



**CALIFORNIA  
ENERGY COMMISSION**



**California Energy Commission April 10, 2024  
Business Meeting Backup Materials for  
CALSTART, Inc. ZVI-23-015**

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

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

**[PROPOSED]**

**RESOLUTION NO: 24-0410-14**

**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 agreement ZVI-23-015 with CALSTART Inc., for up to \$390,000,000. This agreement is for a block grant to design, implement, and fund, with CEC oversight, zero-emission school bus charging and fueling infrastructure projects for local educational agencies throughout California. This agreement initially provides up to \$5,000,000 for administrative costs for CALSTART to design and implement up to \$125,000,000 currently available for incentive projects. Subject to future appropriations in California State Budget, up to \$10,000,000 for administrative costs and \$250,000,000 in grant incentive funding may be added to this agreement, up to the maximum of \$390,000,000 with approval of the CEC's Executive Director through an amendment; and

**RESOLVED**, AB 178 (2022) authorized the CEC to administer new funds, which in part make up the funds in this Agreement, in accordance with Health and Safety Code section 44272. Under the authority in Health and Safety Code section 44272 (b), the CEC delegates to the Executive Director or their designee the full authority allowed to approve amendments to this Agreement; 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:

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Kristine Banaag  
Secretariat



## GRANT REQUEST FORM (GRF)

### A. New Agreement Number

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

**New Agreement Number:** ZVI-23-015

### B. Division Information

1. Division Name: Fuels and Transportation
2. Agreement Manager: Jennifer Masterson
3. MS-:N/A
4. Phone Number: 916 897-3614

### C. Recipient's Information

1. Recipient's Legal Name: CALSTART, Inc.
2. Federal ID Number: 95-4375022

### D. Title of Project

Title of project: California Zero-Emission School Bus Infrastructure Project

### E. Term and Amount

1. Start Date: 04/10/2024
2. End Date: 03/30/2029
3. Amount: \$130,000,000

### F. Business Meeting Information

1. Are the ARFVTP agreements \$75K and under delegated to Executive Director? No
2. The Proposed Business Meeting Date: April 10, 2024
3. Consent or Discussion? Discussion
4. Business Meeting Presenter Name: Kay Williams
5. Time Needed for Business Meeting: 5 minutes.
6. The email subscription topic is: Transportation, School Bus

#### **Agenda Item Subject and Description:**

CALSTART, INC. Proposed resolution approving agreement ZVI-23-015 with CALSTART Inc. (CALSTART), for up to \$390,000,000, and adopting staff's determination that this action is exempt from CEQA. This agreement is for a block grant to design, implement, and fund, with CEC oversight, zero-emission school bus charging and fueling infrastructure projects for local educational agencies throughout California. This agreement initially provides up to \$5,000,000 for administrative costs for CALSTART to design and implement up to \$125,000,000 currently available for incentive projects. Subject to future appropriations in California State Budget, up to \$10,000,000 for administrative costs and \$250,000,000 in grant incentive funding may be added to this agreement, up to the maximum of \$390,000,000 with approval of the CEC's Executive Director through an amendment. (General Fund funding) Contact: Kay Williams (Staff Presentation: 5 minutes)

### G. California Environmental Quality Act (CEQA) Compliance



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

Yes

If yes, skip to question 2.

If no, complete the following (PRC 21065 and 14 CCR 15378) and explain why Agreement is not considered a “Project”:

Agreement will not cause direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment because: If Agreement is considered a "Project" under CEQA skip to question 2. Otherwise, provide explanation.

**2. If Agreement is considered a “Project” under CEQA answer the following questions.**

a) Agreement **IS** exempt?

Yes

Statutory Exemption?

No

If yes, list PRC and/or CCR section number(s) and separate each with a comma. If no, enter “None” and go to the next question.

PRC section number: None

CCR section number: None

Categorical Exemption?

Yes

If yes, list CCR section number(s) and separate each with a comma. If no, enter “None” and go to the next question.

CCR section number: Cal. Code Regs., tit. 14, sec. 15301, 15303, 15304, 15311 and 15314

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

No

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

Under this agreement, CALSTART, Inc., will develop and implement financial incentive projects solely to fund the purchase and installation of zero-emission vehicle fueling infrastructure, including but not limited to electric vehicle (EV) charging equipment. The zero-emission school bus fueling equipment funded under this agreement will only involve commercially available products being predominantly installed in existing parking areas, at existing school yards, or existing facilities.

Cal. Code Regs., tit. 14, sec. 15301 provides that projects which consist of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, and which involve negligible or no expansion of existing or former use, are categorically exempt from the provisions of the California Environmental Quality Act (CEQA). This project involves installation of zero-emission vehicle fueling infrastructure. The equipment will be predominantly installed in existing paved parking lots, involving negligible or no expansion of existing or former use of the



facilities. Therefore, the proposed project falls within section 15301 and will not have a significant effect on the environment.

