California Energy Commission
August 14, 2024 Business Meeting
Backup Materials for Prologis Mobility LLC

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: 24-0814-XX

STATE OF CALIFORNIA

STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION

RESOLUTION: Prologis Mobility LLC

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-24-001 with Prologis Mobility LLC. for a $11,003,014 grant. This agreement will install 68 direct current fast charging ports, 5 MWh of battery energy storage systems, and 2 hydrogen dispensers to provide publicly accessible charging and hydrogen refueling for MDHD ZEVs along Interstate 710 in Long Beach and Interstate 5 in Commerce. The project will also support job training and recruitment in disadvantaged and low-income communities; 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 August 14, 2024.

AYE:
NAY:
ABSENT:
ABSTAIN:

Dated:

_____
Kristine Banaag
Secretariat

GRANT REQUEST FORM (GRF)

A. New Agreement Number

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

New Agreement Number: ZVI-24-001

B. Division Information

1. Division Name: Fuels and Transportation Division
2. Agreement Manager: Magdulin Dwedari
3. MS-:3
4. Phone Number: (916) 909 -2539

C. Recipient's Information

1. Recipient's Legal Name: Prologis Mobility LLC
2. Federal ID Number: 74-2827271

D. Title of Project

Title of project: Southern California Clean Freight Refueling Hubs

E. Term and Amount

1. Start Date: 08-14-2024
2. End Date: 03-31-2028
3. Amount: $11,003,014

F. Business Meeting Information

1. Are the ARFVTP agreements $75K and under delegated to Executive Director? No
2. The Proposed Business Meeting Date: 08-14-2024
3. Consent or Discussion? Discussion
4. Business Meeting Presenter Name: Vivian Nyugen
5. Time Needed for Business Meeting: 5 minutes
6. The email subscription topic is: Altfuels

Agenda Item Subject and Description:

Prologis Mobility LLC. Proposed resolution approving agreement ZVI-24-001 with Prologis Mobility LLC. for a $11,003,014 grant, and adopting staff's determination that this action is exempt from CEQA. This agreement will install 68 direct current fast charging ports, 5 MWh of battery energy storage systems, and 2 hydrogen dispensers to provide publicly accessible charging and hydrogen refueling for MDHD ZEVs along Interstate 710 in Long Beach and Interstate 5 in Commerce. The project will also support job training and recruitment in disadvantaged and low-income communities. (CTP and General Fund Funding) Contact: Vivian Nguyen (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:

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: Sections 15303, 15304

Cal. Code Regs., tit. 14, Section 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 (CEQA). This project involves the installation of publicly available electric vehicle charging infrastructure, including 68 direct current fast charger (DCFC) ports, 2 hydrogen dispensers, and 5 MWh of Battergy Energy Storage Systems in existing paved parking lots across two corridor sites in Long Beach and Commerce, California. Therefore, this project is categorically exempt from the provisions of CEQA under section 15303 of the CEQA Guidelines as a project that consists of construction and location of limited numbers of new, small facilities or structures or the installation of small new equipment and facilities in small structures.

Cal. Code Regs., tit. 14, Section 15304 provides that projects which consist of minor public or private alterations in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees except for forestry and agricultural purposes are categorically exempt from CEQA. This project requires minimum grading on land with a slope of less than 10 percent and the grading is not in a waterway, in any wetland, in an officially designated (by federal, state, or local government action) scenic area, or in officially mapped areas of severe geologic hazard such as an Alquist-Priolo Earthquake Fault Zone or within an official Seismic Hazard Zone, as delineated by the State Geologist. Furthermore, the project will not affect any visual resources, such as protected trees or historic resources. Installation of the DCFCs, hydrogen dispensers and battery energy storage systems will include installation of conduit, wiring, electrical connections, and mounting equipment. Minor trenching is required to bring power to the charging system. The project will not impact adjacent

residential homes, traffic or right of way, or noise. The reconstruction and conversion of any small structures for this project will not impact any scenic resources.Therefore, this project is exempt under California Code of Regulations, title 14, Section 15304.

The project will not impact an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law by federal, state, or local agencies; does not involve any cumulative impacts of successive projects of the same type in the same place that might be considered significant; does not involve unusual circumstances that might have a significant effect on the environment; will not result in damage to any scenic resources within a highway officially designated as a state scenic highway; the project sites are not included on any list compiled pursuant to Government Code section 65962.5; and the project will not cause a substantial adverse change in the significance of a historical resource. Therefore, none of the exceptions to categorical exemptions listed in CEQA Guidelines section 15300.2 apply to this project, and this project will not have a significant effect on the environment.

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

No

If yes, explain reason why Agreement is exempt under the above section.

If no, enter “Not applicable” and go to the next section.

Not applicable

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

No

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

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

H. Is this project considered “Infrastructure”?

Yes

I. Subcontractors

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

Subcontractor Legal Company Name	CEC Funds	Match Funds
TBD (Grant Administration)	$46,577	$78,423
TBD (Construction and Installation)	$6,565,687	$11,104,645

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
Breathe Southern California (Community Engagement)	$65,208	$109,792
ChargerHelp	$99,922	$195,078
WSP USA (Engineering, design)	$1,311,967	$2,159,120
TBD (charging islands)	$2,351,083	$1,975,366
TBD (5 MWh BESS)	$562,570	$179,512
TBD (hydrogen dispensers)	$0	$4,900,000

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
Breathe Southern California
ChargerHelp

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
ARFVTF	20/21	601.118M	$1,352,287
ARFVTF	21/22	601.118N	$1,058,656
ARFVTF	22/23	601.118O	$629,944
General Fund	21/22	601.129ZEV	$7,962,127

