California Energy Commission
November 13, 2024 Business Meeting
Backup Materials for Greenlane Infrastructure, 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: 24-1113-03d

STATE OF CALIFORNIA

STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION

RESOLUTION: Greenlane Infrastructure, 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-23-024 with Greenlane Infrastructure, LLC for a $10,000,000 grant. This agreement will install 69 EV DCFC ports across two corridor sites along Interstates 10 and 215 in Colton and Interstate 15 in Barstow to provide publicly-available charging for medium- and heavy-duty zero-emission vehicles and support workforce development of adjacent communities with engagement efforts to promote job training and recruitment; 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 November 13, 2024.

AYE:
NAY:
ABSENT:
ABSTAIN:

Dated:

_____
Kristine Banaag
Secretariat

STATE OF CALIFORNIA
CALIFORNIA ENERGY COMMISSION

CEC-270 (Revised 01/2024)

GRANT REQUEST FORM (GRF)

A. New Agreement Number

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

New Agreement Number: ZVI-23-024

B. Division Information

1. Division Name: Fuels and Transportation
2. Agreement Manager: Vivian Nguyen
3. MS-: 27
4. Phone Number: (916) 244-9673

C. Recipient's Information

1. Recipient's Legal Name: Greenlane Infrastructure, LLC
2. Federal ID Number: 92-0689041

D. Title of Project

Title of project: Introducing Zero-Emission Movement to the Inland Empire

E. Term and Amount

1. Start Date: 11/13/2024
2. End Date: 08/15/2027
3. Amount: $10,000,000

F. Business Meeting Information

1. Are the ARFVTP agreements $75K and under delegated to Executive Director? No
2. The Proposed Business Meeting Date: 11/13/2024
3. Consent or Discussion? Consent
4. Business Meeting Presenter Name: Vivian Nguyen
5. Time Needed for Business Meeting: 5 minutes
6. The email subscription topic is: Altfuels

Agenda Item Subject and Description:

Greenlane Infrastructure, LLC. Proposed resolution conditionally approving agreement ZVI-23-024 with Greenlane Infrastructure, LLC for a $10,000,000 grant to install 69 direct current fast charger ports across two corridor sites in Colton and Barstow, CA, and adopting staff's recommendation that this action is exempt from CEQA. This project will provide publicly available charging for medium- and heavy-duty zero-emission vehicles along Interstate 10, 15, and 215, and will also support the workforce development of adjacent communities with engagement efforts to promote job training and recruitment. (General Fund Funding) Contact: Vivian Nguyen

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?

Yes

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: 14 C.C.R. § 15177 and 14 CCR § 15061(b)(3)

Categorical Exemption?

Not except for as the City of Barstow and City of Colson may have concluded.

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

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

Yes

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

City of Barstow Project Site
In its CEQA Notice of Exemption (NOE), dated August 6, 2024, the City of Barstow's Planning & Community Development Administrator described the project as, "The proposed private project involves the construction and operation of an EV charging site for dedicated use by electric semi-trucks. The project site is located along High Point Parkway . . . in the City of Barstow and is vacant and undeveloped. . . . EV charging site would include 26 EV charging stalls for dedicated use by electric semi-trucks, 26 non-charging stalls (or pull-through lanes) designated for electric semi-trucks, canopies to partially cover the pull-through lanes, 14 passenger vehicle parking spaces, an amenity building with an initial footprint of 2,500 square feet, with the possibility of expanding by an additional 5,000 square feet by the end of the decade, and on-site retention pond." The City of Barstow's NOE further states, "The proposed private project is consistent with the City's 2014 Master Environmental Impact Report (EIR) and development of the project is within the parameters considered in the EIR. The proposed project would have no new significant environmental impact beyond those identified in the 2014 Master EIR. The project is consistent with the applicable general plan designations and all general plan policies and zoning designation and regulations. This project is exempt from the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines§15177, 15377, and 15379, no further CEQA analysis is required."

The cited CEQA Guidelines sections are: § 15177, regarding subsequent projects within the scope of a Master EIR; § 15377, providing a definition for "private project;" and §15379, with a definition of "public agency" under CEQA.