Cal. Code Regs., tit. 14, sec. 15303 provides that projects which consist of construction and location of limited numbers of new, small facilities or structures; installation of small new equipment and facilities in small structures; and the conversion of existing small structures from one use to another where only minor modifications are made in the exterior of the structure, are categorically exempt from the provisions of CEQA. This project consists of the installation of a limited number of new small equipment (approximately 1 foot wide, 1 foot long, and 5 feet tall) in the form of EV charging equipment which will be added to predominantly existing parking areas, or hydrogen refueling equipment. For sites that will involve hydrogen refueling, the equipment may consist of hydrogen storage tanks, compression, and dispensing equipment at various sites. 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.

Cal. Code Regs., tit. 14, sec. 15304 provides that projects which consist of minor public or private alterations in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees except for forestry or agricultural purposes, are categorically exempt from the provisions of CEQA. For the installation of the equipment in this project, there will be minimal trenching to connect storage and compression equipment to dispensers. No healthy, mature or scenic trees are anticipated to be removed and the surface will be restored. Therefore, the proposed project falls within section 15304 and will not have a significant effect on the environment.

Cal. Code Regs., tit. 14, sec. 15311 provides that projects that consist of the construction or replacement of minor structures accessory to existing commercial, industrial, or institutional facilities are categorically exempt from the provisions of CEQA. This project meets the requirements of 15311 because it involves installation of accessory items such as EV charging equipment and hydrogen refueling equipment which are minor in scope and will be accessory to existing institutional facilities (schools).

Cal. Code Regs., tit. 14, sec. 15314 provides that projects consisting of minor additions to existing schools within existing school grounds where the addition does not increase original student capacity is exempt from the provisions of CEQA. This project meets the requirements of 14 CCR 15314 because it involves minor equipment additions to existing schools and does not increase student capacity at the schools. Therefore, the project falls within 15314 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.

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

Enter Yes or No

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

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

**H. Is this project considered “Infrastructure”?**

yes

**I. Subcontractors**

List all Subcontractors listed in the Budget (s) (major and minor). Insert additional rows if needed. If no subcontractors to report, enter “No subcontractors to report” and “0” to funds.

**Delete** any unused rows from the table

Subcontractor Legal Company Name	CEC Funds	Match Funds
Tetra Tech, Inc	\$ 1,500,000	\$0

**J. Vendors and Sellers for Equipment and Materials/Miscellaneous**

List all Vendors and Sellers listed in Budget(s) for Equipment and Materials/Miscellaneous.

Insert additional rows if needed. If no vendors or sellers to report, enter “No vendors or sellers to report” and “0” to funds. **Delete** any unused rows from the table.

Vendor/Seller Legal Company Name	CEC Funds	Match Funds
OBO Agency	\$95,000	\$0
TBD	\$65,000	\$0

**K. Key Partners**



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

Key Partner Legal Company Name
No key partners to report

**L. Budget Information**

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

Funding Source	Funding Year of Appropriation	Budget List Number	Amount
General Fund	22/23	601.129DTB	\$5,000,000
General Fund	23/24	601.181	\$125,000,000

**TOTAL Amount:** \$130,000,000

R&D Program Area: Enter R&D Program Area. Example: EDMFO: EDMF

Explanation for “Other” selection Enter explanation for "Other"

Reimbursement Contract #: Enter Reimbursement Contract Number

Federal Agreement #: Enter Federal Agreement Number

**M. Recipient’s Contact Information**

**1. Recipient’s Administrator/Officer**

Name: Jared Schnader

Address: 48 S Chester Ave

City, State, Zip: Pasadena, CA 91106

Phone: 250 515-8752

E-Mail: jschnader@calstart.org

**2. Recipient’s Project Manager**

Name: Michelle Hanson

Address: 48 S Chester Ave

City, State, Zip: Pasadena, CA 91106

Phone: 707 633-9070

E-Mail: mhanson@calstart.org

**N. Selection Process Used**

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





Selection Process	Additional Information
Competitive Solicitation #	GFO-23-605

**O. Attached Items**

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

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

**Approved By**

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

**Agreement Manager:** Jennifer Masterson

**Approval Date:** 02/16/2024

**Office Manager:** Elizabeth John

**Approval Date:** 02/21/2024

**Deputy Director:** Elizabeth John for Melanie Vail

**Approval Date:** 2/22/2024

**Exhibit A  
SCOPE OF WORK**

**TECHNICAL TASK LIST**

<b>Task #</b>	<b>CPR</b>	<b>Task Name</b>
1		Administration
2		Block Grant Internal Controls, Processes, and Procedures
3		Web Design, Development, Maintenance, and Implementation
4		Overall Project Plan Development
5	X	Block Grant Project Development
6	X	Block Grant Project Implementation
7		Operations and Reliability
8		Data Collection & Analysis
9		Block Grant Project Fact Sheet

**KEY NAME LIST**

<b>Task #</b>	<b>Key Personnel</b>	<b>Key Subcontractor(s)</b>	<b>Key Partner(s)</b>
1	Michelle Hanson, Amanda Le, Jared Schnader, Stacey Simms, Alyssa Haerle, Tesi Bravo, Piero Stillitano, Jeffrey Caperton	N/A	N/A
2	Michelle Hanson, Amanda Le, Piero Stillitano, Jeffrey Caperton	Tetra Tech, Inc. (Tetra Tech)	N/A
3	Michelle Hanson, Amanda Le, Chase LeCroy	Website Development and Maintenance vendor (TBD), IPC Development and Maintenance vendor (TBD)	N/A
4	Michelle Hanson, Amanda Le		N/A

