California Energy Commission
April 10, 2024 Business Meeting
Backup Materials for CALSTART, Inc.
ARV-20-006-06

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

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

[PROPOSED]

RESOLUTION NO: 24-0410-15

STATE OF CALIFORNIA

STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION

RESOLUTION: CALSTART, Inc.

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

RESOLVED, that the CEC approves amendment 6 to agreement ARV-20-006 with CALSTART, Inc. to 1) increase the agreement's contingent spending authority by up to $268,720,000 with approval of CEC's Executive Director through an amendment; 2) modify the terms and conditions; and 3) revise the Scope of Work with new reliability and data requirements. This amendment does not increase the current agreement amount of $275,983,982. This agreement is for a block grant to design, implement, and fund, with CEC oversight, various medium- and heavy-duty zero-emission vehicle electric charging and hydrogen refueling infrastructure incentive projects throughout California; 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 April 10, 2024.

AYE:
NAY:
ABSENT:
ABSTAIN:

Dated:

_____
Kristine Banaag
Secretariat

STATE OF CALIFORNIA

GRANT AMENDMENT REQUEST FORM (GARF)

CEC-277 (Revised 01/2024) CALIFORNIA ENERGY COMMISSION

Original Agreement # ARV-20-006 Amendment # 06

Division	Agreement Manager:	MS-	Phone
600 Fuels and Transportation Division	Sebastian Serrato	27	916-314-3278

Recipient's Legal Name	Federal ID #
CALSTART, Inc.	95-4375022

Revisions: (check all that apply)	Additional Requirements
☐ Term Extension New End Date: / /	Include revised schedule and complete items A, B, C, & F below.
☒ Budget Augmentation Amendment Amount: $ $268,720,000 (increase to agreement spending authority only)	Include revised budget and complete items A, B, C, D, & F below.
☐ Budget Reallocation	Include revised budget and complete items A, B, C, & F below.
☒ Scope of Work Revision	Include revised scope of work and complete items A, B, C, E, & F below.
☐ Change in Project Location or Demonstration Site	Include revised scope of work and complete items A, B, C, E, & F below.
☐ Novation/Name Change of Prime Recipient	Include novation documentation and complete items A, B, C, & F below.
☒ Terms and Conditions Modification	Include applicable exhibits with bold/underline/ strikeout and complete items A, B, C, & F below.

A) Business Meeting Information

Business Meeting approval is not required for the following types of Agreements:

☐ Minor amendments delegated to Executive Director per December 2013 Resolution

Proposed Business Meeting Date 04 / 10 /2024 ☐ Consent ☒ Discussion

Business Meeting Presenter Michelle Vater Time Needed: 5 minutes

Please select one list serve. Altfuels (AB118- ARFVTP)

Agenda Item Subject and Description:

CALSTART, Inc. Proposed resolution approving amendment 6 to agreement ARV-20-006 with CALSTART, Inc. to 1) increase the agreement's contingent spending authority by up to $268,720,000 with approval of CEC's Executive Director through an amendment; 2) modify the terms and conditions; and 3) revise the Scope of Work with new reliability and data requirements; and adopting staff's determination that this action is exempt from CEQA. This amendment does not increase the current agreement amount of $275,983,982. This agreement is for a block grant to design, implement, and fund, with CEC oversight, various medium- and heavy-duty zero-emission vehicle electric charging and hydrogen refueling infrastructure incentive projects throughout California. (General Fund Funding). Contact: Michelle Vater (Staff Presentation: 5 minutes)

B) List all subcontractors (major and minor) and equipment vendors: (attach additional sheets as necessary)

Legal Company Name:	**Budget**
TetraTech, Inc.	$5,795,071
GRID Alternatives	$150,000
Unique Technical services (Formerly Raven Energy)	$30,000
OBO	$16,301
ZappyRide	$108,800
Build Momentum (d.b.a. Momentum)	$50,000 (match)
Safe Arbor Technology, LLC	$46,000
TBD (Incentive design processing)	$153,403
TBD (Software development for website and Infrastructure Readiness Center updates)	$105,274

C) List all key partners: (attach additional sheets as necessary)

Legal Company Name:

D) Budget Information (only include amendment amount information)

Funding Source	**Funding Year of Appropriation**	**Budget List Number**	**Amount**
General Fund	2021-22	601.211DTI	$91,200,000
General Fund	2021-22	601.211CTB	$69,020,000
General Fund	2022-23	601.129DTB	$65,750,000
General Fund	2022-23	601.129TBB	$28,500,000
General Fund	2022-23	601.129SBB	$14,250,000

R&D Program Area: Select Program Area TOTAL: $268,720,000

Explanation for “Other” selection

Federal Agreement #:

*Budget Act of 2022 (Chapter 45, Statutes of 2022) language (SEC. 78. Item 3360-101-0001, Provision 5 (a)) and Assembly Bill 211 (Chapter 574, Statutes of 2022) language (SEC. 36. (b)(2)(A) allows the CEC to add funds to existing competitively awarded agreements if the existing competitive agreements are consistent with the use of funds defined in the provision/section.

E) California Environmental Quality Act (CEQA) Compliance

1. Is Agreement considered a “Project” under CEQA?

   ☒ Yes (skip to question 2) ☐ No (complete the following (PRC 21065 and 14 CCR 15378)):

   Explain why Agreement is not considered a “Project”:

   Agreement will not cause direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment because .

2. If Agreement is considered a "Project" under CEQA:
   a) ☒ Agreement **IS** exempt.
   ☐ Statutory Exemption. List PRC and/or CCR section number:
   ☒ Categorical Exemption. List CCR section number: 15301, 15303
   ☐ Common Sense Exemption. 14 CCR 15061 (b) (3) Explain reason why Agreement is exempt under the above section:

   Under this agreement, CALSTART, Inc., develops and implements financial incentive projects solely to fund the purchase and installation of zero-emission vehicle refueling infrastructure, including but not limited to electric vehicle (EV) charging equipment and hydrogen refueling station equipment. The zero-emission vehicle refueling equipment funded under this Agreement will only involve commercially available products being installed predominantly in existing facilities such as parking areas, gasoline stations, or shopping centers. This amendment increases the amount of funding that may be available in the future for financial incentive projects.

   Cal. Code Regs., tit. 14, sect. 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 meets the requirements of 14 CCR 15301 because installing EV charging equipment will only involve minor alterations and no expansion of use since the parking areas or facilities already exist. The hydrogen refueling equipment would not significantly expand the use beyond that already existing at potential sites; and the square footage of equipment installation is estimated to be relatively small.

   Cal. Code Regs., tit. 14, sect. 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 the California Environmental Quality Act. This project meets the requirements of 14 CCR 15303 because only a limited number of new small equipment in the form of EV charging equipment will be added to existing parking areas. The hydrogen refueling equipment may consist of hydrogen storage tanks, compression, and dispensing equipment. Relative to both exemptions, this work will only require minor modifications, such as small amounts of trenching, extending electrical lines to the equipment, securing the EV charging equipment in place, and adding signage. Therefore, the proposed project falls within section 15303 and will not have a significant effect on the environment.

   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.