Besides the NOE, CEC staff reviewed related documents, including, but not limited to: The City of Barstow's Building Official/Fire Marshal's Finding of Consistency memorandum regarding the Barstow EV Station, dated May 12, 2024. This memorandum shows consistency of the project with the City's General Plan Elements, in part, based on prior environmental impact analysis in the City of Barstow General Plan Revision Master EIR of 2014-2015. Also, the Recipient provided a Biological Resources Letter Report by Rincon Consultants, Inc. (Aug. 2023) showing that the highly disturbed and previously graded site has no biological resources of concern. In addition, the Recipient's proposal included information about historic, cultural, environmental pollution (i.e., recent desktop review for contamination) and other environmental conditions at the Barstow site, supporting a conclusion of no potential environmental impacts.

Based on review of the City of Barstow's NOE and related materials, the CEC's action of issuing a grant to support the project is exempt from CEQA based on 14 C.C.R. § 15177, regarding subsequent projects within the scope of a Master EIR, and, based on the extensive administrative and technical record provided by the City of Barstow and the Recipient, under 14 CCR § 15061(b)(3), the common sense exemption.

City of Colton Project Site
The Colton project site is generally flat, with the western portion covered with a surface parking lot and the eastern portion undeveloped. The site includes sparse vegetation including shrubs and trees. The proposed facilities include approximately 19 pull-though EV charging stations, 6 back-in EV charging stations, and 29 bob-tail EV charging stations, for a total of 54 electric truck stations, and approximately 8 light-duty vehicle EV charging stations. The project would also include an accessory 3,000 square-foot travel center and amenities building, utility power upgrades, stormwater retention areas, 38 passenger vehicle parking spaces, and an approximately 0.5 to 1.5-MW battery energy storage (BESS).

On May 21, 2024, the City Council of Colton unanimously approved a Zoning Text Amendment to allow "Electric Vehicle Charging Stations/Hydrogen Vehicle Charging Station" uses within certain zoning designations, including that of the project site. Supporting this action, the City of Colton's Development Services Department provided a staff report to the Planning Commission, dated April 23, 2024 regarding the Zoning Amendment. The report concluded that the amendment was exempt from CEQA under 14 CCR § 15061(b)(3), the common sense exemption, "due to the certainty that there is no possibility that the action will have a significant effect on the environment" (Planning Commission meeting agenda, April 23, 2024).

Besides the Zoning Amendment documents, the CEC staff reviewed related documents, including, but not limited to a "Greenlane Colton Mixed Clean Fuel Facility Project: Statutory Exemption Report" prepared by Rincon Consultants (Aug. 2024). This report supports the City of Colton's conclusion that for the City, approval of the project is only ministerial; and therefore, exempt under 14 CCR §15268, Ministerial Projects.

Also, the Recipient provided a Technical Memorandum: Biological and Habitat Review regarding the Colton project site by GHD consultants (Oct. 2023) indicating the "area is a flat and open previously disturbed site and is characterized by paved surfaces, dirt, and sparse vegetation containing shrubs and small trees. There is minimal suitable habitat within the Project area to support plant and wildlife species. . . . there is no critical habitat for listed species within the Project boundaries or adjacent to the site." In addition, the Recipient's proposal includes information about historic, cultural, environmental pollution (i.e., recent review for contamination) and other environmental conditions at the Colton site, supporting a conclusion of no potential environmental impacts.

Based on review of the City of Colton's Zoning Amendment staff report and related materials, the CEC's action of issuing a grant to support the project is exempt from CEQA based on the extensive administrative and technical record provided by the City of Colton and the Recipient, under 14 CCR § 15061(b)(3), the common sense exemption.

Project as a Whole
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.