TOTAL Amount: $11,003,014

R&D Program Area: Not Applicable

Explanation for "Other" selection Not Applicable

Reimbursement Contract #: Not Applicable

Federal Agreement #: Not Applicable

M. Recipient's Contact Information

1. Recipient's Administrator/Officer

Name: JT Steenkamp

Address: 1800 Wazee Str., #500

City, State, Zip: Denver, CO, 80202

Phone: (860) 387-8774

E-Mail: jsteenkamp@prologis.com

2. Recipient's Project Manager

Name: Katie Lee Cox

Address: 1800 Wazee Str., #500

City, State, Zip: Denver, CO, 80202

Phone: (860) 387-8774

E-Mail: kcox2@prologis.com

N. Selection Process Used

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

Selection Process	Additional Information
Competitive Solicitation #	GFO-23-602
First Come First Served Solicitation #	Not Applicable
Other	Not Applicable

O. Attached Items

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

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

Item Number	Item Name	Attached
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: Magdulin Dwedari

Approval Date: 3/28/2024

Office Manager: Elizabeth John

Approval Date: 5/24/2024

Deputy Director: Melanie Vail

Approval Date: 5/31/2024

Exhibit A
SCOPE OF WORK

TECHNICAL TASK LIST

Task #	CPR	Task Name
1		Administration
2.1		Electric Vehicle Infrastructure Training Program (EVITP) Certification
2.2		Hydrogen Refueling Safety Plan
3		Community Outreach and Engagement
4		Infrastructure Planning, Design, and Engineering
5	X	Infrastructure Construction
6	X	Infrastructure Commissioning
7		Workforce Plan
8		Operations and Reliability
9		Semi-Annual Electric Vehicle Charger Inventory Reports
10		Data Collection and Analysis
11		Project Fact Sheet

KEY NAME LIST

Task #	Key Personnel	Key Subcontractor(s)	Key Partner(s)
1	Katie Lee Cox (Prologis)		
2	Les Garrison (Prologis)		
3	Katie Lee Cox (Prologis), Tigran Agdaian (Breathe Southern California), Kianna Scott (ChargerHelp)		Breathe Southern California, ChargerHelp
4	Les Garrison (Prologis)	Engineering, Procurement, Construction, and Management Subcontractor (TBD)	
5	Les Garrison (Prologis)	Engineering, Procurement, Construction, and Management Subcontractor (TBD)	
6	Les Garrison (Prologis)	Engineering, Procurement, Construction, and Management Subcontractor (TBD)	

7	Les Garrison (Prologis)	Engineering, Procurement, Construction, and Management Subcontractor (TBD)	
8	Katie Lee Cox (Prologis), Tigran Agdaian (Breathe Southern California), Kianna Scott (ChargerHelp)		Breathe Southern California, ChargerHelp
9	Doug Merritt (Prologis)		
10	Doug Merritt (Prologis)		
11	Katie Lee Cox (Prologis)		

GLOSSARY

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

Term/ Acronym	**Definition**
AB	Assembly Bill
AC Charging	Alternating Current. A charger that operates on a circuit greater than 200 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
API	Application programming interface. A type of software interface that offers services to other pieces of software. An API allows two or more computer programs to communicate with each other.
CAM	Commission Agreement Manager
CAO	Commission Agreement Officer
CEC	California Energy Commission
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 by 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) connected via digital communications to manage the facilitation of payment, the facilitation of electrical charging, and any related data requests.

Term/ Acronym	Definition
Charging Network Provider	The entity that operates 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 that includes the chargers, supporting equipment, parking areas adjacent to the chargers, and lanes for vehicle ingress and egress. A charging station could comprise only part of the property on which it is located.
Charging Station Management System	A system that may be used to operate a charger, to authorize use of the charger, or to record or report charger data, such as by using OCPP.
Charging Station Operator	The entity that owns the chargers, 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, supporting equipment and facilities. In some cases, the charging station operator and the charging network provider are the same entity.
Connector	The device that attaches an EV to a charging port in order to transfer electricity.
Corrective Maintenance	Maintenance that is carried out after failure detection and is aimed at restoring an asset to a condition in which it can perform its intended function.
CPR	Critical Project Review
CTP	Clean Transportation Program
DCFC	Direct current fast charger. A charger that enables rapid charging by delivering direct current electricity directly to an EV's battery
Depot	A type of “home base” behind-the-fence location where a vehicle is typically kept when not in use (usually parked on a nightly basis)
Downtime	Downtime is any period of time that a charger or dispensing equipment is not operational.
EV	Electric vehicle. A vehicle that is either partially or fully powered on electric power received from an external power source.
EVSE	Electric vehicle supply equipment. A charger as defined.

Term/ Acronym	Definition
Excluded Downtime	Downtime that is caused by events pursuant to Task 8.4.
Failed Charging Session	Following a charge attempt, the criteria for a successful charging session were not met.
FCEV	Fuel cell electric vehicle. A vehicle that uses an electric motor for propulsion, much like an EV, but powers the electric motor using hydrogen fuel cells rather than an onboard battery.
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.
HSP	Hydrogen Safety Panel
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	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. Interoperability failure leads to failed charging sessions.
Maintenance	Any instance in which preventive or corrective maintenance is carried out on equipment.
NREL	National Renewable Energy Laboratory
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.
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.
PNNL	Pacific Northwest National Laboratory

Term/ Acronym	Definition
Preventive Maintenance	Maintenance that is regularly and routinely performed on physical assets to reduce the chances of equipment failure and unplanned machine downtime.
Private	Charging ports located at parking space(s) that are privately owned and operated, often dedicated to a specific driver or vehicle (for example, a charging port installed in a garage of a single-family home).
Public	Charging ports located at parking space(s) designated by the property owner or lessee to be available to and accessible by the public.
Recipient	Prologis Mobility LLC
SB	Senate Bill
SB 671 (2021)	Priority clean freight corridors for medium- and heavy-duty vehicles identified by the California Transportation Commission
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.
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.
Uptime	The time that a charger is installed during a reporting period excluding downtime pursuant to Task 8.4.