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

Check all that apply

☐ Initial Study
☐ Negative Declaration
☐ Mitigated Negative Declaration
☐ Environmental Impact Report
☐ Statement of Overriding Considerations

F) Is this project considered "Infrastructure"?
No

G) The following items should be attached to this GARF (as applicable)

1.	Exhibit A, Scope of Work	☐ N/A	☒ Attached
2.	Exhibit B, Budget Detail	☒ N/A	☐ Attached
3.	CEQA Documentation	☒ N/A	☐ Attached
4.	Novation Documentation	☒ N/A	☐ Attached
5.	CEC 105, Questionnaire for Identifying Conflicts		☒ Attached

Michelle Vater — **03/18/24**
Agreement Manager **Date**

Melanie Vail for Eizabeth John — **03/18/24**
Office Manager **Date**

Melanie Vail — **03/18/24**
Deputy Director **Date**

Exhibit A
SCOPE OF WORK

TECHNICAL TASK LIST

Task #	CPR	Task Name
1		Administration
2	X	Block Grant Internal Controls, Processes, and Procedures
3	X	Website Design, Development, and Implementation
4	X	Incentive Project Development
5	X	Incentive Project Implementation
6		Data Collection/Incentive Recipient Feedback/Process Improvements
7		**Operations and Reliability**
8 ~~7~~		Project Fact Sheet

KEY NAME LIST

Task #	Key Personnel	Key Subcontractor(s)	Key Partner(s)
1	**Tesi Bravo, Amanda Le, Thomas McKenna, Lauren Fleming, Sydney Frazier-Flores, Alyssa Haerle, Ian Cadger, Aidan Anthony,** ~~Alycia Gilde~~, Piero Stillitano, Jeffrey Caperton, Tom Brotherton, ~~Amy Gower~~, Priscilla Barragan, Eddy Huang, ~~Zach Franklin,~~ Linda Khamoushian	Tetra Tech Inc., GRID Alternatives	N/A

2	**Tesi Bravo, Amanda Le, Thomas McKenna, Lauren Fleming, Sydney Frazier-Flores, Alyssa Haerle, Ian Cadger, Aidan Anthony,** ~~Alycia Gilde, Amy Gower~~, Tom Brotherton, Jeffrey Caperton, Priscilla Barragan, Tom Rauls	Tetra Tech Inc.	N/A
Task #	**Key Personnel**	**Key Subcontractor(s)**	**Key Partner(s)**
3	**Tesi Bravo, Amanda Le, Thomas McKenna, Lauren Fleming, Sydney Frazier-Flores, Alyssa Haerle, Ian Cadger, Aidan Anthony,** ~~Alycia Gilde~~, Tom Brotherton, Mike Guerra, Kasey Okazaki, Priscilla Barragan, Nestor Loza	Tetra Tech Inc., Web Developer (TBD)	N/A

4	**Tesi Bravo, Amanda Le, Thomas McKenna, Lauren Fleming, Sydney Frazier-Flores, Alyssa Haerle, Ian Cadger, Aidan Anthony,** ~~Alycia Gilde~~, Bill Van Amburg, Jasna Tomic, Tom Brotherton, ~~Amy Gower,~~ Campbell Scott, ~~Geoffrey Cook,~~ Priscilla Barragan, Tom Rauls, ~~Zach Franklin,~~ Linda Khamoushian	Tetra Tech Inc., GRID Alternatives	Air Districts, State Agencies, Industry Groups, OEMs, Infrastructure Providers, Utilities and Community and Equity Groups
5	**Tesi Bravo, Amanda Le, Thomas McKenna, Lauren Fleming, Sydney Frazier-Flores, Alyssa Haerle, Ian Cadger, Aidan Anthony,** ~~Alycia Gilde, Amy Gower,~~ Campbell Scott, ~~Geoffrey Cook,~~ Priscilla Barragan, Tom Rauls, Linda Khamoushian	Tetra Tech Inc., GRID Alternatives, Momentum	Air Districts, State Agencies, Industry Groups, OEMs, Infrastructure Providers, Utilities and Community and Equity Groups

Task #	Key Personnel	Key Subcontractor(s)	Key Partner(s)
6	**Tesi Bravo, Amanda Le, Thomas McKenna, Lauren Fleming, Sydney Frazier-Flores, Alyssa Haerle, Ian Cadger, Aidan Anthony,** ~~Alycia Gilde~~, Campbell Scott, ~~Geoffrey Cook~~, Priscilla Barragan, Eddy Huang	Tetra Tech Inc.	Project Recipients
7	**Tesi Bravo, Amanda Le, Thomas McKenna, Lauren Fleming, Sydney Frazier-Flores, Alyssa Haerle, Ian Cadger, Aidan Anthony,** ~~Alycia Gilde~~, Kasey Okazaki		Project Recipients

GLOSSARY

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

Term/ Acronym	Definition
AB	Assembly Bill
AC Level 2	**Alternating current. A charger that operates on a circuit from 208 volts to 240 volts and transfers AC electricity to a device in an electric vehicle (EV) that converts AC to direct current to charge an EV battery.**
ADA	**Americans with Disabilities Act**
APCD	Air Pollution Control District
API	**Application programming interface. A type of software interface that offers service to other pieces of software. An API allows two or more computer programs to communicate with each other.**
AQMD	Air Quality Management District

CAM	Commission Agreement Manager
CAO	Commission Agreement Officer
CARB	California Air Resources Board
CCI	California Climate Investments
CEC	California Energy Commission
Term/ Acronym	**Definition**
CEQA	California Environmental Quality Act
Charge attempt	**Any instance of an EV driver taking action to initiate a charging session by taking one or all of the following steps in any order: 1) attaching the connector to the EV appropriately or 2) attempting to authorize a charging session by use of radio frequency identification (RFID) technology, credit card, charging network provider smartphone application (app), screen input, or calling the charging network provider's customer service number.**
Charger	**A device with one or more charging ports and connectors for charging EVs. Also referred to as electric vehicle supply equipment (EVSE). This definition excludes any charger used solely for private use at a single-family residence or a multifamily dwelling with four or fewer dwelling units.**
Charging network	**A collection of chargers located on one or more property(ies) that are connected via digital communications to manage the facilitation of payment, the facilitation of electrical charging, and any related data requests.**
Charging network provider	**The entity that provides the digital communication network that remotely manages the chargers. Charging network providers may also serve as charging station operators and/or manufacture chargers.**
Charging port	**The system within a charger that charges one EV. A charging port may have multiple connectors, but it can provide power to charge only one EV through one connector at a time.**
Charging session	**The period after a charge attempt during which the EV is allowed to request energy. Charging sessions can be terminated by the customer, the EV, the charger, the charging station operator, or the charging network provider.**

Charging station	**The area in the immediate vicinity of one or more chargers and includes the chargers, supporting equipment, parking areas adjacent to the chargers, and lanes for vehicle ingress and egress. A charging station could comprise only part of the property on which it is located.**
Charging station management system	**A system that may be used to operate a charger, to authorize use of the charger, or to record or report charger data, such as by using OCPP.**
Term/ Acronym	**Definition**
Charging station operator	**The entity that owns the chargers and supporting equipment and facilities at one or more charging stations. Although this entity may delegate responsibility for certain aspects of charging station operation and maintenance to subcontractors, this entity retains responsibility for operation and maintenance of chargers and supporting equipment and facilities. In some cases, the charging station operator and the charging network provider are the same entity.**
Clean Transportation Program	Formerly known as the Alternative and Renewable Fuel and Vehicle Technology Program
Connector	**The device that attaches an EV to a charging port in order to transfer electricity.**
CORE	Clean Off-Road Equipment Voucher Incentive Project
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**
DACs	Disadvantaged Communities
Depot	**Type of "home base" behind-the-fence location where a vehicle is typically kept when not in use (usually parked on a nightly basis).**
DCFC	**Direct current fast charger. A charger that enables rapid charging by delivering direct-current (DC) electricity directly to an EV's battery.**
Downtime	**A period of time that a charger is not capable of successfully dispensing electricity or otherwise not functioning as designed. Downtime is calculated pursuant to Task 7.4.**

EJ	Environmental Justice
EV	Electric Vehicle**. A vehicle that is either partially or fully powered on electric power received from an external power source. For the purposes of this Agreement, this definition does not include golf carts, electric bicycles, or other micromobility devices.**
EVSE	Electric Vehicle Supply Equipment**. A charger as defined.**
Excluded downtime	**Downtime that is caused by events pursuant to Task 7.4.**
Term/ Acronym	**Definition**
Failed charging session	**Following a charge attempt, the criteria for a successful charging session were not met.**
FTD	Fuels and Transportation Division
GAAP	Generally Accepted Account Principles
GFO	**Grant Funding Opportunity**
GHG	Greenhouse Gas
Go-Biz	Governor's Office of Business and Economic Development
Hardware	**The machines, wiring, and other physical components of an electronic system including onboard computers and controllers.**
H_2	Hydrogen
HD	Heavy-Duty
HVIP	Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project
Inoperative state	**The charger or charging port is not operational.**
Installed	**Attached or placed at a location and available for use for a charging session. The date a charger is installed is the date it is first available for use for a charging session.**
Interoperability	**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.**
IPC	**Incentive Processing Center**
IRC	Infrastructure Readiness Center
IOU	Investor-Owned Utility