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
NextEra Energy Resources Development, LLC	$ 0	**$** 5,015,246

J. Vendors and Sellers for Equipment and Materials/Miscellaneous

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

Vendor/Seller Legal Company Name	CEC Funds	Match Funds
TBD	$10,000,000	$1,613,566
TBD	$0	$533,287
TBD	$0	$3,954,809
Alptronics	$0	$1,977,220
Power Electronics	$0	$1,377,500

K. Key Partners

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

Key Partner Legal Company Name
Daimler Truck North America, LLC
NextEra Energy Resources, LLC

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	2021-22	601.129ZEV	$10,000,000

TOTAL Amount: $10,000,000

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: Joe Colett

Address: 4555 N Channel Ave

City, State, Zip: Madras, OR 97217

Phone: (971) 421-9519

E-Mail: joseph.colett@daimlertruck.com

2. Recipient’s Project Manager

Name: Joe Colett

Address: 4555 N Channel Ave

City, State, Zip: Madras, OR 97217

Phone: (971) 421-9519

E-Mail: joseph.colett@daimlertruck.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 #	No Applicable
Other	Not Applicable

O. Attached Items

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

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

Approved By

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

Agreement Manager: Vivian Nguyen

Approval Date: 3/15/2024

Office Manager: Elizabeth John

Approval Date: 3/15/2024

Deputy Director: Melanie Vail

Approval Date: 3/22/2024

Exhibit A
SCOPE OF WORK

TECHNICAL TASK LIST

Task #	CPR	Task Name
1		Administration
2		Electric Vehicle Infrastructure Training Program (EVITP) Certification
3		Utilities Coordination
4		Engineering
5		EVSE Equipment Procurement
6	X	Pre-Construction, Construction, and Commissioning
7	X	Conduct Community Outreach
8		Workforce Plan
9		Operations and Reliability
10		Semi-Annual Electric Vehicle Charger Inventory Reports
11		Data Collection and Analysis
12		Project Fact Sheet

KEY NAME LIST

Task #	Key Personnel	Key Subcontractor(s)	Key Partner(s)
1	Patrick Macdonald-King, Greenlane		
2	Nate Hill, Daimler Truck North America Patrick Macdonald-King, Greenlane Andrea Pratt, Greenlane Olivier Ducoup, NextEra Steve Reneker, NextEra		
3	Patrick Macdonald-King, Greenlane Andrea Pratt, Greenlane Olivier Ducoup, NextEra		Southern California Edison City of Colton Electric Utility

Task #	Key Personnel	Key Subcontractor(s)	Key Partner(s)
	Nicole Efron, NextEra Steve Reneker, NextEra Joe Colett, Daimler Truck North America Jon Worley, Daimler Truck North America		
4	Olivier Ducoup, NextEra Nicole Efron, NextEra Jon Worley, Daimler Truck North America Mark Prohaska, NextEra Kaitlyn Toebe, NextEra		
5	Olivier Ducoup, NextEra Nicole Efron, NextEra Rob Fox, NextEra Steve Reneker, NextEra Mark Prohaska, NextEra		
6	Olivier Ducoup, NextEra Nicole Efron, NextEra Rob Fox, NextEra Steve Reneker, NextEra		
7	Patrick Macdonald-King, Greenlane Andrea Pratt, Greenlane		
8	Patrick Macdonald-King, Greenlane Andrea Pratt, Greenlane		
9	Patrick Macdonald-King, Greenlane Andrea Pratt, Greenlane		
10	Olivier Ducoup, NextEra Rob Fox, NextEra		

Task #	Key Personnel	Key Subcontractor(s)	Key Partner(s)
	Jon Worley, Daimer Truck North America		
11	Olivier Ducoup, NextEra Rob Fox, NextEra Jon Worley, Daimer Truck North America		
12	Patrick Macdonald-King, Greenlane Andrea Pratt, Greenlane Joe Colett, Daimler Truck North America Chase Meadows, Daimler Truck North America		

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 from 208 volts to 240 volts and transfers AC electricity to a device in an electric vehicle (EV) that converts AC to direct current to charge an EV battery.
ADA	Americans with Disabilities Act
AHJ	Authority Having Jurisdiction
API	Application programming interface (API). 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
CCEU	City of Colton Electric Utility
CEC	California Energy Commission

Term/ Acronym	Definition
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 electric vehicles. 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.
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 electric vehicle. A charging port may have multiple connectors, but it can provide power to charge only one electric vehicle through one connector at a time.
Charging Session	The period after a charge attempt during which the electric vehicle is allowed to request energy. Charging sessions can be terminated by the customer, the electric vehicle, 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.

