC to direct current to charge an EV battery.
ADA	Americans with Disabilities Act
Battery Energy Storage	Technology that stores electrical energy in batteries for later use, helping to stabilize the electric grid by balancing supply and demand, integrating renewable energy sources, and providing backup power during outages or peak demand periods.
CAM	Commission Agreement Manager
CAO	Commission Agreement Officer
CEC	California Energy Commission
Charger	A device with one or more charging ports and connectors for charging EVs. Also referred to as electric vehicle supply equipment (EVSE). This definition excludes any charger used solely for private use at a single-family residence or a multifamily dwelling with four or fewer dwelling units.
Charging network	A collection of chargers located on one or more property(ies) that are connected via digital communications to manage the facilitation of payment, the facilitation of electrical charging, and any related data requests.
Charging network provider	The entity that provides the digital communication network that remotely manages the chargers. Charging network providers may also serve as charging station operators and/or manufacture chargers.
Charging port	The system within a charger that charges one EV. A charging port may have multiple connectors, but it can provide power to charge only one EV through one connector at a time.
Charging session	The period after a charge attempt during which the EV is allowed to request energy. Charging sessions can be terminated by the customer, the EV, the charger, the charging station operator, or the charging network provider.

Term/ Acronym	Definition
Charging station	The area in the immediate vicinity of one or more chargers and includes the chargers, supporting equipment, parking areas adjacent to the chargers, and lanes for vehicle ingress and egress. A charging station could comprise only part of the property on which it is located.
Charging station management system	A system that may be used to operate a charger, to authorize use of the charger, or to record or report charger data, such as by using OCPP.
Charging station operator	The entity that owns the chargers and supporting equipment and facilities at one or more charging stations. Although this entity may delegate responsibility for certain aspects of charging station operation and maintenance to subcontractors, this entity retains responsibility for operation and maintenance of chargers and supporting equipment and facilities. In some cases, the charging station operator and the charging network provider are the same entity.
Connector	The device that attaches an EV to a charging port in order to transfer electricity.
Corrective maintenance	Maintenance that is carried out after failure detection and is aimed at restoring an asset to a condition in which it can perform its intended function.
CPR	Critical Project Review
CTP	Clean Transportation Program
DCFC	Direct current fast charger. A charger that enables rapid charging by delivering direct-current (DC) electricity directly to an EV's battery.
Depot	Type of “home base” behind-the-fence location where a vehicle is typically kept when not in use (usually parked on a nightly basis).
Downtime	A period of time that a charger is not capable of successfully dispensing electricity or otherwise not functioning as designed. Downtime is calculated pursuant to Task 7.1.
DSA	Data Sharing Agreement
EV	Electric vehicle. A vehicle that is either partially or fully powered on electric power received from an external power source. For the purposes of this Agreement, this definition does not include golf carts, electric bicycles, or other micromobility devices.
EVITP	Electric Vehicle Infrastructure Training Program. It provides training and certification for electricians installing electric vehicle supply equipment.

Term/ Acronym	Definition
EVSE	Electric vehicle supply equipment. A charger as defined.
Excluded DCFCs	DCFCs that are exempt from the reliability requirements of the CEC's EV Charger Data and Reliability Standards (California Code of Regulations, Tit. 20, Div. 2, Chap. 12, Article 2). Excluded DCFCs include, but are not limited to, the following: • Fleet chargers • Off-grid chargers • Private residential chargers • Research chargers • Temporary chargers
Excluded downtime	Downtime that is caused by events pursuant to Task 7.1.
Fleet Charger	A charger that is not publicly available, as defined, is not installed at a single-family residence or a multifamily dwelling, as defined, and either: a) The charger is used solely to charge commercial vehicles, as defined in section 260 of the California Vehicle Code, registered to the charging station operator or their contractors or subcontractors; or b) The charger is used solely to charge commercial vehicles and the charger is not accessible to charge except for those with a preexisting contract or preexisting access agreement with the charging station operator that guarantees a minimum uptime during the period of the contract or access agreement.
FTD	Fuels and Transportation Division
GFO	Grant Funding Opportunity
Hardware	The machines, wiring, and other physical components of an electronic system including onboard computers and controllers.
Inoperative state	The charger or charging port is not operational.
Installed	Attached or placed at a location and available for use for a charging session. The date a charger is installed is the date it is first available for use for a charging session.