KPI~~M~~	Key Performance **Indicators** ~~Measures~~
kW	Kilowatt
kWh	Kilowatt-Hours
LD	Light-Duty
Maintenance	**Any instance in which preventive or corrective maintenance is carried out on equipment.**
MD	Medium-Duty
MD~~/~~HD	Medium-Duty and Heavy-Duty
MSRC	Mobile Source Air Pollution Reduction Review Committee
Term/ Acronym	**Definition**
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.**
NOx	Nitrogen Oxides
OCPP	**Open Charge Point Protocol. An open-source communication protocol that specifies communication between chargers and the charging networks that remotely manage the chargers.**
Operational	**Or "up." A charging port's hardware and software are both online and available for use, or in use, and the charging port is capable of successfully dispensing electricity.**
Operative state	**The charger is operational.**
$PM_{2.5}$	Particulate Matter (2.5 Micrometers and smaller)
Preventative maintenance	**Maintenance that is performed on physical assets to reduce the chances of equipment failure and unplanned machine downtime.**
Private	**Charging ports located at parking space(s) that are privately owned and operated, often dedicated to a specific driver or vehicle (for example, a charging port installed in a garage of a single-family home).**
Public	**Charging ports located at parking space(s) designated by the property owner or lessee to be available to and accessible by the public.**

Recipient	CALSTART
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.**
Software	**A set of instructions, data, or programs used to operate computers and execute specific tasks.**
SOPs	Standard Operating Procedures
Term/ Acronym	**Definition**
Successful charging session	**Following a charge attempt, a customer's EV battery is charged to the state of charge the customer desires and is disconnected manually by the customer or by the EV's onboard software system terminating the charging session, without an additional charge attempt.**
UL	Underwriters Laboratories
Uptime	**The time that a charger is installed during a reporting period excluding downtime pursuant to Task 7.4.**
VGI	Vehicle-Grid Integration
~~VPC~~	~~Voucher Processing Center~~
VW	Volkswagen
ZE	Zero-Emission
ZEV	Zero-Emission Vehicle

In response to GFO-20-603, CALSTART, Inc. (Recipient) submitted application number 2, which was proposed for funding in the CEC's Notice of Proposed Awards on December 16, 2020. Recipient's application, the Notice of Proposed Awards for GFO-20-603, and GFO-20-603 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 the CEC's Award, the 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:

Medium-duty and heavy-duty (MD/HD) vehicles represent a small share of California registered vehicle stock, accounting for about one million out of 31 million vehicles, or 3 percent; however, this small number of vehicles is responsible for about 23 percent of on-road greenhouse gas (GHG) emissions in the state because of comparatively low fuel efficiency and the high number of miles traveled per year. MD/HD vehicles additionally account for nearly 60 percent of Nitrogen Oxides (NO_X) and 52 percent of Particulate Matter (2.5 Micrometers and smaller) ($PM_{2.5}$) emissions from on-road transportation in California. For these reasons, MD/HD vehicles represent a significant opportunity to reduce GHG emissions and criteria emissions while focusing on a small number of vehicles.

In response, California has led the nation in the development of projects incentivizing the adoption of MD/HD advanced vehicle technologies. Since 2010, the state has invested $530 million in such projects, resulting in the deployment of more than 9,000 new clean vehicles on California's roads. Critical barriers remain, however, that threaten to slow the pace of clean vehicle adoption. Foremost among these are the high cost of zero-emission vehicle (ZEV) infrastructure, the relative scarcity of public incentives for such infrastructure, and a significant knowledge gap among fleet owners about ZEV infrastructure technology, permitting, and installation. The consequences of these barriers are magnified in many of the areas most in need of the improvements in air quality—areas categorized as disadvantaged, low-income, and tribal communities—which often suffer from poverty, unemployment, and lower educational attainment.

Goals of the Agreement:

The goal of this Agreement is to develop and administer one or more MD/HD infrastructure incentive project(s) to address critical barriers to the deployment of MD/HD ZEV infrastructure. The infrastructure incentive project(s) will respond to industry demand and community needs. CALSTART will administer up to **$544,673,982** ~~$275,953,982~~ in ~~voucher~~ incentives. This project will be user-friendly, flexible, and easily scalable as available funds increase.

Objectives of the Agreement:

The objectives of this Agreement include:

- Develop the internal controls, processes, and procedures necessary to process block grant funding, evaluate incentive requests, effect payment for valid incentive payment requests, and produce accurate monthly fiscal accounting and reporting.
- Design, develop and implement a robust, user-friendly website and **Incentive** ~~Voucher~~ Processing Center (**IPC** ~~VPC~~) to report on incentive project status, advertise the availability of incentives, provide instructions and forms, enable submission and tracking of incentive applications.

- Design and submit incentive project(s) to the Commission Agreement Manager (CAM) for review and approval. The project(s) will be designed to include defined equity metrics, integration of third-party funding, and meaningful input through stakeholder engagement.
- Implement and administer the incentive project(s), distributing up to **$544,673,982** ~~$275,953,982~~ toward the purchase and installation of ZEV infrastructure.
- Collect data, obtain feedback from incentive recipients, and develop recommendations on how to improve incentive project implementation.

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 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 with the CAM, the Commission Agreement Officer (CAO), and a representative of the California Energy Commission (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.
- 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)
  - Subcontracts 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 Progress Reports (Task 1.4)
  - Technical Products (Product Guidelines located in Section 5 of the Terms and Conditions)
  - Final Report (Task 1.5)

Recipient Products:

- Updated Schedule of Products

- Updated List of Match Funds
- Updated List of Permits

CAM Product:

- Kick-Off Meeting Agenda

Task 1.2 Critical Project Review (CPR) Meetings

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

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

Meeting participants include the CAM 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.
- 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, the CAM, and the CAO. 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 and the CAO about the following Agreement closeout items:

  - What to do with any equipment purchased with CEC funds (Options)
  - CEC's request for specific "generated" data (not already provided in Agreement products)
  - Need to document Recipient's disclosure of "subject inventions" developed under the Agreement
  - "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 **Quarterly** ~~Monthly~~ 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** ~~Monthly~~ 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. **This includes, but is not limited to, forecasting the administrative spend rate for funding associated with implementation activities for the life of each funding lane and for the overall project, comparing the forecasted administrative spend rate to actual expenses.** Each progress report is due to the CAM **the 10th day of each January, April, July, and October.** ~~within 10 days of the end of the reporting period.~~ The recommended specifications for each progress report are contained in Section 6 of the Terms and Conditions of this Agreement. **The Quarterly Progress Report template can be found on the ECAMS Resources webpage available at https://www.energy.ca.gov/media/4691.**
- In the first Monthly Progress Report and first invoice, document and verify match expenditures and provide a synopsis of project progress, if match funds have been expended or if work funded with match share has occurred after the notice of proposed award but before execution of the grant agreement. If no match funds have been expended or if no work funded with match share has occurred before execution, then state this in the report. All pre-execution match expenditures must conform to the requirements in the Terms and Conditions of this Agreement.

Product:

- **Quarterly** ~~Monthly~~ Progress Reports

Task 1.5 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. 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 Final Report 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** ~~one bound copy of the Final Report with the final invoice~~.

Products:

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

Task 1.6 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 shall be spent concurrently or in advance of CEC funds for each task during the term of this Agreement. 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 1.7 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 shall 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 1.8 Obtain and Execute Subcontracts

The goal of this task is to ensure quality products and to procure subcontractors 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. It will also provide the CEC an opportunity to review the subcontracts to ensure that the tasks are consistent with this Agreement, and that the budgeted expenditures are reasonable and consistent with applicable cost principles.

The Recipient shall:

- Manage and coordinate subcontractor activities.
- Submit a draft of each subcontract required to conduct the work under this Agreement to the CAM for review.
- Submit a final copy of the executed subcontract.
- If Recipient decides to add new subcontractors, then the Recipient shall notify the CAM.

Products:

- Letter describing the subcontracts needed or stating that no subcontracts are required.
- Draft subcontracts
- Final subcontracts

TECHNICAL TASKS

TASK 2 – BLOCK GRANT INTERNAL CONTROLS, PROCESSES, AND PROCEDURES

The goals of this task are to establish and maintain written internal controls, processes, and procedures to receive, handle, and account for block grant incentives; receive and evaluate incentive requests; effect payment for valid incentive payment requests; and provide monthly fiscal accounting and reporting to the CAM.

The Recipient shall:

- Develop and submit written internal controls, processes, and procedures for review and approval by CAM.