Background

Assembly Bill (AB) 118 (Núñez, Chapter 750, Statutes of 2007), created the Clean Transportation Program. The statute authorizes the California Energy Commission (CEC) to develop and deploy alternative and renewable fuels and advanced transportation technologies to help attain the state's climate change, clean air, and alternative energy policies. AB 126 (Reyes, Chapter 319, Statutes of 2023) re-authorizes the Clean Transportation Program through July 1, 2035. The Clean Transportation Program has an annual budget of approximately $100 million and provides financial support for projects that:

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

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

On September 26, 2023, the CEC released a Grant Funding Opportunity (GFO) entitled, "Charging and Refueling Infrastructure for Transport in CALifornia Provided Along Targeted Highway Segments (CRITICAL PATHS)." This competitive grant solicitation was to support the development of publicly available charging and/or hydrogen refueling stations for medium- and heavy-duty (MDHD) zero-emission vehicles (ZEVs) along designated corridors, to help create an infrastructure network that supports the state's transition to zero-emission transportation. In response to GFO-23-602, the Recipient submitted application #08 which was proposed for funding in the CEC's Notice of Proposed Awards on February 16, 2024. GFO-23-602 and Recipient's application are hereby incorporated by reference into this Agreement in their entirety.

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

Problem Statement:

According to a 2021 study[1] by the Port of Long Beach (POLB), there are between 13,000 and 18,000 trucks that serve the San Pedro Bay Ports, all of which are targeted to become zero-emission (ZE) by 2035, based on the Ports' collective goals. Presently, the scale of publicly available electric vehicle (EV) charging and hydrogen fuel cell electric vehicle (FCEV) fueling stations is insufficient to accommodate a ZE vehicle (ZEV) transition of this magnitude. The same POLB study estimates that as many as 4,300 public charging units and 6.4 million kg of hydrogen fuel will be needed to meet projected 2035 fueling demand for these trucks. While the vast majority of MDHD ZEV deployments have included private EV charging or FCEV fueling infrastructure, not every fleet has the facilities or resources to deploy private infrastructure. According to data from the California Air Resources Board's (CARB) Emission Factor (EMFAC) database[2], of all the battery EVs (BEVs) deployed near this project's infrastructure sites, roughly 19%, 26%, and 11% belong to fleets with 1, 2, or 3 vehicles at the same address, respectively. By comparison, 45% belong to fleets with 4 or more vehicles at the same address.

As fleets with MDHD vehicles that domicile or operate in Southern California face requirements to transition to ZEVs per CARB's Advanced Clean Fleet (ACF) Regulation, they will also face market and financial barriers. ZEVs and charging and fueling infrastructure have high upfront costs, and for fleets that can afford to invest in private infrastructure, a lack of robust public charging and fueling networks limits their range and operating capabilities. Further, communities and residents near the San Pedro Bay Ports face relatively high rates of pollution and associated health impacts, as well as lower incomes and less access to ZEV workforce training. While much progress has been made in the development of markets and technology for MDHD ZEVs and related infrastructure, they are both relatively nascent, and thus only a limited amount of public ZEV charging and fueling infrastructure has been deployed for MDHD ZEVs. The deployment of more well-planned, high-capacity, and publicly available ZEV charging and

[1] https://thehelm.polb.com/download/379/zero-emissions/12744/final-polb-charging-study-12-sep-2021.pdf
[2] https://arb.ca.gov/emfac/fleet-db

fueling infrastructure is necessary to meet the Ports' and the State of California's goals for widespread MDHD ZEV adoption. As this infrastructure is deployed, attention should also be paid to the needs of disadvantaged (DACs) and low-income communities (LICs) and their residents, especially as it relates to site development and workforce opportunities.

Goals of the Agreement:

The goal of this Agreement is to plan, construct, and commission publicly available, MDHD vehicle-capable, electric vehicle charging and hydrogen fueling stations at two sites along SB 671 designated Priority Clean Freight Corridors in Commerce and Long Beach, California. This project will also design and implement robust community outreach, engagement, and workforce plans to provide ample and targeted opportunities for local communities, residents, and fleets to meaningfully engage in the development of these infrastructure sites, train for ZEV-related jobs, and become more educated on ZEVs and accompanying infrastructure.

Objectives of the Agreement:

The objectives of this Agreement are to:

- Plan, construct and commission publicly available MDHD ZEV fueling in Commerce, California, including forty-four (44) EVSE charging ports with cumulative maximum power of 7.92 MW, 2 hydrogen fueling dispensers, and 3 MWh of battery energy storage systems (BESS), and in Long Beach, California, including twenty-four (24) EVSE charging ports with cumulative maximum power of 4.32 MW, and 2 MWh BESS.
- Hold three publicly available community engagement presentation and discussion sessions per site with communities surrounding the sites, one public tour per site upon successful completion, and three meetings with the Local Advisory Council.
- Recruit and train 50 individuals in ChargerHelp's EVSE Technician Training Program, with 25 trainees associated with each site and 10 percent recruited from local high schools and colleges, and deliver educational presentations about ZEVs, ZEV infrastructure, and ZEV careers to at least 1 high school and 1 college near each site.