Term/ Acronym	Definition
Interoperability	Successful communication between the software, such as the software controlling charging on the EV and the software controlling the charger. Interoperability failures are communication failures between the EV and charger that occur while the software of each device is operating as designed. Interoperability failure leads to failed charging sessions.
Maintenance	Any instance in which preventive or corrective maintenance is carried out on equipment.
Networked	A charger can receive or send commands or messages remotely from or to a charging network provider or is otherwise connected to a central management system, such as by using OCPP 2.0.1, for the purposes of charger management and data reporting.
Nonnetworked charger	A charger that is not networked.
OCPP	Open Charge Point Protocol. An open-source communication protocol that specifies communication between chargers and the charging networks that remotely manage the chargers.
Off-grid charger	A charger that does not draw power from an electric utility as defined in Public Resources Code section 25108, at any time.
Operational	Or “up.” A charging port’s hardware and software are both online and available for use, or in use, and the charging port is capable of successfully dispensing electricity.
Operative state	The charger is operational.
Preventative maintenance	Maintenance that is performed on physical assets to reduce the chances of equipment failure and unplanned machine downtime.
Primary Vehicle Type	A vehicle type depending on the gross vehicle weight rating (GVWR) such as "light duty" or "LD" (GVWR <= 10,000), "medium duty" or "MD" (10,000 < GVWR <= 26,000), "heavy duty" or "HD" (GVWR > 26,000).
Private	Charging ports located at parking space(s) that are privately owned and operated, often dedicated to a specific driver or vehicle (for example, a charging port installed in a garage of a single-family home).
Public	Charging ports located at parking space(s) designated by the property owner or lessee to be available to and accessible by the public.
Publicly available charger	A charger and associated parking space or spaces designated, such as by a property owner or lessee, to be available to, and accessible by, the public for any period of time. A charger designated, such as by a property owner or a lessee, to be available only to customers or visitors of the business is a publicly available charger for purposes of

Term/ Acronym	Definition
	this chapter. Chargers and associated parking spaces located in parking garages or gated facilities are considered publicly available for purposes of this chapter if any member of the public can obtain vehicular access to the facility for free or through payment of a fee. If a charger and associated parking space is made available to the public for only limited time periods, that charger and associated parking space is considered a publicly available charger. A publicly available charger does not include any of the following: (A) A workplace charging station if it is clearly marked and operated as available exclusively to the organization's employees or independent contractors. (B) A charger and associated parking spaces reserved exclusively to residents, tenants, visitors, or employees of: a private residence or common interest development; or a residential building adjacent to a private residence. (C) A charger provided by a manufacturer of electric vehicles for the exclusive use by vehicles it manufactures. (D) A research charger, as defined in this section.
Recipient	Federal Express Corporation
Research charger	A charger that is attached or placed solely to dispense electricity for testing or research; it is neither a fleet charger nor publicly available charger; and it is not used for workplace charging.
RSA	Registered Service Agency. An entity that repairs a commercial device that is registered with the California Department of Food and Agriculture Division of Measurement Standards.
SB	Senate Bill
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.
Site host	The electric utility customer of record for electric service to the charger and can also be the charging network provider or the charging station operator of the charger.
SMUD	Sacramento Municipal Utility District

Term/ Acronym	Definition
Software	A set of instructions, data, or programs used to operate computers and execute specific tasks.
Temporary charger	A charger that is designed to be portable and available for use intermittently, is not attached at a location, and is not available for use at a single lot or parcel, or an adjacent lot or parcel, for more than 30 days in a calendar year. For the purposes of this definition, a charger that is made available for use for any portion of a day, is considered available for use for that full day.
Uptime	The charging port uptime percentage for the reporting period, excluding downtime pursuant to Task 7.1.

Background

The Budget Act of 2023 (Chapter 189, Statutes of 2023), as amended by Senate Bill (SB) 109, (Chapter 36, Statutes of 2024) and Assembly Bill (AB) 158 (Chapter 996, Statutes of 2024) appropriated funding from the Greenhouse Gas Reduction Fund (GGRF) to support infrastructure deployments for zero-emission light-duty and medium- and heavy-duty vehicles. This program is part of California Climate Investments, a statewide initiative that puts billions of Cap-and-Invest dollars to work reducing greenhouse gas emissions, strengthening the economy, and improving public health and the environment — particularly in disadvantaged communities.

AB 118 (Chapter 750, Statutes of 2007) created the Clean Transportation Program (CTP) to help achieve California's climate change policies and support projects that reduce greenhouse gas emissions from the transportation sector. AB 8 (Chapter 401, Statutes of 2013) extended the program through January 1, 2024, and AB 126 (Chapter 319, Statutes of 2023) extended the program through July 1, 2035 and focused the program on zero-emission transportation.

The CTP provides financial support for projects that, among other goals:

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

On March 28, 2025, the California Energy Commission (CEC) released a Grant Funding Opportunity (GFO) entitled "Depot Charging and Hydrogen Refueling Infrastructure for Medium- and Heavy-Duty On-Road Zero-Emission Vehicles." This competitive grant solicitation was to fund the deployment of depot charging and hydrogen refueling

infrastructure for medium- and heavy-duty (MDHD) on-road zero-emission vehicles (ZEVs). In response to GFO-24-612, the Recipient submitted application #13 which was proposed for funding in the CEC's Notice of Proposed Awards on June 29, 2026. GFO-24-612 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:

MDHD vehicles — including delivery trucks, service vehicles, and fleet equipment — represent a disproportionate share of California's greenhouse gas and criteria pollutant emissions from the transportation sector. Despite strong state policy directives under the Advanced Clean Trucks regulation and the California Air Resources Board's broader ZEV mandates, the transition of MDHD fleets to zero-emission technology is constrained by a critical infrastructure gap: the absence of reliable, appropriately scaled depot charging infrastructure at fleet operating facilities. Without on-site charging capable of supporting the duty cycles of today's MDHD battery-electric vehicles, fleet operators cannot make credible vehicle procurement commitments, and the market transformation California depends upon cannot occur.