- Develop Standard Operating Procedures (SOPs) and written workflows for all block grant management tasks.
- Prepare and submit a *Policies and Procedures Compendium* that includes all SOPs along with an overview of staffing resources in the form of an organizational chart with delineated roles and responsibilities and reporting structure.
- Ensure that the Compendium clearly outlines the process taken to minimize errors, fraud, waste, and abuse.

- As necessary, update *Policies and Procedures Compendium* for review and approval by the CAM.
- Establish separate accounts and implement procedures to separately accept, track, and disburse and report on funding from sources other than CEC. This process will include:
  - Applying Generally Accepted Account Principles (GAAP) to set up operation of the block grant accounting system and ensuring that funding sources are kept separate.
  - Setting up a general ledger account to track and report block grant funding separately from other project funding.
  - Establishing tracking of monthly expenditures, detailing all administration and ~~voucher~~ **incentive** spending. **This should include, but not be limited to, tracking of both the Recipient's and Subrecipient's implementation budgets and administrative spend rate to assure adequate budget to complete the associated Tasks.**
  - Setting up internal reconciliation process between records kept by project staff and the records reviewed/processed by Recipient accounting staff to ensure consistency.

Products:

- Policies and Procedures Compendium (written internal controls, processes, and procedures)
- As necessary, updated Policies and Procedures Compendium

TASK 3 – WEBSITE DESIGN, DEVELOPMENT, AND IMPLEMENTATION

The goals of this task are to design, develop, and implement a highly interactive, robust, and user-friendly public-facing website and online ***Incentive*** *~~Voucher~~ Processing Center (**IPC** ~~VPC~~)* that will provide users with quick, timely, and reliable access to project information, resources, eligibility requirements, infrastructure technology, guidance tools, application steps, and application documents, as well as direct access to the **IPC** ~~VPC~~ portal for application submission and processing.

The website will present a live ticker on available and expended funds, application status, informational webinars, as well as technical support opportunities provided through the *Infrastructure Readiness Center (IRC)* and community needs assessment (Task 5). The website will be approachable to multiple users and tailored for all eligible industry segments, communities, and stakeholders vested in advancing zero-emission (ZE) MD/HD infrastructure in California. In the interest of speeding support to industry, the website will be developed in rapid stages; first focused on providing an informational site on the project and its rules; adding secondly the ability for processing of ~~voucher~~ **incentive** requests and full project capability.

The Recipient shall:

- Prepare and submit to the CAM for review and approval a website development plan detailing the functionality and data to be included on the various webpages described within this task.
- Develop an initial website landing page for the purpose of initial public announcements on project (may include information on project, project schedule, information workshops, etc.).
- Develop and manage ADA-compliant, secure website that will:
    - Provide professional, multi-lingual, and culturally appropriate informational resources, tools, and guidance to inform users about the project and how to participate, as well as access to block grant team members for support.
    - Deliver timely information on the latest available infrastructure technologies, participating and approved vendors, informational webinars, and workshops, and project announcements.
    - Real time funding ticker showing, at a minimum, total available, total reserved and total expended funds.
    - Present and regularly update a MD/HD ZE Infrastructure Deployment Heatmap that captures infrastructure deployments resulting from MD/HD ZE incentive projects. The heatmap shall include, at a minimum, ability to show MD/HD infrastructure deployments in Disadvantaged Communities (DACs), California Native American Tribes, and utility territories in CA.
    - Enable easy signup to engage technical assistance and community needs assessments through the Recipient's Infrastructure Readiness Center and Community Engagement activities (Task 5).
    - Report on the status of the overall incentive project and individual incentive project(s), including the total funding available, total funding reserved, and remaining funding for each eligible project category.
    - Advertise the availability of incentives, including the minimum eligibility and technical requirements for incentive project(s).
    - Provide instructions and user-friendly application forms to users interested in submitting an incentive request for an infrastructure project.
    - Provide a compendium of available MD/HD ZE vehicle and infrastructure funding and support resources for California fleets and communities.

- Develop the online database and portal – **Incentive** ~~Voucher~~ Processing Center (**IPC** ~~VPC~~).
- Develop the online **IPC** ~~VPC~~ that will be directly linked to the public-facing website and in alignment with safety and account procedures outlined in Task 2 and the application processes and procedures developed in Task 4 below. The **IPC** ~~VPC~~ will:
    - Enable eligible vendors/users to:
        - Develop and set up accounts to submit applications, supporting documentation, payment requests.
        - Submit and edit project application information documentation.
        - Access and present third-party match funding.
        - Request technical support.
        - Submit pre-applications, applications, incentive funding requests, required documentation, and payment requests.
        - Easily track application status at each step of the application process.
        - Provide capability for incentive participants to access, in real time, the status of incentive applications and payments.
    - Enable the block grant recipient to:
        - Establish and manage funding categories and predetermined amounts across project types to be awarded **incentive** ~~voucher~~ approval.
        - Manage application processing through the backend of the **IPC** ~~VPC~~ and provide timely access to applicant online to follow up on needed information, document review, and technical support needs with **incentive** ~~voucher~~ application.
        - Track all incentive projects and available funding per project funding category in real time.
        - Update eligibility status and lists for equipment and vendors.
- Regularly update, maintain, protect, and ensure the security of the entire website, with the goals of providing accurate, timely information and preventing errors, waste, and fraud.
- Prepare and submit to the CAM for review and approval a *Final Website Report* that documents completion of the major activities described within this task.

Products:

- Website Development Plan
- Initial Website Landing Page
- ADA-compliant, Secure Project Website
- **Online Incentive Processing Center**
- Final Website Report

TASK 4 – INCENTIVE PROJECT(S) DEVELOPMENT

The goal of this task is to design and submit MD/HD infrastructure incentive project(s) to the CAM for review and approval. The project(s) will integrate the seamless and efficient mechanics of a ~~voucher~~ incentive project, while providing the flexibility needed to support, review, and account for the unique circumstances of each submitted infrastructure project. Project(s) shall be designed to include defined equity metrics, integration of third-party funding, and meaningful input through stakeholder engagement. Incentive project design(s) shall include, at a minimum:

- Type(s) of MD/HD electric vehicle (EV) charging equipment eligible (e.g., Level 2, direct current fast chargers, etc.) and hydrogen refueling equipment eligible (e.g., MD/HD hydrogen refueling stations or purpose-built refueling infrastructure, etc.).
- Minimum technical requirements of MD/HD ZEV refueling equipment (e.g., equipment specifications, warranty requirements, operational requirements, etc.).
- Inclusion of equity evaluation criteria based on community needs assessment and feedback from the residents.
- Type of incentive structure (e.g., voucher or rebate).
- Quantity of MD/HD EV chargers and hydrogen refueling stations targeted.
- Incentive amount per charger and hydrogen refueling station.
- Total funding required to complete proposed project.

SUBTASK 4.1 – Develop ~~Voucher~~ Incentive Project

The goal of this subtask is to develop a user-friendly ~~voucher~~ incentive project and application process for each incentive project through the development of *Incentive Project Implementation Manual(s)*. The *Incentive Project Implementation Manual(s)* will define project goals, objectives, rules, policies, eligibility, and parameters and will serve as the ultimate guidance document on overall project design, development, and implementation with meaningful engagement and input from key stakeholders. Development of Incentive Project Implementation Manual(s) will be done in coordination with CEC and will include CEC guiding principles. The final Incentive Project Implementation Manual(s) shall be subject to the review and approval of the CAM.

The Recipient shall:

- Develop clear, concise, and easily marketable name for overall Block Grant Project. Provide two to three name recommendations to CEC CAM for review, approval and finalize project name with CEC's Media Office.
- Develop project eligibility standards including:

- Eligible infrastructure equipment for EV (e.g., Level 2 Chargers, Direct Current Fast Chargers, other equipment as deemed eligible for unique installations, etc.) and hydrogen (H_2) refueling equipment (e.g., compressors, dispensers, storage, etc.). Infrastructure technologies to support fleets with resiliency measures such as Vehicle-Grid Integration (VGI), microgrids, and energy storage may also be considered.
- Minimum technical requirements of eligible MD/HD ZEV refueling equipment, including:
  - Equipment specifications (UL (Underwriters Laboratories) Certification, etc.)
  - Warranty requirements
  - Operational requirements
  - Safety standards
- Eligible infrastructure project types. Potential project types include:
  - Vocational: Eligible projects could be inclusive of vocations, such as transit, municipal, regional warehouse, port, distribution center, last-mile delivery, and small fleets.
  - Fueling stations
  - Corridor-specific locations
  - Projects that have received Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP), Clean Off-Road Equipment Voucher Incentive Project (CORE), Volkswagen (VW), Carl Moyer, Assembly Bill (AB) 617, Mobile Source Air Pollution Reduction Review Committee (MSRC), and other complementary 3rd-party funding – may be considered for a fast-track roll-out to best respond to industry demand and urgency.
  - Projects that complement planning grants—such as the CEC's MD/HD ZE Blueprints—and other strategic planning activities.
  - Projects proposing public fueling stations to serve MD/HD ZEVs.
- Eligible vendors, which may include infrastructure equipment manufacturers, suppliers and dealers, and installers.