<b>Task #</b>	<b>Key Personnel</b>	<b>Key Subcontractor(s)</b>	<b>Key Partner(s)</b>
5	Michelle Hanson, Amanda Le, Jared Schnader, Stacey Simms, Alyssa Haerle, Tesi Bravo	Tetra Tech	Air Districts, State Agencies, Industry Groups, Utilities and Community and Equity Groups
6	Michelle Hanson, Amanda Le, Emily Gasca, Alberto Santos-Davidson, Olaoluwa Oyewusi	Tetra Tech	Incentive Recipients
7, 8, 9	Michelle Hanson, Amanda Le, Tesi Bravo, Chase LeCroy, Bharadwaj Sathiamoorthy	N/A	Incentive Recipients
10	Michelle Hanson, Amanda Le, Emily Gasca, Alberto Santos-Davidson	N/A	N/A

## **GLOSSARY**

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

<b>Term/ Acronym</b>	<b>Definition</b>
AB	Assembly Bill
ADA	Americans with Disabilities Act
Block Grant Funding Cycle	Total incentive amounts awarded to local educational agencies within the fiscal year
CAM	Commission Agreement Manager
CAO	Commission Agreement Officer
CARB	California Air Resources Board
Central System	Charge Point Management System: the central system that manages Charge Points and has the information for authorizing users for using its Charge Points
Charge Point	Physical system where an EV can be charged. A Charge Point has one or more connectors.

<b>Term/ Acronym</b>	<b>Definition</b>
Charger	Any connector that can independently provide charge regardless of whether the other connectors associated with a Charge Point are simultaneously charging.
Charging session	Part of a transaction during which the EV is allowed to request energy.
Charging station	A physical location with any number of Charge Point(s) and Connector(s) with a unique address. For a charger to be part of a charging station, it must not be further than 0.125 miles (660 feet) from any other charger that is also considered to be part of the same charging station.
CEC	California Energy Commission
Connector	An independently operated and managed electrical outlet on a Charge Point. This usually corresponds to a single physical connector, but in some cases a single outlet may have multiple physical socket types and/or tethered cable/connector arrangements to facilitate different vehicle types (e.g. four-wheeled EVs and electric scooters).
Corrective Maintenance	Maintenance which is carried out after failure detection and is aimed at restoring an asset to a condition in which it can perform its intended function.
CPR	Critical Project Review
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	A direct current fast charger, which enables rapid charging by delivering direct-current (DC) electricity directly to an EV's battery
Downtime	Downtime is any period of time that a charger is not operational.
EV	Electric Vehicle
EVITP	Electric Vehicle Infrastructure Training Program
EVSE	Electric Vehicle Supply Equipment
EVSP	Electric Vehicle Service Provider
Excluded Downtime	Downtime that is caused by events outside of the control of the funding recipient and is subtracted from total downtime when calculating uptime percentages.
FTD	Fuels and Transportation Division
GFO	Grant Funding Opportunity
Hardware	The machines, wiring, and other physical components of an electronic system including onboard computers and controllers.
Incentive(s)	Individual awards made under this Agreement to Local Educational Agencies (LEAs) for zero-emission school bus infrastructure projects

<b>Term/ Acronym</b>	<b>Definition</b>
Incentive Agreement	An agreement between the Recipient and an incentive recipient.
Incentive Recipient	An incentive recipient is any LEA that receives an incentive awarded under this Agreement
Installed	Attached or placed at a location and available for use for a charging session
Interoperability	Successful communication between the software controlling charging on the EV and the software controlling the charger. Interoperability failures are communication failures between the EV and charger that occur while the software of each device is operating as designed.
KPI	Key Performance Indicators
kW	Kilowatt
kWh	Kilowatthour
LEAs	<p>Local Educational Agencies means any of the following:</p> <p>(A) A school district, county office of education, or charter school, excluding a charter school classified as a nonclassroom-based charter school as of the 2021–22 fiscal year second principal apportionment certification pursuant to Section 47612.5 of the Education Code, with ownership of title for a schoolbus or schoolbuses.</p> <p>(B) A school district or charter school, excluding a charter school classified as a nonclassroom-based charter school as of the 2021–22 fiscal year second principal apportionment certification pursuant to Section 47612.5 of the Education Code, that contracts with a county office of education or private contractor for the maintenance and operation of its schoolbuses.</p> <p>(C) A county office of education that contracts with a private contractor for maintenance and operation of its schoolbuses.</p> <p>(D) A joint powers authority currently operating home-to-school transportation programs on behalf of school districts, county offices of education, or charter schools, excluding charter schools classified as a nonclassroom-based charter school as of the 2021–22 fiscal year second principal apportionment certification pursuant to Section 47612.5 of the Education Code.</p>
Maintenance Event	Any instance in which preventive or corrective maintenance is carried out on equipment.
OCP	Open Charge Point Protocol
Operational	A charging port is considered operational or "up" when its hardware and software are both online and available for use, or in use, and the charging port successfully dispenses electricity as expected.