Three of Federal Express Corporation (Recipient)'s Sacramento-based fleet facilities operated within Sacramento Municipal Utility District (SMUD)'s service territory lack the electrical infrastructure and energy management systems necessary to support MDHD electric vehicle (EV) charging at scale. Each site faces challenges common to California fleet operators: limited existing electrical service capacity, exposure to significant utility demand charges that increase the total cost of charging, and the need to charge large numbers of EVs within overnight windows. These barriers have not been resolved by the marketplace alone, as the capital costs of depot charging infrastructure — particularly battery energy storage system integration required to manage peak demand — remain prohibitive without public funding support.

Goals of the Agreement:

The goal of this Agreement is to accelerate the deployment of MDHD ZEV fleet infrastructure in Sacramento County by installing 130 Level 2 charging ports, 20 direct current fast charging (DCFC) ports, and three battery energy storage systems across one private depot and two shared depot sites, enabling the electrification of at least 150 MDHD vehicles.

Objectives of the Agreement:

The objectives of this Agreement are to:

- Install 50 charging ports and one 750 kWh / 300 kW battery energy storage system at each of three fleet depot sites in Sacramento County,

for a total of 150 charging ports (130 single-port Level 2 chargers and 10 dual-port DCFCs) and three battery energy storage systems.

- Deploy and integrate an intelligent load management system at each of three depot sites that coordinates battery energy storage system charge and discharge cycles with fleet charging demand, demonstrating peak demand reduction of 40% to 60% relative to a baseline without battery energy storage.
- Support the procurement and deployment of 50 MDHD ZEVs to be deployed at the private depot site in Sacramento that is dedicated only to the Recipient's fleet, with vehicles in operation upon infrastructure energization. These vehicles will be purchased using Recipient's own funding that is not part of the agreement budget.

TASK 1 ADMINISTRATION

Task 1.1 Attend Kick-off Meeting

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

The CAM shall:

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

The Recipient shall:

- Attend a "Kick-Off" meeting that includes the CAM and may include the Commission Agreement Officer (CAO) and a representative of the CEC Accounting Office. The Recipient shall bring their Project Manager, Agreement Administrator, Accounting Officer, and any others determined necessary by the Recipient or specifically requested by the CAM to this meeting.
- Provide a *written statement of match share activities* that have occurred after the notice of proposed awards but prior to the execution of the agreement using match funds. If none, provide a statement that no work has been completed using match funds prior to the execution of the agreement. All pre-execution match expenditures must conform to the requirements in the Terms and Conditions of this Agreement.
    - The statement should include the following project activities: key milestone dates, site specific charger information and any other equipment to be included at the site(s).
- Provide an *updated Schedule of Products and Due Dates, updated list of match funds (Private, Utility, Federal), and updated list of permits.*
- Discuss the following administrative and technical aspects of this Agreement:

- Agreement Terms and Conditions
- Critical Project Review (Task 1.2)
- Match fund documentation (Task 1.6) No reimbursable work may be done until this documentation is in place.
- Permit documentation (Task 1.7)
- Subawards and site host agreements (if applicable) needed to carry out project (Task 1.8)
- The CAM's expectations for accomplishing tasks described in the Scope of Work
- An updated Schedule of Products and Due Dates
- Monthly Calls (Task 1.4)
- Quarterly Progress Reports (Task 1.5)
- Program Management Data Report (report template to be provided by CAM)
- Utilization_and_Reliability_Data_Dictionary (to be provided by CAM, or available on the CEC website: https://www.energy.ca.gov/media/12649)
- GHG Intensity Report (report template to be provided by CAM)
- Technical Products (Product Guidelines located in Section 5 of the Terms and Conditions)

CAM Product:

- Kick-Off Meeting Agenda

Recipient Products:

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

Task 1.2 Critical Project Review (CPR) Meetings

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

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

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

The Recipient shall:

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

CAM Products:

- CPR meeting agenda and a list of expected participants
- Schedule for written determination
- Written determination

Recipient Product:

- CPR Report(s)

Task 1.3 Final Meeting

The goal of this task is to closeout this Agreement.

The Recipient shall:

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

  This meeting will be attended by, at a minimum, the Recipient 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
- Provide *written documentation of meeting agreements*.
- Prepare a *schedule for completing the closeout activities* for this Agreement.

Products:

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

Task 1.4 Monthly Calls

The goal of this task is to have calls at least monthly between CAM 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 and explain the Program Management Data Report Template during first monthly call and review with Recipient during subsequent monthly calls.
- Provide questions to the Recipient prior to the monthly call.
- Provide call summary notes to Recipient of items discussed during call.

The Recipient shall:

- Review the questions provided by CAM prior to the monthly call
- Complete the *Program Management Data Report* following the first monthly call and review and update with CAM during subsequent monthly calls as needed (Task 8)
- Provide verbal answers to the CAM during the call.
- Send an *email to CAM concurring with call summary notes*.