- Develop project funding and incentive structure leveraging input criteria used in other MD/HD infrastructure incentive projects and input from third-party funding agencies and industry. The incentive is expected to act much like a voucher but may include flexibility around payment schedule and the entity to be reimbursed based on the project. Project funding will be divided into multiple categories, based on equipment type, and consider a variety of factors, including:
  - Percentage of total funding between EV and H_2.
  - Incentive cap per project applicant category.
  - Percentage of cost to be covered by equipment type.

    - Applicant project incentive cap.
    - Total funding required to complete proposed project.
- Determine application process, procedures, and roll-out timeline.
- Develop an efficient and effective application workflow.
- Determine decision gates based on applicant project type.
- Develop project/application readiness criteria that may include:
    - Meets eligible project, equipment, and vendor requirements.
    - Infrastructure site assessment/plan development.
    - Coordination with local utility.
    - Project technical requirements.
    - Proof of vehicle or equipment procurement/commitment.
    - Lease or property ownership.
    - Project financing (beyond block grant incentive); cost share/match funding.
    - Permitting (California Environmental Quality Act (CEQA), etc.)
    - Ability to utilize funding/deploy funded equipment by funding liquidation date.
- Develop equity evaluation criteria that may include:
    - Location within disadvantaged, low-income, tribal, Environmental Justice (EJ), or other sensitive communities.
    - Potential engagement of community with proposed infrastructure project.
    - Commitment to participate in outreach/case study development for community benefit/awareness building.
- Determine how third-party funding—such as match funds and funding notifications—are integrated into block grant incentive project(s).
- Prepare a *Draft Incentive Project Implementation Manual* for each incentive project and share with stakeholders for input into project design, development, and implementation.
- For each incentive project, engage stakeholder feedback by conducting one to three virtual workshops to gain insight into project design and development. Stakeholders include but are not be limited to:
    - Industry groups
    - Community groups
    - State agency groups
    - Air Districts
    - Utilities

- For each incentive project, incorporate stakeholder input and prepare a *Final Incentive Project Implementation Manual*.
- For each incentive project, host the *Final Incentive Project Implementation Manual* on the website.
- Perform regular improvements and modifications to the *Project Implementation Manual(s)* to ensure that it best supports planned implementation outcomes by leveraging outcomes from *Funding Advisory* and *Technology Advisory Workgroups*, and participant surveys.

Products:

- List of 2 – 3 Block Grant Project names.
- Project Implementation Manual(s) (Incentive Project Recommendation(s))
- As necessary, updates to the Project Implementation Manual(s)

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

SUBTASK 4.2 – Develop Equity Strategy

The goal of this subtask is to develop an equity strategy that will ensure maximum project benefit to disadvantaged and low-income communities, California Native American Tribes, priority populations, and EJ communities. The Equity Strategy will include defined metrics for successful outcomes and project evaluation criteria.

The Recipient shall:

- Review existing equity planning documents and plans, including, but not limited to:
  - The California Energy Commission's Senate Bill (SB) 350 Barriers Study.
  - The California Air Resources Board's SB 350 Barriers Report.
- Convene an Equity Strategy meeting with representatives of relevant agency and nonprofit groups, with the goal of coordinating with existing equity programming and equity outreach efforts. This approach will minimize confusion and "engagement fatigue" among members of target communities and increase participation by members of target groups.
- Work closely with the CAM and other stakeholders to develop *Community Engagement Strategy and Plan* including leveraging CEC's Energy Equity Indicators for reference and guidance. This document will include equity metrics that quantify intended outcomes of success, anticipated outcomes, project evaluation criteria and an outreach plan. The metrics, anticipated outcomes, evaluation criteria and outreach plan will be included in the Project Implementation Manual (Subtask 4.1) and may include:
  - Infrastructure projects to be implemented within communities.
  - Workforce development and training

- Community outreach activities
- Community needs assessments
- Emissions reduced

- Prepare and submit to the CAM for review and approval the *Community Engagement Strategy and Plan Report.*

Products:

- Community Engagement Strategy and Plan Report

SUBTASK 4.3 – Establish Funding and Technology Advisory Workgroups

The goals of this subtask are to regularly engage funding agencies and industry to leverage and further extend the impact of funding resources and to ensure that the block grant project(s) meets industry needs, anticipates industry demand, and responds to technology advancement and resiliency needs.

The Recipient shall:

- Conduct outreach to relevant local and state agencies, utilities and other groups including the CALSTART-led Funders Forum—to participate in a *Funding Advisory Workgroup*.
- Convene interested funding partners in a *Funding Advisory Workgroup* focused on integrating third-party funding sources for MD/HD ZEV infrastructure into the block grant project(s). Members of this group will collaborate on the synchronization and coordination of their respective MD/HD incentive projects with the block grant incentive project(s) to enhance the ability of applicants to fund their MD/HD ZEV projects. The workgroup will:
  - Prepare a *Funding Advisory Workgroup Plan* that includes funding goals, objectives, and action plan development.
  - Work to leverage to synchronize existing 3rd-party MD/HD incentive projects with this project. Examples of such projects include HVIP, CORE, VW, Carl Moyer, AB 617, MSRC, and Investor-Owned Utility (IOU) make-ready investments.
  - Evaluate opportunities for timely funding notification and inclusion of match funds.
  - Identify ways to fill in funding gaps for infrastructure by leveraging and extending funding partner resources to promote project sustainability.
  - Support coordination of equity goals across incentive projects for maximum community benefit, increased project participation, and workforce development.
  - Leverage and collaborate on outreach and advertisement activities across industry sectors and community groups.
  - Evaluate project barriers, identify solutions, and share best practices.

- Prepare a *Funding Advisory Workgroup Report.*
- Update the Project Implementation Manual as needed to reflect needed changes or updates.

- Conduct outreach to relevant industry organizations to participate in a *Technology Advisory Workgroup*.
- Convene a *Technology Advisory Workgroup* composed of existing members of the CALSTART-led MD/HD ZE Infrastructure Workgroup and interested industry organizations that consist of the following entity types: 1) designers, manufacturers, or installers of ZEVs or ZEV infrastructure 2) MD/HD ZEV owners and operators, and 3) government and utility partners. The *Technology Advisory Workgroup* will:
  - Support an ongoing workgroup process leading up to the *Annual Technology Advisory Workshop*.
  - Identify electric charging and H_2 refueling needs in California (leverage Infrastructure Deployment Heatmap).
  - Identify industry barriers and needs, such as refueling standards and interoperability.
  - Evaluate progress of Infrastructure Beachhead Model/Theory of Change, technology advancements, and best practices.
  - Develop strategy for long-term California ZEV infrastructure success.
  - Develop and submit to the CAM for review and approval the *Annual Technology Advisory Workshop Agenda and Plan*
  - Update Project Implementation Manual as needed to reflect needed changes and updates.
- Convene the *Funding Advisory* and *Technology Advisory Workgroups* throughout the life of the project to ensure ongoing strategic planning, coordination, promoting engagement and community outreach, tracking, and leveraging of funds, evaluating industry demand, sharing technology transfer, and evaluating barriers and solutions.

Products:

- Funding Advisory Workgroup Report
- Annual Technology Advisory Workshop Agenda and Plan

TASK 5 – INCENTIVE PROJECT IMPLEMENTATION

The goals of this task are to fully implement, administer, and approve individual ~~voucher~~ incentive project(s) through the **Incentive** ~~Voucher~~ Processing Center (**IPC** ~~VPC~~) based on the criteria, eligibility and processes defined under Task 4. This task will also include implementation of technical assistance for applicants, a statewide multi-lingual outreach and advertisement plan, and community engagement.