TASK 1 ADMINISTRATION

Task 1.1 Attend Kick-off Meeting

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

The Recipient shall:

- Attend a "Kick-Off" meeting that includes the CAM and may include the Commission Agreement Officer (CAO) and a representative of the CEC Accounting Office. The Recipient shall bring their Project Manager, Agreement Administrator, Accounting Officer, and any others determined necessary by the Recipient or specifically requested by the CAM to this meeting.

- Provide a written statement of project activities that have occurred after the notice of proposed awards but prior to the execution of the agreement using match funds. If none, provide a statement that no work has been completed using match funds prior to the execution of the agreement. All pre-execution match expenditures must conform to the requirements in the Terms and Conditions of this Agreement.
- Discuss the following administrative and technical aspects of this Agreement:
    - Agreement Terms and Conditions
    - Critical Project Review (Task 1.2)
    - Match fund documentation (Task 1.7) No reimbursable work may be done until this documentation is in place.
    - Permit documentation (Task 1.8)
    - Subawards needed to carry out project (Task 1.9)
    - The CAM's expectations for accomplishing tasks described in the Scope of Work
    - An updated Schedule of Products and Due Dates
    - Monthly Calls (Task 1.4)
    - Quarterly Progress Reports (Task 1.5)
    - Technical Products (Product Guidelines located in Section 5 of the Terms and Conditions)
    - Final Report (Task 1.6)

Recipient Products:

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

Commission Agreement Manager Product:

- Kick-Off Meeting Agenda

Task 1.2 Critical Project Review (CPR) Meetings

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

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

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

The CAM shall:

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

The Recipient shall:

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

CAM Products:

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

Recipient Product:

- CPR Report(s)

Task 1.3 Final Meeting

The goal of this task is to closeout this Agreement.

The Recipient shall:

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

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

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

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

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

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

Products:

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

Task 1.4 Monthly Calls

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

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

The CAM shall:

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

The Recipient shall:

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

Product:

- Email to CAM concurring with call summary notes.

Task 1.5 Quarterly Progress Reports

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

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

The Recipient shall:

- Prepare a *Quarterly Progress Report* which summarizes all Agreement activities conducted by the Recipient for the reporting period, including an assessment of the ability to complete the Agreement within the current budget and any anticipated cost overruns. Progress reports are due to the CAM the 10th day of each January, April, July, and October. The Quarterly Progress Report template can be found on the ECAMS Resources webpage available at https://www.energy.ca.gov/media/4691.

Product:

- Quarterly Progress Reports

Task 1.6 Final Report

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

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

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

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

The Recipient shall:

- Prepare an *Outline of the Final Report*, if requested by the CAM.

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

Products:

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

Task 1.7 Identify and Obtain Matching Funds

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

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

The Recipient shall:

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

- Discuss match funds and the implications to the Agreement if they are reduced or not obtained as committed, at the kick-off meeting. If applicable, match funds will be included as a line item in the progress reports and will be a topic at CPR meetings.
- Provide the appropriate information to the CAM if during the course of the Agreement additional match funds are received.
- Notify the CAM within 10 days if during the course of the Agreement existing match funds are reduced. Reduction in match funds must be approved through a formal amendment to the Agreement and may trigger an additional CPR meeting.

Products:

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

Task 1.8 Identify and Obtain Required Permits

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

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

The Recipient shall:

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

- If during the course of the Agreement additional permits become necessary, provide the appropriate information on each permit and an updated schedule to the CAM.
- As permits are obtained, send a copy of each approved permit to the CAM.
- If during the course of the Agreement permits are not obtained on time or are denied, notify the CAM within 5 working days. Either of these events may trigger an additional CPR.

Products:

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

Task 1.9 Obtain and Execute Subawards

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

The Recipient shall:

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

Products:

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

TECHNICAL TASKS

TASK 2.1 ELECTRIC VEHICLE INFRASTRUCTURE TRAINING PROGRAM (EVITP) CERTIFICATION
for Charging Infrastructure Projects Only

The goal of this task is to comply with AB 841 certification requirements.

The Recipient shall:

- Submit an AB 841 Certification that certifies the project has complied with all AB 841 (2020) requirements specified in the Agreement Terms and Conditions or describes why the AB 841 requirements do not apply to the project. The certification shall be signed by Recipient's authorized representative.
- Submit EVITP Certification Numbers of each Electric Vehicle Infrastructure Training Program certified electrician that installed electric vehicle charging infrastructure or equipment. EVITP Certification Numbers are not required to be submitted if AB 841 requirements do not apply to the project.

Products:

- AB 841 Certification
- EVITP Certification Numbers

TASK 2.2 HYDROGEN REFUELING SAFETY PLAN

for Hydrogen Refueling Station Projects Only

The goal of this task is to develop a detailed hydrogen safety plan that the Recipient and any subrecipients or individuals involved in station construction, operation, and maintenance will follow throughout the project and as long as each station operates. The Recipient will collaborate with the Pacific Northwest National Laboratory (PNNL) Hydrogen Safety Panel (HSP) to ensure the plan is comprehensive and demonstrates a strong commitment to safety.