Product:

- Email to CAM concurring with call summary notes.

Task 1.5 Quarterly Progress Reports

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

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

The Recipient shall:

- Prepare a *Quarterly Progress Report* which summarizes all Agreement activities conducted by the Recipient for the reporting period, including an assessment of the ability to complete the Agreement within the current budget and any anticipated cost overruns. Progress reports are due to the CAM 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 Identify and Obtain Match Funds

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

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

The Recipient shall:

- Prepare a *letter* documenting the match funding committed to this Agreement and submit it to the CAM at least 2 working days prior to the kick-off meeting. If no match funds were part of the proposal that led to the CEC awarding this Agreement and none have been identified at the time this Agreement starts, then state such in the letter. If match funds were a part of the proposal that led to the CEC awarding this Agreement, then provide in the letter a list of the match funds that identifies the:
    - Amount of each cash match fund, its source, including a contact name, address and telephone number and the task(s) to which the match funds will be applied.
    - Amount of each in-kind contribution, a description, documented market or book value, and its source, including a contact name, address and telephone number and the task(s) to which the match funds will be applied. If the in-kind contribution is equipment or other tangible or real property, the Recipient shall identify its owner and provide a contact name, address and telephone number, and the address where the property is located.
- Provide a *copy of the letter of commitment* from an authorized representative of each source of cash match funding or in-kind contributions that these funds or contributions have been secured. For match funds provided by a grant, a copy of the executed grant shall be submitted in place of a letter of commitment.
- Discuss match funds and the implications to the Agreement if they are reduced or not obtained as committed, at the kick-off meeting. If applicable, match funds will be included as a line item in the progress reports and will be a topic at CPR meetings.
- Provide the appropriate information, including but not limited to, a *letter of new match fund commitment* to the CAM if during the course of the Agreement additional match funds are received.

- Provide the CAM *written notification* within 10 days if during the course of the Agreement existing match funds are reduced. Reduction in match funds must be approved through a formal amendment to the Agreement and may trigger an additional CPR meeting.

Products:

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

Task 1.7 Identify and Obtain Required Permits

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

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

The Recipient shall:

- Prepare a *letter* documenting the permits required to conduct this Agreement and submit it to the CAM 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 actions available to the CEC under this Agreement, such as an additional CPR.

Products:

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

Task 1.8 Obtain and Execute Subawards and Agreements with Site Hosts

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

The Recipient shall:

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

Products:

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

TECHNICAL TASKS

TASK 2 ENGINEERING AND DESIGN

The goal of this task is to complete all engineering design and technical specifications required for the Level 2 charging infrastructure, DCFC charging infrastructure, battery energy storage systems, electrical distribution, structural support, and load management systems at all three project sites, producing a complete construction-ready design package for each site.

The Recipient shall:

- Conduct site surveys at each of three project sites to assess existing electrical infrastructure capacity, available space for battery energy storage system pad placement and charger installation, utility point-of-connection locations, and any site-specific constraints. Prepare *Site Survey Reports* for each site documenting existing conditions, measurements, photographs, and design inputs and provide a copy to the CAM.
- Prepare *100% Electrical Design Drawings* for all three sites and provide a copy to the CAM. Drawings shall include, but are not limited to:
    - Single-line diagrams showing utility service, transformers, switchgear, battery energy storage system integration, and charger circuits;
    - Panel schedules;
    - Conduit routing plans;
    - Conductor sizing calculations;
    - Grounding and bonding plans; and
    - Point-of-connection details for each site's utility service.
- Prepare *Battery Energy Storage System Technical Specifications* for the 750 kWh / 300 kW system to be deployed at each site and provide a copy to the CAM. Specifications shall include, but are not limited to:
    - Battery chemistry and cell configuration;
    - Rated energy and power capacity;

    - Charge and discharge cycle parameters and expected cycle life;
    - Thermal management system;
    - Fire and safety protection systems and fault response;
    - Enclosure ingress protection rating;
    - Seismic anchorage requirements;
    - Communications interface requirements; and
    - Manufacturer warranty terms.
- Prepare *Civil and Structural Drawings* for battery energy storage system equipment pads, Level 2 charger pedestal mounts, DCFC locations, and switchgear anchorage at each site and provide a copy to the CAM. Drawings shall address:
    - Concrete pad design;
    - Equipment load-bearing requirements;
    - Seismic anchorage per California Building Code requirements; and
    - Site drainage considerations.
- Prepare the *Controls Architecture Document* for the load management system to be deployed at each site and provide a copy to the CAM. This document shall include, but is not limited to:
    - System topology diagram showing battery energy storage system, chargers, Central Management System, and utility service interfaces;
    - Battery energy storage system-to-charger communication protocol and data exchange specifications;
    - Peak-shaving control logic and setpoint parameters;
    - Dynamic load throttling algorithms and charger port-level modulation approach;
    - Open Charge Point Protocol 2.0.1 integration framework for Central Management System-to-charger communication;
    - Demand response signal interface; and
    - Cybersecurity provisions for remote access and software update pathways.