SUBTASK 5.1 – Develop and Implement Infrastructure Readiness Center

The goals of this subtask are to develop and implement an *Infrastructure Readiness Center (IRC)* to provide potential applicants with technical assistance on infrastructure planning and guidance on project participation. The IRC will better prepare applicants to participate in block grant project(s), improve cost-effectiveness, help ensure a seamless and successful application submission, and minimize the risk of developing stranded assets.

The Recipient shall:

- Prepare and submit to CAM for review and approval an *Infrastructure Readiness Center Plan*. The plan will:
  - Guide interested applicants through the required infrastructure planning steps for electric charging or hydrogen refueling.
  - Help applicants evaluate the appropriate refueling equipment.
  - Evaluate additional funding sources to leverage for project development.
  - Provide guidance on Low Carbon Fuel Standard and Renewable Energy Credits.
  - Provide guidance and direction to tools on emergency response and safety.
  - Direct applicants to online technical resources such as CALSTART's online infrastructure guidance tool, Funding Finder, Total Cost of Ownership Tool and the California Governor's Office of Business and Economic Development (GoBiz's) EV and H_2 Station Permitting Guidebooks.
  - Inform potential applicants of project participation needs.
- Develop *Infrastructure Readiness Center Collateral*, which may include:
  - Infrastructure best practices guides
  - Infrastructure planning check list
  - Infrastructure site plan template
  - Guidance on equipment selection for EV and H_2 refueling
  - Available match funding for Infrastructure
- Implement the Infrastructure Readiness Center Plan
- Prepare and submit to CAM for review and approval an *Infrastructure Readiness Center Report*

Products:

- Infrastructure Readiness Center Report

SUBTASK 5.2 – Administer, Review and Approve Infrastructure ~~Voucher~~ Incentive Projects

The goals of this subtask are to administer, review, and approve **applications** ~~vouchers~~ for MD~~/~~HD ZE infrastructure through the **IPC** ~~VPC~~. Understanding that each infrastructure project is unique, CALSTART will process **incentive** ~~voucher~~ applications using the mechanics and seamless process of the **IPC** ~~VPC~~, while carefully considering specific circumstances of each project and working directly with each applicant. Administration of each project will be given thorough support and review to avoid errors, schedule delays, and project interruptions. Infrastructure ~~voucher~~ application processing may include the following:

The Recipient shall:

- Develop appropriate, user-friendly application documents (including instructions and forms) and submit to CAM for review and approval.
- Develop Equipment and Vendor Eligibility Lists for posting to public facing website and **IPC** ~~VPC~~.
- Enforce project eligibility requirements.
- Require submission of applications through approved vendor network or by fleet user depending on project.
- Upload incentive project information and documents onto website's **IPC** ~~VPC~~ portal (Task 3).
- Receive, evaluate, and process incentive requests through the following application steps; 1) Pre-Approval, 2) ~~Voucher~~ Request, 3) ~~Voucher~~ Approval, 4) Document Review, and 5) ~~Voucher~~ Redemption.
- Troubleshoot and address project applicant support needs throughout ~~voucher~~ administration.
- Determine ~~voucher~~ amount, payment schedule and recipient of ~~voucher~~ funding for each approved project.
- Support leveraged cost share or match through third-party funding.
- Ensure application supports equity metrics/requirements determined during development of Project Implementation Manual and Task 4.
- Track and ensure all application forms and supporting documentation are uploaded onto the **IPC** ~~VPC~~ correctly, are reviewed carefully, and meet project requirements.
- Upon CAM approval of CALSTART-reviewed complete application documents, reimburse pre-determined recipient through process approved by CEC.
- Ensure incentive payments are processed and paid within 30 calendar days of receipt of a complete and valid request for incentive funds.

- Establish, maintain, submit incentive project records to the CEC (e.g., completed incentive request forms, photographs of installation, financial records, incentive payment documentation, and other appropriate documentation to confirm compliance with project requirements).

Products:

- Application documents for individual incentive projects.

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

SUBTASK 5.3 – Develop and Implement Outreach and Advertisement Plan

The goals of this subtask are to develop and implement a robust and thoughtfully executed statewide Outreach and Advertisement Plan tailored to meet the needs of industry eligible to participate in incentive projects and focused to increase participation and a ramp-up of projects for communities defined in the project's Community Engagement Strategy and Plan. CALSTART will collaborate with third-party funding partners participating in the Funding Advisory Workgroup, industry partners of the Technology Advisory Workgroup, and its equity partners to leverage and enhance outreach and timely notification of funding availability to potential applicants.

The Recipient shall:

- Develop and submit to the CAM for review and approval an *Outreach and Advertisement Plan* tailored to meet the needs of industry eligible to participate in incentive project(s) and focused to increase participation and a ramp-up of projects for communities defined in the Community Engagement Strategy and Plan.
- Conduct outreach in accordance with the CAM approved *Outreach and Advertisement Plan*.
- Develop and submit to the CAM for review and approval targeted, language-specific, and culturally appropriate print collateral and online guidance tools, such as fact sheets, email blasts, case studies, and guidance tools to promote and support project participation. Collateral will leverage existing material, such as the Total Cost of Ownership Tool and an online MD/HD ZE Infrastructure Guidance Tool.
- Prepare and submit to the CAM for review and approval a Collateral Report.
    - Facilitate targeted webinars and virtual workshops to effectively engage, raise awareness, inform, and train potential industry and community participants. Targeted needs could include:
        - Informational webinars on how to participate
        - Training for approved vendors and equipment providers
        - Guidance on infrastructure planning
        - Community needs assessment

        - Energy resiliency
        - Community building and project development
        - Case studies on industry and community best practices/success stories
- Implement social and video media.
    - Develop a highly interactive social media campaign to engage with industry, communities, and stakeholders throughout California.
    - Use social media platforms such as Twitter, Instagram, Facebook and LinkedIn to expand a social network of followers vested in advancing ZE transportation and clean communities.
    - Provide timely information on funding availability, eligible technologies and projects, virtual events, relevant news stories and acknowledgement of block grant champions and applicant success stories.
    - Video media such as testimonials, informational videos, and case-studies will be used to reach further into communities and industry segments that are harder to reach or lack access to timely and relevant information.
- Prepare Outreach and Advertisement Report documenting completion of all activities above. The Recipient will engage CEC media to review and approve media outreach.

Products:

- Outreach and Advertisement Plan
- Collateral Report
- Outreach and Advertisement Report

SUBTASK 5.4 – Engage and Educate Communities

The goals of this subtask are to thoughtfully engage regional community-based organizations, community leaders, California Native American Tribes, and potentially affected residents in the planning process and education on the benefits of ZEV transportation. This outreach will extend the reach of block grant project(s) to communities most in need of its benefits and build a pipeline of future projects to participate in the project.

The Recipient shall:

- Build upon other important equity projects and tools. CALSTART will leverage and collaborate with efforts such the CEC's Disadvantaged Communities Advisory Group, California Air Resources Board's (CARB) One-Stop-Shop, and CALSTART's Champions Program to access a wide network of community leadership and effectively extend the reach and impact of block grant project(s).
- Implement the *Community Engagement Strategy and Plan* that will outline key actions that may include:
    - Evaluating priority communities for engagement.

- Intentional outreach strategies to foster relationship building.
- Needs assessments.
- Support of One-Stop-Shop events.
- Workforce and training development.
- Other important actions recommended in CEC and CARB SB 350 Barrier Studies.

- Track progress toward achievement of equity metrics.
- Develop and/or utilize existing needs assessment templates to be used for communities targeted through the *Community Engagement Strategy and Plan*.
- Identify communities that require a needs assessment to evaluate community needs, priorities, and opportunities to advance ZE MD/HD projects and require support for potential project development. The purpose of this effort will be to build a pipeline of applications that will be eligible through block grant project(s) and other MD/HD ZE incentive projects.
- Support workforce development training and encourage use of local workforce to support infrastructure development funded through block grant project(s). This effort may include building strategic partnerships with local community colleges, universities, and high schools to support training programs; development of a local workforce network to be utilized by block grant project participants; and educational forums and webinars to increase capacity building, outreach, and development.
- Prepare a *Community Engagement Report.*

Products:

- Community Engagement Report

TASK 6 – DATA COLLECTION, INCENTIVE RECIPIENT FEEDBACK, & PROCESS IMPROVEMENTS

The goal of this task is to collect data, obtain feedback from incentive recipients, and develop recommendations on how to continuously improve project implementation.