The Recipient shall:

- Submit the design of the stations to the PNNL HSP for review.
- Submit a *Written Notification of Completion* of PNNL HSP design review to the CAM.
- Develop a Preliminary Hydrogen Safety Plan and submit it to PNNL HSP for assessment. Provide a *copy of PNNL HSP's assessment* to the CAM.
- Discuss the PNNL HSP's assessment with members of the PNNL HSP.
- Evaluate the PNNL HSP's comments and determine how to address them in the final plan.
- Prepare a *memo* on how the PNNL HSP's comments will be addressed and provide a copy to the CAM.
- Collaborate with the PNNL HSP and CAM to resolve any questions or issues pertaining to the Hydrogen Safety Plan.
- Prepare a Final Hydrogen Safety Plan and submit it to PNNL HSP.
- Submit a *Written Notification of Submission of the Final Hydrogen Safety Plan to the PNNL HSP* to the CAM.

Products:

- Written notification of completion of PNNL HSP design review
- A copy of the PNNL HSP's assessment of the Preliminary Hydrogen Safety Plan for each station

- Memo describing how the PNNL HSP's comments will be addressed in the Final Hydrogen Safety Plan for both stations.
- Written notification of submission of the final Hydrogen Safety Plan to the PNNL HSP

TASK 3 COMMUNITY OUTREACH AND ENGAGEMENT

The goal of this task is to develop and implement a Community Outreach and Engagement Plan to ensure the meaningful engagement of local residents, community members, key stakeholders, and the general public regarding Prologis' ZEV infrastructure sites.

The Recipient shall:

- Develop a Community Outreach and Engagement Plan that describes the activities the Project Team will take to engage community members, along with key timelines and methods of feedback solicitation and analysis.
- Provide a copy of the *Community Outreach and Engagement Plan* to the CAM.
- Organize and hold publicly available community engagement presentation and discussion sessions to educate the public and solicit their feedback about the ZEV infrastructure sites. At least one presentation and discussion session will be held at each of the following project stages and for each of the two sites: initial planning and design, during construction, and after site commissioning.
- Provide *written notifications of completion for each community engagement and discussion session* (minimum of 3 sessions for each site) to the CAM.
- Translate publicly available presentation and discussion sessions in English and Spanish.
- Coordinate with the Community Outreach and Engagement Task Lead, which will help to promote, organize, and advertise community outreach events to local populations in Long Beach, CA and Commerce, CA, respectively.
- Organize and hold a publicly available tour of each infrastructure site after each has been constructed and commissioned.
- Provide *written notifications of completion for the two public tours*, one for each site to the CAM.
- Convene a Local Fleet Advisory Council comprised of key staff from fleets that domicile and operate vehicles near the two ZEV infrastructure sites. Hold meetings with the Local Fleet Advisory Council throughout the site development process to obtain feedback about development plans and their practicalities given on-the-ground realities for fleets operating in the region. Hold at least three meetings with the Council, including once after design and engineering plans have been drafted, once during construction, and once after site commissioning.
- Provide *written notification of completion of Local Fleet Advisory Council convening*.

Products:

- Community Outreach and Engagement Plan

- Written notifications of completion for each community engagement and discussion session (minimum of 3 sessions for each site)
- Written notifications of completion for the two public tours, one for each site
- Written notification of completion of each of the three meetings with the Local Fleet Advisory Council

TASK 4 INFRASTRUCTURE PLANNING, DESIGN, AND ENGINEERING

The goal of this task is to develop site plans, designs, and engineering documents, and to obtain all necessary permits required before commencing construction at each of the two infrastructure sites.

The Recipient shall:

- Develop all initial site layout plans, drawings, and renderings.
- Provide *site plans and engineering documents* to the CAM.
- Develop all necessary engineering documents, including but not limited to electrical plans, load requirements, single-line diagrams, civil engineering plans, and equipment specifications.
- Coordinate with the necessary utilities to establish electrical service agreements, complete infrastructure upgrades as needed, and establish grid interconnection.
- Provide *written notification of execution of electrical service agreements, completion of infrastructure upgrades, and establishment of grid interconnection* to the CAM.
- Develop and execute Procurement Plan. This plan will include, but is not limited to:
    - Complete list of procurements necessary for the project;
    - Procedures, steps, and timelines that will be followed to acquire the procurements necessary for the project.
- Provide a copy of the *Procurement Plan* to the CAM. CAM written approval to proceed with procurement is required.

Products:

- Site plans and engineering documents Written notification of execution of electrical service agreements, completion of infrastructure upgrades, and establishment of grid interconnection
- Procurement Plan

TASK 5 INFRASTRUCTURE CONSTRUCTION

The goal of this task is to complete all construction activities necessary to install and commission chargers, refueling equipment, and battery storage.

The Recipient shall:

- Develop and submit to the CAM a *Construction Management Plan* that includes details regarding key construction phases, tasks, activities, team members, schedules and milestones, detailed budgets, quality control and inspection, risk management, safety plans, and commissioning plans.
- Utilize the Construction Management Plan to coordinate installation of the following equipment:
    - In Commerce, CA:
        - At least eleven (11) charging islands each containing two (2) dual-port chargers with 600 kW charging power per island (forty-four (44) EVSE charging ports)
        - At least three (3) MWh Battery Energy Storage System (BESS)
        - At least two (2) hydrogen dispensers
    - In Long Beach, CA:
        - At least six (6) charging islands each containing two (2) dual-port chargers with 600 kW charging power per island (twenty-four (24) EVSE charging ports)
        - At least two (2) MWh BESS
        - Make-ready equipment, which will include a trailer-mounted tank and dispenser ("mobile fueler") parked in a designated parking space with available parking on each side of the trailer for maximum flexibility, space efficiency, and cost effectiveness. The make-ready equipment will:
            - Use electric power provided by the Prologis charging island that sits at the head of each parking spot.
            - Be interconnected via “make ready infrastructure” - an underground pre-cast trench system, allowing cabling and piping to be accessed without tearing up the pavement, and which can be upgraded to accommodate future technology including the megawatt charging standard (MCS), which increases charging speeds.
            - Be shared by both the EV charging infrastructure and the hydrogen infrastructure.
- Prepare each site location by:
    - Preparing and/or upgrading electrical infrastructure
    - Performing any required earthwork/trenching/boring
    - Pouring concrete pads
    - Installing conduit, wiring, lighting, and security features
    - Patching and sealing any concrete, asphalt, or other surfaces impacted by trenching
    - Ensuring site is restored to a condition consistent with or better in appearance than original site