Products:

- Site Survey Reports (3 sites)
- 100% Electrical Design Drawings (3 sites)
- Battery Energy Storage System Technical Specifications

- Civil and Structural Drawings (3 sites)
- Controls Architecture Document

Task 2.1 Coordinate with Utility and Obtain Final Utility Service Design

The goal of this task is to ensure the Recipient coordinates with the Utility and obtains the Final Utility Service Design(s) if required for the project site(s).

The Recipient shall:

- For each project site, coordinate with the appropriate Utility or Utilities to ensure project infrastructure is capable of energization, and provide to the CAM a *Timeline for obtaining Final Utility Service Design or a letter stating that no Final Utility Service Design is required*.
- If Final Utility Service Design is required, submit to the Utility all required application documentation to initiate the utility service planning and design process and send to the CAM *confirmation that the application(s) to initiate the utility service planning and design process has been submitted for the project site(s)*.
- Obtain a *Final Utility Service Design* (if applicable) and submit to CAM.

Products:

- Timeline for obtaining Final Utility Service Design for the project site(s) or a letter stating that no Final Utility Service Design is required
- Confirmation that the application(s) to initiate the utility service planning and design process has been submitted for the project site(s) (if applicable)
- Final Utility Service Design(s) for the project site(s) (if applicable)

TASK 3 EQUIPMENT PROCUREMENT

The goal of this task is to procure all major equipment required for the project, including three battery energy storage system units, switchgear, transformers, 130 single-port Level 2 chargers, 10 dual-port DCFCs, electrical materials, and load management systems.

The Recipient shall:

- Issue *Request for Quotation* for three battery energy storage system units, switchgear, transformers, 130 single-port Level 2 chargers, and 10 dual-port DCFCs and provide a copy to the CAM. Evaluate responses and select vendors.
- Develop a *List of Equipment and Materials* to procure for construction of the Level 2 charging infrastructure for all three sites, and DCFC charging infrastructure at two sites and provide a copy to the CAM. The list shall include a schedule for issuing purchase orders and delivery. CAM written approval to proceed with procurement is required.

- Receive delivery of equipment and materials.
- Provide a copy of the *Email Notification of Equipment and Materials Delivery* to the CAM.

Products:

- Request for Quotation
- List of Equipment and Materials
- Email Notification of Equipment and Materials Delivery

[CPR WILL OCCUR DURING THIS TASK. SEE TASK 1.2 FOR DETAILS.]

TASK 4 CONSTRUCTION AND INSTALLATION

The goal of this task is to complete all site preparation, civil, structural, electrical, mechanical, and equipment installation work required to construct the energy infrastructure at each project site. At the private depot site, the system includes EV charging infrastructure with 50 single-port Level 2 chargers and one battery energy storage system. At each of two shared depot sites, the proposed system includes EV charging infrastructure with 40 single-port Level 2 chargers, five dual-port DCFCs, and one battery energy storage system.

The Recipient shall:

- Perform site preparation activities at all three sites for installation of electrical infrastructure, battery energy storage systems, Level 2 chargers, DCFCs, and load management system. Prepare *Site Preparation Completion Reports* for all three sites and provide a copy to the CAM.
- Install electrical infrastructure and prepare *Electrical Rough-In Reports* for all three sites documenting completed rough-in scope, results of rough-in inspections by the authority having jurisdiction, and confirmation of readiness for equipment terminations and final inspection. Provide a copy to the CAM.
- Install one battery energy storage system at each of the three sites and conduct fire suppression system acceptance testing in coordination with the local fire marshal and authority having jurisdiction. Prepare *Battery Energy Storage System Installation Completion Reports* for all three sites, documenting completed installation scope, manufacturer startup checklist items completed, photographs of installed equipment, and readiness for commissioning. Provide a copy to the CAM.
- Install 50 charging ports at each of the three sites. Prepare *Charger Installation Completion Reports* for all three sites, documenting installed charger inventory by make, model, serial number, port ID, and location; electrical connection completion; photographs; and readiness for commissioning and provide a copy to the CAM.
- Install load management system controls hardware and prepare *Load*

Management System Installation Completion Reports for all three sites and provide a copy to the CAM.

- Complete and inspect all final electrical terminations across all equipment at each site. Prepare *Connection Completion Reports* for all three sites and provide a copy to the CAM.
- Submit an *AB 841 Certification* that certifies the project has complied with all AB 841 (2020) requirements specified in Exhibit C or describes why the AB 841 requirements do not apply to the project. The certification shall be signed by Recipient's authorized representative.
- Submit *EVITP Certification Numbers* of each Electric Vehicle Infrastructure Training Program certified electrician that installed electric vehicle charging infrastructure or equipment. EVITP Certification Numbers are not required to be submitted if AB 841 requirements do not apply to the project.
- Ensure all applicable electric vehicle supply equipment (EVSE) installed for commercial use has a type approval certificate issued through the California Type Evaluation Program (CTEP) administered by the California Department of Food and Agriculture (CDFA) Division of Measurement Standards (DMS) or Certificate of Conformance issued by the National Type Evaluation Program (NTEP) administered through the National Conference on Weights and Measures. California accepts NTEP certificates so long as the device also meets CCR Title 4, Section 4002.11.
- Unless otherwise updated by the CDFA DMS, ensure installation, repair, and/or maintenance on applicable commercial EVSE is performed by a Registered Service Agency (RSA) and after the device is placed in service, the RSA must report this information to the county within 24 hours. Device owners are responsible for registering their device with the county.