The Recipient shall:

- **Ensure incentive agreements, 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.**
  - **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 the incentive agreement, state that the incentive 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 the incentive agreement. Once regulations are final, they will apply to work under the incentive agreement irrespective of when finalized. Any updates to regulations may also be applicable to work under this Agreement.**
- **If the incentive 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 incentive recipient shall verify receipt by signing the disclosure.**

- **Collect and report to the CEC:**
  - **For hydrogen-refueling stations, the availability of operational fueling nozzles, whether hydrogen is available for refueling at the station, the volume of hydrogen-dispensed, the number of vehicles fueled by a station, and any other data deemed necessary by the CEC to monitor reliability and accessibility of the refueling infrastructure. The data must 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* delivered with the quarterly progress reports described in Task 1.4.**
  - **For hydrogen-refueling stations, the source and carbon intensity of the hydrogen produced for, or dispensed by, the stations, as measured by the methodology in the LCFS regulation (Subarticle 7 (commencing with Section 95480) of Article 4 of Subchapter 10 of Chapter 1 of Division 3 of Title 17 of the California Code of Regulations). Data must be reported to the CEC annually in a *AB 126 Data Report* specified by the CAM.**
  - **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 progress reports described in Task 1.4.**

- **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 electric vehicle charging station(s) at the meter, consistent with the disclosure methodology set forth in Article 14 (commencing with Section 398.1) of Chapter 2.3 of Part 1 of Division 1 of the Public Utilities Code. Data must be reported to the CEC annually in an *AB 126 Data Report* specified by the CAM.**

- Leverage best practices from existing MD/HD ZE incentive projects (e.g., HVIP and CORE) as well as input from stakeholder and community engagement, the *Funding Advisory Workgroup*, and the *Technology Advisory Workgroup* to create the *Data Collection Plan*. Developed in collaboration with the CAM, this plan shall include Key Performance **Indicators** ~~Metrics~~ (**KPI** ~~KPM~~) that will guide data collection activities, help identify areas requiring improvement, and improve transferability to future incentive projects.
- Collect, analyze, and compile informative, user-friendly data on incentive projects (which may include, but not be limited to, type of organizations receiving ~~vouchers~~ **incentives**, reason for participation timelines to complete ~~voucher~~ **incentive** projects, and timeframes associated with EV charger or H_2 refueling installations). Each funded project will provide a minimum of 12 months of data collection on deployed charging/refueling equipment, submitted electronically on a regular basis at least monthly. ~~Applicants~~ **Incentive recipients** shall describe in detail plans to ensure MD/HD vehicles will utilize the infrastructure, methods for collecting usage data, and methods of managing charging/refueling energy and potential utility grid impacts leveraging technology solutions installed at the site. ~~Funding~~ **Incentive** recipients shall collect 12 months of data on charging/refueling events for each deployed Electric Vehicle Supply Equipment (EVSE), charger, or refueling station including but not limited to the following:

  - Vehicle/equipment utilization of refueling equipment (energy delivered Kilowatt-Hours(kWh) and H_2 throughput).
  - Methods for collecting usage data.
  - Methods for managing charging and grid impacts (resiliency methods).
  - Methods for managing H_2 refueling efficiency at the pump.
  - Refueling schedule (charging/refueling time of day and duration).
  - Peak power (Kilowatt ((kW)) and energy delivered (kWh).
  - Vocation and vehicle/equipment type utilizing refueling equipment.
  - Number of users of refueling equipment if shared/public station.
  - Cost of charging (electric utility tariff, EVSP service contract, public charging price).
  - Cost of H_2 fuel either delivered to site, onsite development or at public refueling station.

- Payment methods for refueling.
- Energy delivered back to grid or facility if bidirectional charging use case (kWh).
- Challenges or barriers with refueling equipment.
- Cost savings and smart business practices (charging/refueling).
- Number, type, date, and location of chargers or hydrogen refueling stations installed.
- Nameplate capacity of the installed equipment, in kW for chargers and kg/day for hydrogen.
- Number and type of **charging ports and connectors** ~~outlets~~ per charger.
- Location type, such as street, parking lot, hotel, restaurant, or multi-unit housing.
- Total cost per **charging port and connector**~~charger~~ or refueling station, the subsidy from the commission per **charging port and connector**~~charger~~ or refueling station, federal subsidy per charger or refueling station, utility subsidy per **charging port and connector**~~charger~~ or refueling station, and privately funded share per **charging port and connector**~~charger~~ or refueling station.
- Data on the chargers over a twelve-month period, including:
  - Number of charging or refueling sessions
  - Average session duration
  - Average kWh or kg dispensed
  - Average charger or refueling station downtime

- Develop and collect *User Survey(s)* from **incentive** ~~project~~ recipients to better evaluate a variety of factors. The *User Survey(s)* will be conducted at different stages of an **incentive** application to better inform the ~~block grant~~ Recipient of needed project improvements and support to the **incentive** applicant/**incentive** recipient ~~of voucher funds~~. Examples of factors include:
  - Purpose for participating in block grant project.
  - Experience with project participation.
  - Challenges and successes with deploying funded infrastructure equipment.
  - General barriers and issues facing recipients.
  - Solutions and strategies to address and overcome barriers.
  - Progress with the operation and use of charging/refueling equipment.
- **Submit *AB 841 Certification* from incentive recipients that certifies their incentive project has complied with all AB 841 (Ting, Chapter 841, Statutes of 2020) requirements specified in Exhibit C or describes why AB 841 requirements do not apply to their incentive project.**

- **Collect from incentive recipients the *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.**
- **Include the collected *EVITP Certification Numbers* as an appendix in the Final Report, or within 5 business days of request by the CEC.**
- Recommend process and implementation improvements and submit recommendations for review and approval by the CAM.
- Implement process improvement changes.
- Include data and relevant analysis in the Final Report (Subtask 1.5).
- **Submit all *Collected Data* to the CEC upon CEC request.**

Products:

- Data Collection Plan
- User Survey Report
- **EVITP Certification Numbers as appendix in Final Report**
- **AB 126 Data Reports**
- **Collected Data**
- Process Improvement Recommendation(s)

TASK 7 OPERATIONS AND RELIABILITY

Recipient shall require and ensure that incentive recipients comply with the reliability performance standards, recordkeeping, reporting, and maintenance requirements (Requirements) for EV chargers installed as part of their incentive agreements. In the Recipient shall also ensure that incentive agreements have provisions that state any regulations adopted by CEC that include Requirements, for example as required by AB 2061 (Ting, Chapter 345, Statutes of 2022) and/or AB 126 (Reyes, Chapter 319, Statutes of 2023), shall supersede the Requirements contained in their incentive agreement wherever they conflict or are redundant.

Task 7.1 Operations

The Recipient shall:

- **Ensure incentive agreements include requirements for incentive recipients to:**
  - **Operate the installed charging ports during the term of their agreement.**
  - **Ensure that the charging port uptime for each charging port installed in the incentive project is at least 97 percent of each year for six years after the beginning of operation.**

Ensure incentive agreements include a provision stating that the charging port uptime requirement described immediately above shall survive the completion or termination date of the incentive agreement. In addition to other requirements in the incentive agreement, all reimbursable expenditures must be incurred within the incentive agreement term.

Task 7.2 Recordkeeping

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

The Recipient shall require the following from incentive recipients:

For networked chargers, the incentive recipient shall collect and retain the maintenance records specified in this section. The incentive recipient shall retain the services of a charging network provider that meets the criteria in 1. through 4. to record, retain, and transmit the remote monitoring data for networked chargers specified in this section.