<b>Term/ Acronym</b>	<b>Definition</b>
Operative	A state indicating the charger is operational and available to charge or currently charging.
Operative Status	A status reported by the charger’s onboard software indicating whether the charger is in an operative state. The status may directly report ‘Operative’ or some other status that indirectly indicates the charger is in an operative state. Conversely, the charger may report ‘Inoperative’ or some other status indicating that it is in not in an operative state.
Preventive Maintenance	Maintenance that is regularly and routinely performed on physical assets to reduce the chances of equipment failure and unplanned machine downtime.
Public	Charging ports located at parking space(s) or at sites designated by the property owner or lessee to be available to and accessible by the public
Recipient	CALSTART, Inc., the applicant awarded under CEC solicitation, GFO-23-605; may also be referred to as “implementer”
SB	Senate Bill
Software	A set of instructions, data or programs used to operate computers and execute specific tasks.
Uptime	A charging port is considered “up” when its hardware and software are both online and available for use, or in use, and the charging port successfully dispenses electricity in accordance with requirements for minimum power level. Uptime is the percentage of time a charging port is “up”.
ZE	Zero-emission

## Background

Senate Bill (SB) 114<sup>1</sup> (Committee on Budget and Fiscal Review, Chapter 48, Statutes of 2023), which amended Section 121 of Assembly Bill (AB) 181 (Committee on Budget, Chapter 52, Statutes of 2022), appropriated \$125,000,000 for the 2023-2024 fiscal year to the California Energy Commission (CEC) to fund zero-emission school bus charging or fueling infrastructure and related activities, including, but not limited to, charging or fueling stations, equipment, site design, construction, and related infrastructure upgrades.

The appropriation is intended to complement \$375,000,000 appropriated to the California Air Resources Board (CARB) for the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project, which provides funding to replace internal combustion

<sup>1</sup> Senate Bill 114 Education Finance: Education Omnibus Budget Trailer Bill, Committee on Budget and Fiscal Review, Chapter 48, Statutes of 2023.

school buses owned by local educational agencies (LEAs) with new zero-emission school buses.

SB 114 makes funding available from Proposition 98's \$1.5 billion budget for one-time grants that support the adoption of zero-emission school buses and supporting infrastructure. Proposition 98 is a constitutional amendment passed by the California Legislature in 1988 that sets a minimum annual funding level for K-12 schools and community colleges. The guaranteed annual funding is sourced from the state General Fund and local property tax revenues. SB 114 appropriated a total of \$500,000,000 to the CEC and CARB for the 2023-2024 fiscal year with an additional \$1 billion intended to be allocated evenly over the 2024-2025 and 2025-2026 fiscal years, subject to future appropriations.

On November 09, 2023, the CEC released a Grant Funding Opportunity (GFO) entitled "Zero-Emission School Bus Charging and Fueling Infrastructure Block Grant." This competitive grant solicitation was to seek block grant implementer to design and implement an up to \$375,000,000 incentive program for zero-emission and renewable fuel type school bus infrastructure incentive projects to LEAs in California. In response to GFO-23-605, the Recipient submitted application #1 which was proposed for funding in the CEC's Notice of Proposed Awards on February 6, 2024. GFO-23-605 and Recipient's application are hereby incorporated by reference into this Agreement in their entirety.

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

**Problem Statement:**

The electrification of school buses provides the opportunity to achieve a variety of health, environmental, equity, economic, and resiliency benefits to local communities throughout the state. Across the United States, of the approximately 500,000 school buses in operation, about 95%, run on diesel. Diesel exhaust is linked to serious health and development conditions with evidence suggesting young students are especially at-risk. California leads the United States in electric school bus adoption, making up approximately 34% of electric school buses deployed in 2022.

However, as of the end of 2022, California Department of Motor Vehicle data showed only 2,300 medium-duty and heavy-duty zero-emission vehicles registered. In the CEC's "Second Assembly Bill (AB) 2127 Electric Vehicle Charging Infrastructure Assessment: Assessing Charging Needs to Support Zero-Emission Vehicles in 2030 and 2035", the CEC estimated that "California will need about 109,000 depot chargers and 5,500 public chargers for 155,000 vehicles in 2030, and 256,000 depot chargers and 8,500 public chargers for 377,000 vehicles in 2035." While the technology readiness level of electric school buses has increased from pilot projects towards at-scale deployments, there remains key market, cost, and financial hurdles to widespread adoption.

Of most relevance to this program, key barriers for zero-emission (ZE) school bus market readiness include: 1) lack of EV charging and renewable fueling infrastructure availability, 2) lack of ZE school bus workforce development and training for facility / fleet managers and operators, and 3) high upfront capital costs associated with ZE school buses and associated infrastructure deployment. School administrators applying for grants are often not technical experts in EV technology and may be unfamiliar with managing construction projects.

Providing charging and fueling infrastructure awards will support the operation of ZE school buses and reduce cost barriers for fleet operators ready to transition, while providing much needed technical assistance and resources to reduce the friction to deploying electric school buses across the state. Joint awards, through CARB's program for ZE school buses and CEC's program for ZE infrastructure, will promote a user-friendly experience for LEAs. Enabling the replacement of internal combustion school buses with zero-emission school buses will reduce transportation pollutants and emissions, contributing to the improvement of community health and progress towards California's climate goals.