Products:

- Site Preparation Completion Reports (3 sites)
- Electrical Rough-In Reports (3 sites)
- Completion Reports including:
  - Battery Energy Storage System Installation (3 sites)
  - Charger Installation (3 sites)
  - Load Management System Installation (3 sites)
  - Connection (3 sites)
- AB 841 Certification
- EVITP Certification Numbers for all electricians installing EVSE

TASK 5 COMMISSIONING AND TESTING

The goal of this task is to commission, test, and validate the complete integrated EV charging and battery energy storage system infrastructure at all three project sites, confirming all systems operate as designed, meet CEC minimum technical requirements in the solicitation, and are ready for fleet operations prior to vehicle deployment.

The Recipient shall:

- Coordinate with SMUD to complete utility service energization at each site. Obtain a *Written Confirmation from SMUD* that service is live and available to the installed equipment at each site and provide a copy to the CAM.
- Commission battery energy storage system and prepare *Battery Energy Storage System Commissioning Reports* for each site. Provide a copy to the CAM.
- Commission Level 2 chargers at three sites and prepare *Charger Commissioning Reports* for each site. Provide a copy to the CAM.
- Commission DCFCs at two sites and prepare *Charger Commissioning Reports* for each site. Provide a copy to the CAM.
- Conduct integrated system testing and prepare a *Final System Test Report*, which shall include but is not limited to:
    - Test scenarios and methodology;
    - Aggregate demand measurements during simulated peak charging;
    - Battery energy storage system charge and discharge performance during test;
    - Load management system response;
    - Charger uptime during test period;
    - Results compared to design parameters; and
    - Overall system readiness determination for each site.
- Provide a copy of the *Final System Test Report* to the CAM.
- Complete and submit the *Station Checklist* to the CAM for each site upon confirmation that the station is operational and meets all CEC minimum technical requirements.
- Provide training for station operators to safely operate and maintain the installed EV charging and battery energy storage system infrastructure. Prepare a *Training Summary* documenting training content, training dates, participant names, and completion status for all operator and maintenance training conducted.

- Develop a *Community Outreach Plan* describing the Recipient's strategy for communicating the project's benefits to the communities surrounding the three project sites, with particular attention to disadvantaged and low-income communities in the vicinity of each site. The plan shall include, but is not limited to:
    - Target audiences;
    - Outreach channels and materials such as signage, informational flyers, community meetings, and digital communications;
    - A timeline of outreach activities; and
    - Evaluation methods for measuring outreach reach and effectiveness.
- Implement outreach activities in accordance with the Community Outreach Plan and prepare and submit *Community Outreach Summary Report* at project completion to the CAM. The report shall include, but is not limited to:
    - Outreach activities conducted;
    - Channels and materials used;
    - Estimated reach by community;
    - Feedback received from community members; and
    - A description of how community input was considered in project activities.

Products:

- Written Confirmation from SMUD (3 sites)
- Battery Energy Storage System Commissioning Reports (3 sites)
- Charger Commissioning Reports (3 sites)
- Final System Test Report (3 sites)
- Station Checklists (3 sites)
- Training Summary
- Community Outreach Plan
- Community Outreach Summary Report

[CPR WILL OCCUR DURING THIS TASK. SEE TASK 1.2 FOR DETAILS.]

TASK 6 FLEET VEHICLE DEPLOYMENT

The goal of this task is to procure and deploy the MDHD battery electric vehicles that will utilize the installed charging infrastructure at the private depot site in Sacramento

that is dedicated only to the Recipient's fleet, ensuring vehicles are in operation at or prior to infrastructure energization. The vehicles will be purchased using Recipient's own funding that is not part of the agreement budget.

The Recipient shall:

- Execute purchase orders for 50 MDHD battery electric vehicles within three months of grant agreement execution.
- Provide a copy of *Vehicle Purchase Orders* to the CAM.
- Accept and document vehicle deliveries. Prepare *Vehicle Delivery Records* identifying vehicle type, quantity, manufacturer, model year, gross vehicle weight rating, vehicle class, site assignment, and delivery date for each vehicle delivered. Provide a copy to the CAM.
- Prepare the *Vehicle-to-Infrastructure Integration Completion Report*. This report shall include, but is not limited to:
    - Connector compatibility confirmation;
    - Any issues encountered during integration and corrective actions taken; and
    - A written statement confirming that vehicles were in operation prior to or at the time of infrastructure energization.
- Provide a copy of the Vehicle-to-Infrastructure Integration Completion Report to the CAM.

Products:

- Vehicle Purchase Orders
- Vehicle Delivery Records
- Vehicle-to-Infrastructure Integration Completion Report

TASK 7 OPERATIONS AND RELIABILITY

The goal of this task is to ensure that EV chargers installed as part of this Agreement comply with legislative and regulatory requirements for charger reliability.