- Schedule delivery and installation of charging systems and battery energy storage systems to both sites
- Schedule delivery and installation of hydrogen dispensers to the site in Commerce

- Install chargers, refueling equipment, and battery energy storage systems.
- Provide *high quality photographs of all installed chargers, refueling equipment, and battery energy storage systems* to the CAM.

Products:

- Construction Management Plan
- High quality photographs of all installed chargers, refueling equipment, and battery energy storage systems

[CPR WILL BE HELD IN THIS TASK, see Task 1.2 for details]

TASK 6 INFRASTRUCTURE COMMISSIONING

The goal of this task is to test and commission the equipment and infrastructure installed prior to commencing site operations.

The Recipient shall:

- Develop and submit to the CAM an *Infrastructure Commissioning Plan* that includes planned tests and procedures to verify the proper functionality and safety of all installed EV charging equipment, hydrogen dispensing equipment, battery energy storage systems, power generation equipment, and other associated infrastructure.
- Commence and complete testing and commissioning per the Infrastructure Commissioning Plan.
- Prepare an *Infrastructure Commissioning Report,* which will include but is not limited to:
  - Acceptance Test Plan for each piece of equipment
  - Tests to verify acceptance that equipment meets specifications
  - Verification with vehicle manufacturers that charging and refueling equipment is supporting vehicle technology
- Provide a *Written Notification of Intent to Operate* prior to the start of operations and provide a copy to the CAM.

Products:

- Infrastructure Commissioning Plan
- Infrastructure Commissioning Report
- Written Notification of Intent to Operate

[CPR WILL BE HELD IN THIS TASK, see Task 1.2 for details]

TASK 7 WORKFORCE PLAN

The goal of this task is to develop a Workforce Plan.

The Recipient shall:

- Develop a Workforce Plan that includes, but is not limited to:
    - Enrollment of at least 50 EVSE technician trainees in ChargerHelp's EVSE technician training program, including 25 associated with the Long Beach site and 25 associated with the Commerce site.
    - Development and delivery of educational presentations for students at high schools and colleges, as recommended by the local school districts, to educate on ZEVs and ZEV careers, to recruit students to participate in ChargerHelp's EVSE technician training.
    - Outreach and engagement efforts aimed at job recruitment, job-placement strategies, and local hiring especially from those facing employment barriers and residents from disadvantaged and/or low-income communities and individuals whose income is below poverty.
    - Recruitment of pre-apprentices from Division of Apprenticeship Standards (DAS) approved pre-apprenticeship programs.
    - Number of direct and indirect jobs created by the project with calculations and assumptions.
    - Support for job quality by providing estimated total number of workers to be trained and/or hired; job classifications or titles; job classifications' specific role(s) in the project; wage rates and benefits; share of jobs that are short-duration positions (less than 12 months) and long-term positions (12 months or more).
    - Promotion of training and upward mobility including benefits to workers from disadvantaged and/or low-income communities, an estimate of the number of training hours during the project, and workforce training partnerships with local community-based organizations, workforce development boards, and high road training partnerships which can include State-approved Joint Apprenticeship Training Programs.
    - How job training, placement and employment will lead to careers with living wages, health care, and other benefits.
    - Experience respecting and implementing labor laws including workers right to organize.
- Provide a copy of the *Workforce Plan* to the CAM.
- Provide a *written notification of completion of hiring* at least 50 EVSE technician trainees, 25 associated with each site to the CAM.

Products:

- Workforce Plan
- Written notification of completion of hiring at least 50 EVSE technician trainees, 25 associated with each site

TASK 8 OPERATIONS AND RELIABILITY

Recipients shall comply with the reliability performance standards, recordkeeping, reporting, and maintenance requirements (Requirements) for EV chargers installed as part of this Agreement. In the event the CEC adopts regulations that include Requirements, for example as required by AB 2061 (Ting, Chapter 345, Statutes of 2022) and/or AB 126 (Reyes, Chapter 319, Statutes of 2023), those Requirements shall supersede the Requirements contained in this Scope of Work for this Agreement wherever, as determined by the CAM, they conflict or are redundant.

Task 8.1 Operations

The Recipient shall:

- Operate the installed charging ports during the term of this agreement.
- Ensure that the charging port uptime for each charging port installed in the project is at least 97 percent of each year for six years after the beginning of operation.
- Provide a plan explaining how hydrogen stations will maximize uptime with a goal of 95% uptime.

Without limitation to other rights and remedies which the CEC may have, including but not limited to survival provisions specified in the Terms and Conditions of this Agreement, this requirement to ensure operationality for six years after the beginning of operation shall survive the completion or termination date of this Agreement. In addition to other requirements in the Terms and Conditions of this Agreement, all CEC-reimbursable expenditures must be incurred within the Agreement term.

Products:

- Hydrogen stations: A plan explaining how uptime will be maximized, with a goal of 95% uptime.

Task 8.2 Recordkeeping

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

For networked chargers, the Recipient shall collect and retain the maintenance records specified in this section. The 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 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 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 change.