### **Goals of the Agreement:**

The goal of this Agreement is to design and implement an incentive program for zero-emission school bus charging or fueling infrastructure incentive projects for California LEAs. CALSTART will administer up to \$125,000,000 in incentives. This project will be user-friendly, flexible, and easily scalable in case funds are added to the Agreement.

### **Objectives of the Agreement:**

The objective of this Agreement is to provide a nimble and flexible mechanism to quickly and effectively award incentives to install zero-emission school bus charging or fueling infrastructure to California LEAs.

Recipient shall conduct Agreement activities in accordance with the SB 114 Funded Charging and Refueling Infrastructure Program Guiding Principles adopted by the Energy Commission at its December 13, 2023 business meeting, including any amendments to those principles.

## **TASK 1 ADMINISTRATION**



## **Task 1.1 Attend Kick-off Meeting**

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

### **The Recipient shall:**

- Attend a “Kick-Off” meeting with the CAM, the Commission Agreement Officer (CAO), and a representative of the CEC Accounting Office. The Recipient shall bring their Project Manager, Agreement Administrator, Accounting Officer, and any others determined necessary by the Recipient or specifically requested by the CAM to this meeting.
- Provide a written statement of project activities that have occurred after the notice of proposed awards but prior to the execution of the agreement using match funds. If none, provide a statement that no work has been completed using match funds prior to the execution of the agreement. All pre-execution match expenditures must conform to the requirements in the Terms and Conditions of this Agreement.
- Discuss the following administrative and technical aspects of this Agreement:
  - Agreement Terms and Conditions
  - Critical Project Review (Task 1.2)
  - Match fund documentation (Task 1.7) No reimbursable work may be done until this documentation is in place.
  - Permit documentation (Task 1.8)
  - Subawards needed to carry out project (Task 1.9)
  - The CAM’s expectations for accomplishing tasks described in the Scope of Work
  - An updated Schedule of Products and Due Dates
  - Monthly Calls (Task 1.4)
  - Quarterly Progress Reports (Task 1.5)
  - Technical Products (Product Guidelines located in Section 5 of the Terms and Conditions)
  - Final Report (Task 1.6)

### **Recipient Products:**

- Updated Schedule of Products
- Updated List of Match Funds
- Updated List of Permits

- Written Statement of Match Share Activities

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

**The Recipient shall:**

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

**CAM Products:**

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

**Recipient Product:**

- CPR Report(s)

**Task 1.3 Final Meeting**

The goal of this task is to closeout this Agreement.

**The Recipient shall:**

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

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

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

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

- What to do with any equipment purchased with CEC funds (Options)
- CEC request for specific “generated” data (not already provided in Agreement products)

- Need to document Recipient’s disclosure of “subject inventions” developed under the Agreement, if applicable
- “Surviving” Agreement provisions
- Final invoicing and release of retention
- Prepare a schedule for completing the closeout activities for this Agreement.

**Products:**

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

**Task 1.4 Monthly Calls**

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

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

**The CAM shall:**

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

**The Recipient shall:**

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

**Product:**

- Email to CAM concurring with call summary notes.

**Task 1.5 Quarterly Progress Reports**

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

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

**The Recipient shall:**

- Prepare a Quarterly Progress Report which summarizes all Agreement activities conducted by the Recipient for the reporting period, including an assessment of the ability to complete the Agreement within the current budget and any anticipated cost overruns. This includes, but is not limited to, forecasting the administrative spend rate for funding associated with Implementation activities for the life of each funding launch and for the overall project, comparing the forecasted administrative spend rate to actual expenses. Each progress report is due to the CAM the 10<sup>th</sup> day of each January, April, July, and October. The recommended specifications for each progress report are contained in Section 6 of the Exhibit C 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>.

**Product:**

- Quarterly Progress Reports

**Task 1.6 Final Report**

The goal of the Final Report is to assess the project's success in achieving the Agreement's goals and objectives, advancing science and technology, and providing energy-related and other benefits to California.

The objectives of the Final Report are to clearly and completely describe the project's purpose, approach, activities performed, results, and advancements in science and technology; to present a public assessment of the success of the project as measured by the degree to which goals and objectives were achieved; to make insightful observations based on results obtained; to draw conclusions; and to make recommendations for further projects and improvements to the FTD project management processes.

The Final Report shall be a public document and is limited to 25-pages. If the Recipient has obtained confidential status from the CEC and will be preparing a confidential version of the Final Report as well, the Recipient shall perform the following activities for both the public and confidential versions of the Final Report.

In addition to any other applicable requirements, the Final Report must comply with the Americans with Disabilities Act (ADA) of 1990 (42 U.S.C. 12101 et seq.), which prohibits discrimination on the basis of disability; all applicable regulations and guidelines issued pursuant to the ADA; Cal. Gov. Code sects. 7405 and 11135; and Web Content Accessibility Guidelines 2.0, or a subsequent version, as published by the Web Accessibility Initiative of the World Wide Web Consortium at a minimum Level AA success criteria.