Term/ Acronym	Definition
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 (DCFC). 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)
DER	Distributed Energy Resources
Downtime	A period of time that a charger is not capable of successfully dispensing electricity or otherwise not functioning as designed. Downtime is calculated pursuant to Task 9.4.
DTNA	Daimler Truck North America
EV	Electric vehicle. A vehicle that is either partially or fully powered on electric power received from an external power source. For the purposes of this Agreement, this definition does not include golf carts, electric bicycles, or other micromobility devices.
EVSE	Electric vehicle supply equipment (EVSE). A charger as defined.
Excluded Downtime	Downtime that is caused by events pursuant to Task 9.4.
Failed Charging Session	Following a charge attempt, the criteria for a successful charging session were not met.
FTD	Fuels and Transportation Division

Term/ Acronym	Definition
Hardware	The machines, wiring, and other physical components of an electronic system including onboard computers and controllers.
Inoperative State	The charger or charging port is not operational.
Installed	Attached or placed at a location and available for use for a charging session. The date a charger is installed is the date it is first available for use for a charging session.
Interoperability	Successful communication between the software, such as the software controlling charging on the EV and the software controlling the charger. Interoperability failures are communication failures between the EV and charger that occur while the software of each device is operating as designed. Interoperability failure leads to failed charging sessions.
LD	Light-Duty
Maintenance	Any instance in which preventive or corrective maintenance is carried out on equipment.
MDHD	Medium-Duty and Heavy-Duty
NEER	NextEra Energy Resources
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 (OCPP). 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	A state indicating the charger is operational and available to charge or currently charging.
Operative State	A state in which the charger is operational and available to charge or currently charging.
PNNL	Pacific Northwest National Laboratory
Preventive Maintenance	Maintenance that is regularly and routinely performed on physical assets to reduce the chances of equipment failure and unplanned machine downtime.

Term/ Acronym	Definition
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	Greenlane Infrastructure, LLC
RFP	Request for Proposal
SCE	Southern California Edison
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 9.4.

Background

The Budget Act of 2021 (Assembly Bill (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 California Energy Commission (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 #18 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 the U.S. Department of Energy's Alternative Fuels Data Center (AFDC), there is a dearth of publicly accessible charging infrastructure for medium- and heavy-duty zero-emission vehicles (MDHD ZEV) on the I-215 to I-15 corridor running between the Inland Empire, and the California / Nevada border. The region's highways are critical corridors for the movement of goods and people, yet petroleum dependency creates increasingly detrimental air quality and public health impacts. The United States, and California in particular, consumes large volumes of and has a major dependence on petroleum fuels in the transportation sector. Indeed, 27% of the US's energy is consumed by the transportation sector and 90% of the transportation sector's energy comes from petroleum sources. The State of California has established a goal of being carbon neutral by 2035, yet currently faces some of the most serious and persistent air quality challenges in the nation. Furthermore, climate change is making this area more susceptible to extreme weather events, such as droughts and wildfires.

Goals of the Agreement:

The goal of this Agreement is to deploy two (2) MDHD ZEV charging complexes in Barstow and Colton, California and along Interstate 10, 15, and 215. The charging complexes will reduce petroleum consumption, generate air quality benefits, and abate carbon emissions from the transportation sector. As a result, upward mobility will increase through a new highly trained and skilled workforce in and around disadvantaged communities.

Objectives of the Agreement:

The objectives of this Agreement are to:

- Permit, design, engineer, procure, construct, and commission sixty-nine (69) safe, fully operational, and highly utilized direct current fast charger (DCFC) ports across Greenlane's Barstow and Colton, California locations.
- Develop a workforce plan that will support and promote job training and recruitment in the adjacent communities of the Barstow and Colton sites.

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 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 subaward (if requested)
- Final subaward (if requested)

TECHNICAL TASKS

TASK 2 ELECTRIC VEHICLE INFRASTRUCTURE TRAINING PROGRAM (EVITP) CERTIFICATION

The goal of this task is to comply with Assembly Bill (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 3 UTILITIES COORDINATION

The goal of this task is to liaise with SoCal Edison and City of Colton Electric Utility to manage grid interconnection, determine load and secure power at each site.