1. **The charging network provider must have an API of the CEC's choosing to permit the charging network provider to transfer the data required in this section directly to the CEC or the CEC's designee within 60 minutes of the record's generation.**
2. **The charging network provider must have Subset Certification of the Charging Station Management System in the Open Charge Alliance Open Charge Point Protocol (OCPP) Certification Program for OCPP version 2.0.1, published May 24, 2023, or a subsequent version of OCPP for Core, Advanced Security, and ISO 15118 Support functionalities.**
3. **For networked chargers, the charging network provider's central system must have connection to the chargers using OCPP version 2.0.1 or a subsequent version of OCPP. This does not preclude the additional use of other communication protocols.**
4. **For networked chargers, the charging network provider and chargers must transmit the following protocol data units between the Central Management System and the charger(s) as specified in OCPP version 2.0.1 or a subsequent version of OCPP:**
   a. **HeartbeatRequest shall be transmitted to the Central Management System by the charger on a set interval.**

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

c. **StatusNotificationRequest shall be transmitted by the charger to the Central Management System any time the charger or an associated charging port's operative status changes.**

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

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

The Recipient Shall:

- **Ensure incentive agreement require incentive recipients to collect and retain records for each charger installed and operated as part of their incentive project.**
- **Require incentive recipients to:**
  - **For networked chargers, ensure the charging network provider collects and retains the Remote Monitoring data below from each charging port installed and operated as part of the incentive project.**
  - **For networked chargers, ensure the charging network provider automatically transmits the Remote Monitoring data below to the CEC, via API, within 60 minutes of the Remote Monitoring data's generation.**
  - **For networked chargers, ensure the charging network provider retains the Remote Monitoring data below for 2 years from the date of each record's generation. Provide *Remote Monitoring records* within 10 business days of request.**
    1. **Provide digital records in a comma separated values file unless another file format is approved by the CEC for the request.**
    2. **Provide a clear and understandable *data dictionary* that describes each data element and any associated units with all digital records.**
  - **For all chargers, collect and retain the maintenance records specified below for each charging port installed and operated as part of this incentive project for 6 years from the date the charging port begins operation. Provide *maintenance records* within 10 business days of request.**

Remote Monitoring Data for Networked Chargers

1. **All instances of the following Protocol Data Units specified in OCPP 2.0.1, that are transmitted between the charger and the central system.**

a. **HeartbeatResponse**
b. **StatusNotificationRequest**
c. **BootNotificationRequest**

2. **The total number of charge attempts for the reporting period.**
3. **The total number of successful charging sessions for the reporting period.**
4. **The total number of failed charging sessions for the reporting period.**
5. **The percentage of successful charging sessions for the reporting period relative to the total number of charge attempts for the reporting period.**

Maintenance Records

1. **For all chargers, reports of inoperative charging ports or charging port failures resulting in inability to charge, such as a customer or operator complaint, internal diagnostics, or inspection.**
2. **For all chargers, records of any maintenance conducted on charging ports installed and operated as part of the incentive project. Records should specify the following:**
   a. **Date and time of the maintenance event**
   b. **Whether maintenance was corrective or preventive in nature**
   c. **Whether and for how long the charging port was in an inoperative state prior to maintenance.**
   d. **Whether the charging port was in an operative state following maintenance.**

Products:

- **Incentive Recipients' Remote Monitoring Records**
- **Incentive Recipients' Maintenance Records**
- **Incentive Recipients' 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 require that incentive recipients conduct maintenance on each charger installed and operated as part of their incentive project as specified in this section.

The Recipient Shall:

- **Ensure incentive agreements require that incentive recipients:**
  - **Conduct preventive maintenance, as specified by the charger manufacturer, on the charger hardware by a certified technician**

annually. The time interval between consecutive preventive maintenance visits to any charger shall be no more than 13 months.

- **Complete corrective maintenance within 5 business days of the beginning of a time when the charger or charging port is inoperative or exhibiting failures that result in an inability to charge.**
- **Report on preventive and corrective maintenance on a quarterly basis once the charging port is operational.**

Products:

- **Maintenance section of Quarterly Report described in Task 7.4**

Task 7.4 Reporting

The goal of this task is to provide reports on charger reliability and maintenance prepared by incentive recipients.

The Recipient shall:

- **Ensure incentive agreements require incentive recipients to prepare and submit *Quarterly Reports on Charger and Charging Port Reliability and Maintenance.***
  - **Each report shall include: A summary of charging port downtime, including total downtime and the number and frequency of downtime events, the minimum, median, mean, and maximum duration, and the causes of downtime events. Downtime shall be determined on a per charging port basis by summing the durations of all downtime events during the reporting period. The duration of a downtime event shall be the longest of the following periods:**
    - **For networked charging ports, the time after the charger has transmitted a StatusNotificationRequest indicating that the charging port associated with that charger is in a "faulted" or "unavailable" state until a subsequent StatusNotificationRequest is transmitted by that charger indicating that the charging port has transitioned to an "available," "occupied," or "reserved" state. The timestamps in each StatusNotificationRequest shall be used to quantify downtime.**
    - **For networked chargers, the time between a BootNotificationResponse transmitted by the Central Management System and the last HeartbeatResponse transmitted by the Central Management System prior to the BootNotificationResponse. The timestamps in the relevant BootNotificationResponse and HeartbeatResponse shall be used to quantify downtime.**
    - **For all charging ports, the time between the earliest record that a charging port is not capable of successfully dispensing electricity or otherwise not functioning as designed and the time it is available to**

deliver a charge. First record that a charger is not capable of successfully dispensing electricity or otherwise not functioning as designed includes, but is not limited to, consumer notification, internal diagnostics, or inspection, whichever is earliest.

- **Ensure incentive agreements require incentive recipients to prepare a summary of excluded downtime, including total excluded downtime and the number and frequency of excluded downtime events, the minimum, median, mean, and maximum duration, and the causes of excluded downtime events and include in each Quarterly Report on Charger and Charging Port Reliability and Maintenance. 'Excluded Downtime' includes:**
  - **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.**
  - **Vehicle Fault: Any failure to charge or failure to meet the EV charging customer's expectation for power delivery due to the fault of the vehicle.**
  - **Outage for Preventative Maintenance or Upgrade: Downtime caused by any preventative maintenance or upgrade work that takes the charging port offline. This must be scheduled at least two weeks in advance of the charger being placed in an inoperative state. The maximum downtime that can be excluded for preventative maintenance or upgrade work is 24 hours for any 12-month period.**
  - **Vandalism or Theft: Downtime caused by any physical damage to the charger or station committed by a third party. This may include, but is not limited to, theft of charging cables, damage to connectors from mishandling, or damage to screens. A maximum of 5 days may be claimed as excluded downtime for each Vandalism or Theft event. A police report or similar third-party documentation is required to claim this as excluded time.**
  - **Natural Disasters: Downtime caused by any disruption of the charging port due to a natural event such as a flood, earthquake, or wildfire that causes great damage. Third party documentation such as news reporting must be provided along with a narrative of the direct impacts to the chargers(s) to claim this as excluded downtime.**
  - **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.**

- **For all charging ports, ensure incentive agreements require incentive recipients to prepare a summary and calculation of uptime and include in each Quarterly Report on Charger and Charging Port Reliability and Maintenance. Each report shall include the uptime percentage of each charging port (Uptime) installed and operated as part of the incentive project for the reporting period. Charging port uptime shall be calculated as:**

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

U = Charging Port Uptime

T =

1. **Q1 reporting period = 129,600 minutes, except for a leap year, which is 131,040 minutes.**
2. **Q2 reporting period = 131,040 minutes.**
3. **Q3 and Q4 reporting periods = 132,480 minutes.**

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

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

- **For networked charging ports, ensure incentive agreements require incentive recipients to prepare a summary of charge data and include in each Quarterly Report on Charger and Charging Port Reliability. The data will include:**
  - **Total number of charge attempts in the reporting period**
  - **Total number of successful charge attempts in the reporting period**
  - **Total number of failed charges in the reporting period**
  - **The percentage of successful charging sessions for the reporting period relative to the total number of charge attempts for the reporting period**

- **A description of steps taken to reduce the number of failed charge attempts, and the success rate of those steps**

- **For all chargers, ensure incentive agreements require incentive recipients to prepare a summary of the total number of maintenance dispatch events that occurred since the last report, the number of days to complete each maintenance event reported, and a narrative description of significant maintenance issues. Require incentive recipients to include details of all excluded downtime and a narrative description of events that caused the excluded downtime. The summary shall be included in each Quarterly Report on Charger and Charging Port Reliability.**
- **Submit incentive recipients' Quarterly Report on Charger and Charging Port Reliability to the CEC.**

Products:

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

TASK 8 ~~7~~ - 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