Task 7.1 AC Level 1, AC Level 2, and Excluded DCFC

The goal of this task is to ensure that AC Level 1, AC Level 2, and Excluded DCFCs installed as part of this Agreement that are exempt from the **reliability** requirements of the CEC's EV Charger Data and Reliability Standards (California Code of Regulations, Tit. 20, Div. 2, Chap. 12, Article 2) comply with legislatively mandated reporting.

The Recipient shall:

- **For networked AC Level 2 and networked fleet DCFC only:** Ensure that all networked AC Level 2 and networked fleet DCFC installed as part of this Agreement have Subset Certification in the Open Charge Alliance OCPP Certification Program for OCPP version 2.0.1, edition 3, published

May 06, 2024, for Core and Advanced Security functionalities.

- Submit to CAM the completed and signed *EV Charger Data and Reliability Standards Regulations Compliance Worksheet* for AC Level 1, AC Level 2, and Excluded DCFC prior to the purchase of the chargers.
- For **each AC Level 1, AC Level 2, and Excluded DCFC charging port,** prepare and submit the *Reliability Uptime* template and *Reliability Downtime* template in the Utilization_and_Reliability_Data_Dictionary available on the CEC's website. These templates should be updated for each charging port, after the charging port becomes operational, and submitted on a quarterly basis for six years. The CAM will provide instructions for submittal. As specified in the *Utilization_and_Reliability_Data_Dictionary,* data in the templates must include:
    - A summary of charging port downtime, including total downtime and the number and frequency of downtime events. Downtime shall be determined on a per charging port basis by summing the durations of all downtime events during the reporting period. The duration of a downtime event shall be the time between the earliest record that a charging port is not capable of successfully dispensing electricity or otherwise not functioning as designed and the time it is available to deliver a charge. First record that a charger is not capable of successfully dispensing electricity or otherwise not functioning as designed includes, but is not limited to, consumer notification, internal diagnostics, or inspection, whichever is earliest.
    - A summary of excluded downtime, including total excluded downtime and the number and frequency of excluded downtime events and the causes of excluded downtime events. 'Excluded Downtime' includes:
        - **Before Initial Installation:** Downtime before the charging port was initially installed.
        - **Grid Power Loss:** Downtime during which power supplied by a third-party provider is not supplied at levels required for minimum function of the charging port. This may include, but is not limited to, service outages due to utility equipment malfunction or public safety power shutoffs. This does not include power generation or storage equipment installed to serve the charger(s) exclusively. Documentation from power provider detailing outage is required to claim this as excluded downtime.
        - **Outage for Preventative Maintenance or Upgrade:** Downtime caused by any preventative maintenance or upgrade work that takes the charging port offline. This must

be scheduled at least two weeks in advance of the charger being placed in an inoperative state. The maximum downtime that can be excluded for preventative maintenance or upgrade work is 72 hours for any 12-month period.

- **Vandalism or Theft:** Downtime caused by any physical damage to the charger or station committed by a third party. This may include, but is not limited to, theft of charging cables, damage to connectors from mishandling, or damage to screens. A maximum of 10 days may be claimed as excluded downtime for each vandalism or theft event. A police report or similar third-party documentation is required to claim this as excluded time.
- **Natural Disasters:** Downtime caused by any disruption of the charging port due to a natural event such as a flood, earthquake, or wildfire that causes great damage. Third party documentation such as news reporting must be provided along with a narrative of the direct impacts to the charger(s) to claim this as excluded downtime.
- **Communication Network Outages:** Downtime caused by loss of communication due to cellular or internet service provider system outages. A Communication Network Outage can be claimed as excluded downtime provided the chargers default to a free charge state during communication losses. A free charge state is when the charger is operational and dispenses energy free of charge to any consumer.
- **Operating Hours:** Hours in which the charging port is in an operative state but that are outside of the identified hours of operation of the charging station.

- A summary and calculation of uptime. Each report shall include the uptime percentage of each charging port (Uptime) installed and operated as part of this Agreement for the reporting period. Charging port uptime shall be calculated as:

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

U = Charging Port Uptime

T =

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

Q2 reporting period = 131,040 minutes.

Q3 and Q4 reporting periods = 132,480 minutes.

D = Total charging port downtime for the reporting period, in minutes.

E = Total charging port excluded downtime in the reporting period, in minutes.

Products:

- Completed and signed *EV Charger Data and Reliability Standards Regulations Compliance Worksheet* for AC Level 1, AC Level 2, and Excluded DCFC
- Reliability Uptime template and Reliability Downtime template in the Utilization_and_ Reliability_Data_Dictionary for six years after charging port is operational. The Utilization_and Reliability_Data_Dictionary can be found at https://www.energy.ca.gov/media/12649.

TASK 8 OTHER DATA COLLECTION AND ANALYSIS

The goal of this task is to collect operational and programmatic data from the project.