    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:

- 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 this Agreement.
- 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 to the CEC 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 Agreement for 6 years from the date the charging port begins operation. Provide *Maintenance Records* to the CEC 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 charging 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 complaint, internal diagnostics, or inspection.
2. For all chargers, records of any maintenance conducted on charging ports installed and operated as part of the agreement. Records should specify the following:
    a. Date and time of the maintenance event.
    b. Whether maintenance was corrective or preventive in nature.
    c. Whether and for how long the charging port was in an inoperative state prior to maintenance.
    d. Whether the charging port was in an operative state following maintenance.

Products:

- Remote Monitoring Records
- Remote Monitoring Data
- Maintenance Records
- Data Dictionary

Task 8.3 Maintenance Requirements

The goal of this task is to increase reliability through timely and effective preventive and corrective maintenance. The Recipient shall conduct maintenance on each charger installed and operated as part of the Agreement as specified in this section.

The Recipient Shall:

- Conduct preventive maintenance, as specified by the charger manufacturer, on the charger hardware by a 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 is inoperative or exhibiting failures that result in an inability to charge.
- *Report on preventive and corrective maintenance in each Quarterly Report on Charger and Charging Port Reliability and Maintenance* described in Task 8.4.

Products:

- Maintenance section of Quarterly Report on Charger and Charging Port Reliability and Maintenance described in Task 8.4

Task 8.4 Reporting

The goal of this task is to provide the CEC reports on charger reliability and maintenance.

The Recipient shall:

- Prepare and submit to the CEC *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 during the reporting period. 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.

- Prepare and submit to the CEC 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 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 Preventive Maintenance or Upgrade:** Downtime caused by any preventive 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 preventive 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 charger(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,** 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 this Agreement for the reporting period. Charging port uptime shall be calculated as:

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

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

- **For networked charging ports**, prepare a summary of charge data and include in each Quarterly Report on Charger and Charging Port Reliability and Maintenance. 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,** 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. Include details of all excluded downtime and a narrative description of events that caused the excluded downtime. Include the summary in each Quarterly Report on Charger and Charging Port Reliability Maintenance.

Products:

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

TASK 9 SEMI-ANNUAL ELECTRIC VEHICLE CHARGER INVENTORY REPORTS

The goal of this task is to provide information on the number of chargers in the Recipient's charging network in California, including both public and shared private, serving all vehicle sectors (light-, medium-, and heavy duty) excluding any charger used solely for private use at a single-family residence or a multifamily housing unit with four or fewer units.

The Recipient shall:

- Prepare an Electric Vehicle Charger Inventory Report, in a template provided by the CAM, that includes:
  - For chargers serving light-duty electric vehicles:
    - Number of public AC charging ports aggregated at the county level by charging network provider
    - Number of shared private AC charging ports aggregated at the county level by charging network provider
    - Number of public DC fast charging ports aggregated at the county level by charging network provider
    - Number of shared private DC fast charging ports aggregated at the county level by charging network provider
  - For chargers serving medium- and/or heavy-duty vehicles:
    - Number of public AC charging ports aggregated at the county level by charging network provider
    - Number of shared private AC charging ports aggregated at the county level by charging network provider
    - Number of public DC fast charging ports aggregated at the county level by charging network provider
    - Number of shared private DC fast charging ports aggregated at the county level by charging network provider
    - Number of other publicly available charging ports at the county level by charging network provider
    - Number of other depot charging ports by power output (less than 50 kilowatts (kW), between 50kW to 150kW,150kW to 350kW, 350kW and above) at the county level by charging network provider (if applicable)
  - Submit the *Electric Vehicle Charger Inventory Report* to the CAM, no later than 30 calendar days after the Agreement is executed and then each calendar half-year thereafter. Reports are due at the end of July and end of January.

Recipient Product:

- Electric Vehicle Charger Inventory Reports

TASK 10 DATA COLLECTION AND ANALYSIS

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

The Recipient shall:

- For all electric vehicle chargers and charging stations installed on or after January 1, 2024:
    - Comply with recordkeeping and reporting standards as described in CEC's regulations.
    - Comply with all industry best practices and charger technology capabilities that are demonstrated to increase reliability, as described in CEC's regulations.
    - Without limitation to other requirements in this Agreement, Recipient shall comply with any other regulatory requirements, including but not limited to uptime requirements and operation and reliability requirements. Such regulatory requirements may, but will not necessarily, be enacted after execution of this Agreement. Once regulations are final, they will apply to work under this Agreement irrespective of when finalized. Any updates to regulations may also be applicable to work under this Agreement.
    - If the Recipient is an electric vehicle service provider or other third-party entity that is not the site host, the electric vehicle service provider or third-party entity shall provide a disclosure to the site host about the site host's right to designate the service provider or third-party as the entity to report the data on behalf of the site host. The Recipient shall verify receipt by signing the disclosure.
- For all hydrogen refueling stations:
    - Complete and submit the *NREL Data Collection Tool* for each hydrogen refueling station once the station becomes open retail and continue to do so every quarter until one year after the final station in the Recipient's project becomes open retail.
    - Perform and submit *results of purity testing* using hydrogen collected at the nozzle for each hose at each open retail hydrogen refueling station. Purity tests for each station in the Recipient's project will be performed:
        - At the time the station becomes open retail (to meet the open retail definition).
        - Every six months after the station becomes open retail during the approved term of this Agreement.
        - As needed when the hydrogen lines are potentially exposed to contamination due to maintenance or other activity.