**The Recipient shall:**

- Prepare an Outline of the Final Report, if requested by the CAM.
- Prepare a Final Report complying with ADA requirements and following the latest version of the Final Report guidelines which will be provided by the CAM. The CAM shall provide written comments on the Draft Final Report within fifteen (15) working days of receipt. The Final Report must be completed at least 60 days before the end of the Agreement Term.
- Submit Final Report in Microsoft Word format or similar electronic format as approved by the CAM.

**Products:**

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

**Task 1.7 Identify and Obtain Matching Funds**

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

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

**The Recipient shall:**

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

- Provide a copy of the letter of commitment from an authorized representative of each source of cash match funding or in-kind contributions that these funds or contributions have been secured. For match funds provided by a grant a copy of the executed grant shall be submitted in place of a letter of commitment.
- Discuss match funds and the implications to the Agreement if they are reduced or not obtained as committed, at the kick-off meeting. If applicable, match funds will be included as a line item in the progress reports and will be a topic at CPR meetings.
- Provide the appropriate information to the CAM if during the course of the Agreement additional match funds are received.
- Notify the CAM within 10 days if during the course of the Agreement existing match funds are reduced. Reduction in match funds must be approved through a formal amendment to the Agreement and may trigger an additional CPR meeting.

**Products:**

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

**Task 1.8 Identify and Obtain Required Permits**

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

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

**The Recipient shall:**

- Prepare a letter documenting the permits required to conduct this Agreement and submit it to the CAM at least 2 working days prior to the kick-off meeting. If there are no permits required at the start of this Agreement, then state such in the letter. If it is known at the beginning of the Agreement that permits will be required during the course of the Agreement, provide in the letter:
  - A list of the permits that identifies the:
    - Type of permit

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

**Products:**

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

**Task 1.9 Obtain and Execute Subawards**

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

**The Recipient shall:**

- Manage and coordinate subrecipient activities.
- If requested by the CAM, submit a draft of each subaward required to conduct the work under this Agreement to the CAM for review.
- If requested by the CAM, submit a final copy of the executed subaward.
- If Recipient intends to add new subrecipients or change subrecipients, then the Recipient shall notify the CAM.



**Products:**

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

**TECHNICAL TASKS**

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

The goal of this task is to establish and maintain written internal controls, processes and procedures to: 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 the CAM.
- As necessary, no less than annually, update and submit written internal controls, processes and procedures 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 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:**

- Written internal controls, processes, and procedures

- As necessary, updated internal controls, processes, and procedures

### **TASK 3 WEB DESIGN, DEVELOPMENT, MAINTENANCE, AND IMPLEMENTATION**

The goal of this task is to design, develop and implement public access web pages and a robust, user-friendly application portal.

#### **The Recipient shall:**

- Design a robust, user-friendly program website or web pages on an existing website that will include, but not be limited to:
  - Report on the status of Block Grant funding cycles, including amount of funding available and remaining for each active Block Grant funding cycle.
  - Advertise the availability of incentives including the minimum eligibility and technical requirements.
  - Provide instructions and forms to LEAs interested in participating in the Block Grant funding cycle(s).
  - Provide information on disbursements, such as heat map representations of where the funds are being disbursed.
- Develop a user-friendly application portal which shall include (at a minimum):
  - Joint online application forms
  - Provide the ability for interested LEAs to submit required documents to participate in Block Grant funding cycles including application forms, payment requests, and appropriate documentation
  - Provide capability for incentive participants to access, in real time, the status of incentive applications and payments
- Develop and submit web design and content for review and approval by the CAM.
- Regularly update, maintain, protect, and ensure the security of the entire website. Keep information current including adding new Block Grant funding cycles as they are developed and implemented.

#### **Products:**

- Web design and content, application portal

### **TASK 4 OVERALL PROJECT PLAN DEVELOPMENT**

The goal of this task is to develop an Overall Project Plan that describes:

- Timeline that details milestones, key performance indicators (KPI), metrics, and actions or decisions by the Recipient, CEC, and/or potential project partners.
- Block Grant funding cycle(s) target launch timeline.
- Planned outreach and engagement activities including workshops.
- Recipient's plan to quickly scale if additional incentive funds become available that may require a rapid project launch.
- Recipient's approach in managing multiple Block Grant projects and scaling of resources.
- Forecasted administrative funding spend rate.
- Forecasted incentive funds to be paid out.
- Forecasted charging ports, charger, and charging stations to become operational.
- Forecasted fueling infrastructure stations to become operational (If applicable).

**The Recipient shall:**

- Develop and submit an Overall Project Plan for review and approval by the CAM.
- Update the Overall Project Plan regularly, no less than quarterly. Submit the updated Overall Project Plan for review and approval by the CAM.

**Products:**

- Overall Project Plan
- Updated Overall Project Plan

**TASK 5 BLOCK GRANT PROJECT DEVELOPMENT**

The goal of this task is to design, in consultation with the CEC, and submit targeted Block Grant projects to the CAM for review and approval.

**The Recipient shall:**

- Develop an incentive agreement template that includes all T&Cs that are required by this Agreement to be included in incentive agreements. Provide incentive agreement template to CAM for review and approval.
- Provide any significant amendments to incentive agreement templates to CAM for review and approval.
- Research and analyze zero-emission school bus charging and fueling infrastructure incentive project opportunities and provide Block Grant Project Recommendation(s) to the CAM.