The Recipient shall:

- Prepare and submit a *Program Management Data Report* in a format chosen by the CAM following the first monthly call (Task 1.4) and update during subsequent monthly calls as needed. The Report must reflect site construction activities and site characteristics. The Report must encompass all sites from those planned through to completed ones, including detailed information regarding their respective ZEV infrastructure. The Recipient may contribute inputs to this report throughout the duration of the Agreement. The programmatic data shall include, but not be limited to the following:
    - Electric Vehicle Charger Information
        - Funding
            - The subsidy from a federal program, utility program, and private funding
        - Vehicles
            - Primary Vehicle Type served such as light duty (GVWR <= 10,000), medium duty (10,000 < GVWR <= 26,000), heavy duty (GVWR > 26,000)
        - Milestone Dates
            - Key milestone dates, such as permit request and received date, charger energization date, charger operational date, and other dates as requested by the CAM
        - Location

    - Primary site access type such as publicly available, shared private, private
    - Location/site use type, such as hotel, restaurant, or multi-unit housing
    - Charger address
    - Parking location type, such as street, parking lot or parking garage
  - Other Equipment
    - Battery Energy Storage CEC cost and kWh capacity
    - Non-battery Distributed Generation CEC cost, kW capacity and type
  - ZEV Infrastructure Information:
    - Charger Information
    - Charger make and model, serial number, level (Level 1, Level 2, DCFC, MCS), nameplate capacity (kW), number of ports per charger

Products:

- Program Management Data Report, submitted monthly

Task 8.1 Utilization

The Recipient shall:

- Prepare and submit the *Utilization Inventory* template*, Utilization Session* template and *Utilization Interval* template in the Utilization_and_Reliability_Data_Dictionary, at least quarterly for three years after the charging ports are operational, including, but not limited to:
  - Charging network provider name
  - Charger site address, city, zip code
  - Charger make, model, and manufacturer serial number
  - EV service equipment charger and charging port ID
  - Peak Power (kW)
  - Charging session start/end date and times
  - Charging session energy consumed (kWh)
  - Plug in/un-plugged timestamp Coordinated Universal Time (UTC)
  - Charging interval peak demand (kW)
  - Charging interval start/end times
  - Charging interval energy consumed (kWh)

- If a bidirectional charger, energy (kWh) discharged back to grid or facility
- Total transacted amount
- Payment method

Products:

- The Utilization Inventory template, Utilization Interval template, and Utilization Session template of the Utilization_and_ Reliability_ Data_Dictionary provided, at a minimum, quarterly for three years after a charging port is operational.
  - The CEC provided Utilization_and_Reliability_Data_Dictionary can be found at https://www.energy.ca.gov/media/12649.

Task 8.2 GHG Intensity Reporting

The Recipient shall:

- Collect and report the source and greenhouse gas emissions intensity, on an annual basis, of the electricity used and dispensed by the EV charging station(s) at the meter, consistent with the disclosure methodology set forth in Article 14 (commencing with Section 398.1) of Chapter 2.3 of Part 1 of Division 1 of the Public Utilities Code. Data must be reported to the CEC annually in the *GHG Intensity Report* specified by the CAM.

Products:

- GHG Intensity Report

Task 8.3 GGRF Reporting

The Recipient shall:

- Provide *program metrics and data reports* consistent with the GGRF Special Terms and Conditions, as applicable, in a format provided by the CAM.

Product:

- Program metrics and data reports consistent with the GGRF Special Terms and Conditions (as applicable)

Task 8.4 Data Sharing Agreement

The goal of this subtask is to ensure a data sharing agreement with the requirements described below is executed for the purposes of facilitating data collection and reporting on EV charging ports. This task is only applicable if CEC has not executed a data service agreement with the charging network provider that includes delivery of the data from this agreement.

The Recipient shall:

- Enter into a data sharing agreement with a charging network provider that

shall include the following, or, if the Recipient is a charging network provider, the Recipient shall enter into a data sharing agreement with the CEC that shall include the following:

  - The charging network provider fulfills all the data collection and reporting requirements described in Task 7.1 AC Level 1, AC Level 2, and Excluded DCFC and Task 8.1 Utilization, on behalf of Recipient (in case of non-CNP Recipient).
  - The charging network provider's reports adhere to CEC-approved formatting, report templating, and delivery methods.
  - CEC is identified as a third-party beneficiary to the data sharing agreement.

- Be responsible for ensuring the charging network provider fulfills all requirements described in the data-sharing agreement. Retention may be withheld under this Agreement until at least 12 months of data collection is provided by the charging network provider to the CEC.
- If the Recipient is not the charging network provider, submit a copy of the *executed data-sharing agreement* to the CEC within 30 calendar days of selecting a charging network provider and no later than when the first charging port under this Agreement is energized.
- Notify the CAM in writing within 30 calendar days if Recipient changes its selected charging network provider.
- If a new charging network provider is selected, the new executed data-sharing agreement shall be submitted to the CEC within 30 calendar days of the charging network provider's selection.

Product:

- Executed data-sharing agreement

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 includes but is not limited to: a description of the project; the actual benefits resulting from the project; lessons learned from implementing the project; data on potential job creation, economic development, and increased state revenue as a result of expected future expansion; and a

comparison of any project performance and expectations provided in the proposal to CEC with actual project performance and accomplishments. Use the format provided by the CAM.

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

Products:

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