Hydrogen purity readings shall be collected according to CCR Title 4 Business Regulations, Division 9 Measurement Standards, Chapter 6 Automotive Products Specifications, Article 8 Specifications for Hydrogen Used in Internal Combustion Engines and Fuel Cells, Sections 4180 and 4181.

- Identify the source of the hydrogen using the *Renewable Hydrogen Report* template.
- Comply with the Petroleum Industry Information Reporting Act (PIIRA) and complete *CEC Form A15* on an annual basis for submission to the CEC's PIIRA Data Collection Unit (https://a15.energy.ca.gov/).
- Once charging/refueling station becomes operational, submit to the CAM an *Open Retail Attestation Form* within 5 business days.
- 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 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 reports described in Task 1.5.
    - For an electric vehicle charging station, the source and greenhouse gas emissions intensity, on an annual basis, of the electricity used and dispensed by the EV charging station(s) at the meter, consistent with the disclosure methodology set forth in Article 14 (commencing with Section 398.1) of Chapter 2.3 of Part 1 of Division 1 of the Public Utilities Code. Data must be reported to the CEC annually in a *AB 126 Data Report* specified by the CAM.
- Collect and provide the following data:
    - Number, type, date, and location of chargers and/or hydrogen refueling stations installed.
    - Nameplate capacity of the installed equipment, in kW for chargers and in kilograms per day (kg/day) for hydrogen.

    - Number and type of outlets per charger and/or number of fueling positions per station.
    - Location type, such as street, parking lot, hotel, restaurant or shopping center, existing retail gasoline station, etc.
    - Total cost per charger and/or hydrogen refueling station, the subsidy from the CEC per charger and/or refueling station, federal subsidy per charger and/or refueling station, utility subsidy per charger and/or refueling station, and privately funded share per charge and/or refueling station.
    - Total kWh electricity consumption by MDHD ZEVs from the site within the term's operational period.
- Identify and discuss the results of performance data measured and collected in the Workforce Plan.
- Collect and provide 12 months of throughput, usage, and operations data from the project including, but not limited to:
    - The data requested in the NREL Data Collection
    - Number of charging and/or refueling sessions
    - Average charger and/or refueling station downtime
    - Peak power delivered (kW)
    - Duration of active charging, hourly
    - Duration of charging sessions, hourly (e.g., vehicle parked but not actively charging)
    - Average session duration
    - Energy delivered (kWh)
    - Average kWh or kg dispensed
    - Types of vehicles using the charging equipment and/or hydrogen refueling station equipment
    - Applicable price for charging, including but not limited to electric utility tariff, EVSP service contract, or public charger price and/or applicable retail price for hydrogen fuel
    - Payment method for public charging
    - Energy delivered back to grid or station if a bidirectional charging use case (kWh)
    - Normal operating hours, uptime, downtime, and explanations of variations
    - Gallons of gasoline and/or diesel fuel displaced (with associated mileage information)
    - Expected air emissions reduction, for example:
        - Non-methane hydrocarbons
        - Oxides of nitrogen
        - Particulate Matter
        - Formaldehyde
- Provide calculations on how many lbs. of carbon emissions was reduced and how many short tons of GHG was reduced.
- Identify any current and planned use of renewable energy at both stations.
- Provide data on potential job creation, economic development, and increased state revenue as a result of expected future expansion.
- Compare any project performance and expectations provided in the proposal to CEC with actual project performance and accomplishments.
- Collect and provide 12 months of throughput, usage, and operations data from the project including, but not limited to, for each session:

Category	Field	Desired Data Type
Sites	Site ID	Hash key
Sites	Site Name	Varchar
Sites	Site Type	Varchar
Sites	EVSP	Varchar
Sites	Street Address	Varchar
Sites	City	Varchar
Sites	State	Varchar
Sites	Zip	Varchar
Sites	Latitude	Decimal
Sites	Longitude	Decimal
Sites	Number of EVSEs	Varchar
Sites	Number of Ports	Varchar
EVSE	EVSE ID	Hash key
EVSE	EVSE Manufacturer	Varchar
EVSE	EVSE Model Number	Varchar
EVSE	EVSE Maximum kW	Integer
EVSE	EVSE Number of Ports	Integer
EVSE	EVSE Power Level	Varchar
Ports	Port ID	Hash key
Ports	Port Maximum kW	Integer
Ports	Connector Type	Varchar
Sessions	Session ID	Hash key
Sessions	Charge Duration	Varchar (HH:MM:SS)
Sessions	Charge Session Start Date	Date
Sessions	Charge Session Start Time	Time
Sessions	Charge Session End Date	Date
Sessions	Charge Session End Time	Time
Sessions	Disconnect Reason	String
Sessions	Connection Duration	Varchar (HH:MM:SS)
Sessions	Idle Duration	Varchar (HH:MM:SS)
Sessions	Energy Consumed	Decimal
Sessions	Charge Peak Demand	Decimal
Sessions	Charge Average Demand	Decimal
Sessions	Total Transacted Amount (Driver)	Currency
Sessions	Payment method	Character

Sessions	Driver ID	Hash key
Sessions	Vehicle Make, if known	Varchar
Sessions	Vehicle Model, if known	Varchar
Sessions	Vehicle Year, if known	Integer
Sessions	Vehicle Type, if known	Character

- Provide a *Data Collection and Information Analysis Report* that lists and analyzes all the data and information described above.

Products:

- NREL Data Collection Tool
- Initial, biannual, and as needed hydrogen purity test results
- CEC Form A15 annually
- Open Retail Attestation Form
- AB 126 Data Reports
- Data Collection Information and Analysis Report
- Renewable Hydrogen Report

TASK 11 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