- Engage with LEAs, zero-emission vehicle automakers, infrastructure/technology providers, infrastructure manufacturers, electric utilities, public entities, private entities, regional community-based organizations, community leaders, California Native American Tribes and tribal corporations, air districts, local governments, small businesses, low-income, and disadvantaged communities, as appropriate in the planning process of Block Grant Project Designs.
- Complete Block Grant Project Designs and submit to the CAM for review and approval. Block Grant Project Designs shall include, at a minimum:
  - Types of eligible zero-emission school bus charging and fueling infrastructure and eligible renewable fueling equipment
  - Quantity of zero-emission school bus charging and fueling infrastructure targeted
  - Incentive amount per charger and eligible renewable fueling station.
  - Type of funding mechanism (e.g., competitive, first-come, first-served, etc.)
  - Total funding (administrative and incentive) required to complete the proposed project
  - KPI and metrics
- Complete a Block Grant Project Plan with a timeline detailing milestones and actions or decisions by the Recipient, CEC, and/or potential project partners and provide to the CAM. The plan shall include:
  - All phases of the incentive project including planning, development, implementation, and close-out
  - Estimates of how quickly the charging and fueling infrastructure can be deployed from incentive project launch to “steel in the ground”
  - A description of the application intake process, application assessment, notifying site/project of award, and streamlining the process to ensure timely deployment of infrastructure
  - The project plan shall be updated regularly, no less than quarterly
- Complete Updated Block Grant Project Plan(s), as necessary.
- Strategies to leverage private funding to supplement public funds.
- Monitor technical standards, market readiness, and utility considerations related to eligible equipment such as bidirectional charging.
- Attend, and present as needed, in CALSTART’s Electric School Bus Network California Forum as related to infrastructure.
- Plan, host/attend, and conduct workshops to:

- Identify future project, equipment, and other technical requirements.
- Seek feedback on block grant project designs.

**Products:**

- Incentive Agreement Template including T&Cs
- Significant Amendments to Incentive Agreement Template (as applicable)
- Block Grant Project Recommendation(s)
- Block Grant Project Designs
- Block Grant Project Plan
- Updated Block Grant Project Plan

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

**TASK 6 BLOCK GRANT PROJECT IMPLEMENTATION**

The goal of this task is to implement and administer individual targeted block grant project(s) based on approved projects from Task 4.

**The Recipient shall:**

- Develop appropriate, user-friendly application documents (including instruction forms) and submit to the CAM for review and approval. Application documents may include, as applicable, any required certifications related to AB841 compliance and EVITP Certification Numbers.
- Develop an Implementation Manual for each block grant project and submit to the CAM for review and approval. The Implementation Manual should include (at a minimum):
  - Type of Incentive structure
  - Type of funding mechanism (e.g. first come, first served, competitive, etc)
  - Type(s) of zero-emission school bus charging and fueling infrastructure eligible (e.g., Level 2, direct current fast chargers, wireless, etc)
  - Minimum technical requirements of zero-emission school bus fueling equipment (e.g. equipment specifications, warranty requirements, operational requirements, etc).
  - Incentive amount per zero-emission school bus charging and fueling infrastructure or project
  - Total funding required to complete proposed project

- Bidirectional direct current fast charging station eligibility and requirements
- Types, minimum technical requirements, and incentive amount of renewable fueling equipment, if applicable
- Simplified, streamlined application requirements
- Evaluation criteria for assessing codes, certifications, and standards for funded charging and fueling infrastructure to ensure safety, network communications, remote software updates, managed charging, and interoperability
- Requirements for vendors and installers
- Develop grant agreements with awarded LEAs that require at least 12 months of data collection, developed and defined in coordination with CEC and reported on a monthly basis.
- Develop an outreach and program awareness plan targeted at priority grantees with outreach materials that reflect the languages needed by the communities. Submit the plan to the CAM for review and approval.
- Conduct outreach in accordance with CAM approved outreach and program awareness plan.

Any travel associated with the outreach and program awareness plan must be approved by the CAM prior to travel, and any travel conducted for the purpose of this grant must be associated and in accordance with the program awareness plan.

- Develop and implement technical assistance, educational resources and tools to help ensure applicants have the support they need to fully participate in these incentives. Offerings could include information sheets, case studies, best practices guides, tools, programmatic support, office hours, fleet resource plans, and other resources and support.
- Develop, implement, and maintain a vendor list for publishing to website or web pages (Task 3). Information on this list could include business details, services offered (e.g. installation, project management, site assessment, workforce development and training, etc.), service territory, and other service details.
- Develop and manage an Approved Products List process as applicable for charging and renewable fueling stations.
- Conduct an annual technical advisory workshop, in partnership with the CEC, to identify the needs of LEAs. This workshop shall include an assessment of zero-emission school bus charging standards and interoperability.
- Upload block grant project information, Implementation Manual, and relevant documents to website or web page(s) developed under Task 3.

- Receive, evaluate, and process incentive requests.