Task 3.1 – Barstow Utilities Coordination

The Recipient shall:

- Conduct load reserve study.
- Compile and submit utilities' *load reserve requirements* and provide a copy to the CAM.
- Execute a *power contract* and provide a copy to the CAM.
- Develop an *Interconnection Plan and Schedule* and provide a copy to the CAM.
- Coordinate with the utility providing service to evaluate interconnection options and requirements.
- Develop a report which includes engineering drawings and definitions and agree upon plan with the utility to meet all interconnection requirements.

Products:

- Load reserve requirements
- Executed power contract
- Interconnection Plan and Schedule

Task 3.2 – Colton Utilities Coordination

The Recipient shall:

- Conduct load reserve study.
- Compile and submit utilities' *load reserve requirements* and provide a copy to the CAM.
- Execute a *power contract* and provide a copy to the CAM.
- Develop an *Interconnection Plan and Schedule* and provide a copy to the CAM.
- Coordinate with the utility providing service to evaluate interconnection options and requirements.
- Develop a report which includes engineering drawings and definitions and agree upon plan with the utility to meet all interconnection requirements.

Products:

- Load reserve requirements
- Executed power contract
- Interconnection Plan and Schedule

TASK 4 ENGINEERING

The goal of this task is to properly design the charging stations to begin construction at each site.

Task 4.1 Barstow Engineering

The Recipient shall:

- Analyze competitive and potential engineering contractors.
- Select final engineering contractors.
- Provide input to station design and equipment specifications.
- Provide an *engineering design initial draft* to the CAM.
- Complete engineering design.
- Provide an *engineering design final draft* to the CAM.
- Complete engineering design review.
- Obtain an *Issue for Construction* and provide a copy to the CAM.

Products:

- Engineering design initial draft
- Engineering design final draft
- Issue for Construction document

Task 4.2 Colton Engineering

The Recipient shall:

- Analyze competitive and potential engineering contractors.
- Select final engineering contractors.
- Provide input to station design and equipment specifications.
- Provide an *engineering design initial draft* to the CAM.
- Complete engineering design.
- Provide an *engineering design final draft* to the CAM.
- Complete engineering design review.
- Obtain an *Issue for Construction* and provide a copy to the CAM.

Products:

- Engineering design initial draft
- Engineering design final draft
- Issue for Construction document

TASK 5 EVSE EQUIPMENT PROCUREMENT

The goal of this task is to purchase and obtain all equipment, supplies and services to support the installation of 69 DCFC ports including 20 dual port and 29 single port chargers.

The Recipient shall:

- Evaluate EVSE equipment and other long-lead items.
- Select contractor(s) and vendor(s).
- Issue purchase order.
- Provide copies of *purchase orders with vendors/service providers and spec sheets* for final EVSE hardware procured to the CAM.
- Obtain manufacturer lead time.
- Develop a Final Charging Hardware and Electric Truck Availability and Procurement Report that shall include but not be limited to:
    - Commercially available bi-directional chargers considered
    - Vendor and model selection criteria and quotes for charging equipment
    - Communications and hardware compatibility evaluation
    - Minimum truck usage requirements for the site
    - Commercially available electric trucks considered
    - Specifications of customers' trucks, including charging and communications standards
- Provide a copy of the *Final Charging Hardware and Electric Truck Availability and Procurement Report* to the CAM.

Products:

- Purchase orders with vendors/service providers and spec sheets for final EVSE hardware procured
- Final Charging Hardware and Electric Truck Availability and Procurement Report

TASK 6 PRE-CONSTRUCTION, CONSTRUCTION, AND COMMISSIONING

The goal of this task is to complete all construction activities safely and efficiently, deploy 69 DCFC ports (20 dual port chargers in Barstow and 29 single port chargers in Colton), and deploy other hardware at the two project sites. Following site energization under this Task, all chargers at each site will be fully operational and ready for commercial use.

Task 6.1 Barstow Pre-Construction

The Recipient shall:

- Mobilize construction.
- Perform necessary pre-charging infrastructure construction activities including:

- Site preparation and clearing, including removal of debris and vegetation, installation of security fencing, and other tasks
- Grading and surface preparation activities
- Excavation work, including removal of top soil for underground utilities pathways and equipment foundations
- Pathway and precast infrastructure installation, including conduits, vaults, and other infrastructure
- Backfill, forms and foundation preparation
- Equipment foundation construction, including concrete work
- Final surface preparation and paving

- Provide *photos* of the site to the CAM once pre-construction activities are completed.