**Products:**

- Technical Advisory Workshop Agenda (annual)
- Application documents
- Implementation Manual
- Outreach and Program Awareness Plan
- Upon CAM request submit to CAM, incentive project records, including, but not limited to financial records, incentive payment documentation (e.g., completed incentive request forms, photographs of installed charging and fueling infrastructure, and other appropriate documentation to confirm compliance with project requirements), problems/issues experienced, and how identified problems/issues were resolved; this may also include any applicable AB 841 Certification or EVITP Certification Numbers associated with the incentive projects

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

**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.

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 incentive 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:

- Ensure incentive agreements 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 HeartbeatRequest.
  - 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.
- Ensure incentive agreements require incentive recipients to collect and retain records for each charger installed and operated as part of their incentive project.
- Ensure incentive agreements 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:
    1. **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.
    2. **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.
    3. **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:
  1. **Before Initial Installation**: Downtime before the charging port was initially installed.
  2. **Grid Power Loss**: Downtime during which power supplied by a third-party provider is not supplied at levels required for minimum

function of the charging port. This may include, but is not limited to, service outages due to utility equipment malfunction or public safety power shutoffs. This does not include power generation or storage equipment installed to serve the charger(s) exclusively.

Documentation from power provider detailing outage is required to claim this as excluded downtime.

3. **Vehicle Fault:** Any failure to charge or failure to meet the EV charging customer's expectation for power delivery due to the fault of the vehicle.
  4. **Outage for Preventative Maintenance or Upgrade:** Downtime caused by any preventative maintenance or upgrade work that takes the charging port offline. This must be scheduled at least two weeks in advance of the charger being placed in an inoperative state. The maximum downtime that can be excluded for preventative maintenance or upgrade work is 24 hours for any 12-month period.
  5. **Vandalism or Theft:** Downtime caused by any physical damage to the charger or station committed by a third party. This may include, but is not limited to, theft of charging cables, damage to connectors from mishandling, or damage to screens. A maximum of 5 days may be claimed as excluded downtime for each Vandalism or Theft event. A police report or similar third-party documentation is required to claim this as excluded time.
  6. **Natural Disasters:** Downtime caused by any disruption of the charging port due to a natural event such as a flood, earthquake, or wildfire that causes great damage. Third party documentation such as news reporting must be provided along with a narrative of the direct impacts to the chargers(s) to claim this as excluded downtime.
  7. **Communication Network Outages:** Downtime caused by loss of communication due to cellular or internet service provider system outages. A Communication Network Outage can be claimed as excluded downtime provided the chargers default to a free charge state during communication losses. A free charge state is when the charger is operational and dispenses energy free of charge to any consumer.
  8. **Operating Hours:** Hours in which the charging port is in an operative state but that are outside of the identified hours of operation of the charging station.
- **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:
  - a. Total number of charge attempts in the reporting period
  - b. Total number of successful charge attempts in the reporting period
  - c. Total number of failed charges in the reporting period
  - d. The percentage of successful charging sessions for the reporting period relative to the total number of charge attempts for the reporting period
  - e. 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 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, have provisions that require incentive recipients:
  - Comply with recordkeeping and reporting standards as described in CEC's regulations. These requirements are not applicable to those electric vehicle chargers and charging stations installed at residential real property containing four or fewer dwelling units.
  - Comply with all industry best practices and charger technology capabilities that are demonstrated to increase reliability, as described in CEC's regulations.
  - Without limitation to other requirements in the incentive agreement, state that 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 1.5.
  - 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 1.5.
- For an electric vehicle charging station, the source and greenhouse gas emissions intensity, on an annual basis, of the electricity used and dispensed by the EV charging station(s) at the meter, consistent with the disclosure methodology set forth in Article 14 (commencing with Section 398.1) of Chapter 2.3 of Part 1 of Division 1 of the Public Utilities Code. Data must be reported to the CEC annually in a *AB 126 Data Report* specified by the CAM.
- Leverage best practices from existing MDHD 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 KPI 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 incentives, reason for participation timelines to complete incentive projects, and timeframes associated with EV charger or H2 refueling installations). Recipient must ensure that each incentive project must provide a minimum of 12 months of data collection on deployed charging/refueling equipment, submitted electronically on a regular basis at least monthly. Incentive recipients shall describe in detail plans to ensure MDHD 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. 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<sub>2</sub> throughput).
  - Methods for collecting usage data.
  - Methods for managing charging and grid impacts (resiliency methods).
  - Methods for managing H<sub>2</sub> 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<sub>2</sub> 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 per charger.
- Location type, such as street, parking lot, hotel, restaurant, or multi-unit housing.
- Total cost per charging port and connector or refueling station, the subsidy from the commission per charging port and connector or refueling station, federal subsidy per charging port and connector or refueling station, utility subsidy per charging port and connector or refueling station, and privately funded share per 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 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 Recipient of needed project improvements and support to the incentive applicant/incentive recipient. 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.
- 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:**

- AB 126 Data Reports
- Data Collection Plan
- User Survey Report
- Collected Data
- Process Improvement Recommendation(s)

**TASK 9 BLOCK GRANT 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 block grant project that describes the project and the expected benefits. Use the format provided by the CAM.
- Prepare a *Final Project Fact Sheet* at the block grant 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 1300x400 pixels in landscape ratio) of post technology installation at the incentive project sites or related project photographs.

**Products:**

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