Products:

- Photos of site once pre-construction activities are completed

Task 6.2 Barstow Construction

The Recipient shall:

- Construct the site, including:
  - Electrical and communication infrastructure installation, including conductors, communications cabling, transformation, switchgear, switchboards, and electric vehicle supply equipment
  - Civil infrastructure installation, including canopies, seating areas, etc.
  - Landscaping
  - Final site inspection and permit approvals
- Provide *photos* of the site to the CAM once construction activities are completed, including installed (but not energized) charging infrastructure

Products:

- Photos of site once construction activities are completed, including installed (but not energized) charging infrastructure

Task 6.3 Barstow Commissioning

The Recipient shall:

- Commission the station's charging infrastructure.
- Energize the site.
- Provide a *System Installation and Commissioning Report* to the CAM that includes but is not limited to the following:
  - Final stamped site and electrical plans

- Delivery receipts for major equipment
- Receipts for contracted electrical services performed
- Final inspection and utility verification for interconnection and permission to operate
- Relevant interconnection agreement with utility

- Provide on-site *photos* of procured and installed equipment to the CAM.

Products:

- System Installation and Commissioning Report
- Photos of procured and installed equipment

Task 6.4 Colton Pre-Construction

The Recipient shall:

- Mobilize construction.
- Perform necessary pre-charging infrastructure construction activities including:
  - Site preparation and clearing, including removal of debris and vegetation, installation of security fencing, and other tasks
  - Grading and surface preparation activities
  - Excavation work, including removal of top soil for underground utilities pathways and equipment foundations
  - Pathway and precast infrastructure installation, including conduits, vaults, and other infrastructure
  - Backfill, forms and foundation preparation
  - Equipment foundation construction, including concrete work
  - Final surface preparation and paving
- Provide *photos* of the site to the CAM once pre-construction activities are completed.

Products:

- Photos of the site to the CAM once pre-construction activities are completed

Task 6.5 Colton Construction

The Recipient shall:

- Construct the site, including:
  - Electrical and communication infrastructure installation, including conductors, communications cabling, transformation, switchgear, switchboards, and electric vehicle supply equipment
  - Civil infrastructure installation, including canopies, seating areas, etc.

- Landscaping
- Final site inspection and permit approvals

- Provide *photos* of the site to the CAM once construction activities are completed, including installed (but not energized) charging infrastructure

Products:

- Photos of the site to the CAM once construction activities are completed, including installed (but not energized) charging infrastructure

Task 6.6 Colton Commissioning

The Recipient shall:

- Commission the station's charging infrastructure.
- Energize the site.
- Provide a *System Installation and Commissioning Report* to the CAM that includes the following:
  - Final stamped site and electrical plans
  - Delivery receipts for major equipment
  - Receipts for contracted electrical services performed
  - Final inspection and utility verification for interconnection and permission to operate
  - Relevant interconnection agreement with utility
- Provide on-site *photos* of procured and installed equipment to the CAM.

Products:

- System Installation and Commissioning Report
- Photos of procured and installed equipment

[CPR WILL OCCUR DURING THIS TASK. See Task 1.2 for details.]

TASK 7 CONDUCT COMMUNITY OUTREACH

The goal of this task is to share project information with the general public and establish ongoing communications to obtain feedback from community stakeholders for both the Colton and Barstow sites.

The Recipient shall:

- Engage with Community Based Organization (CBO) to identify qualified organizations that could share project details and gather feedback from stakeholders.
- Provide a copy of the *final list of CBO* to the CAM.

- Determine the right partners and level of commitment needed for community outreach.
- Develop scopes of work with selected CBO to complete community outreach and engagement activities for the project and provide a copy of the *scopes of work* to the CAM.
- Work with CBO to reach local residents, neighborhood associations, and environmental groups throughout the project period.
- Develop communication methods to share information about the project and obtain feedback.
- Provide a *memo on communications plan* with messaging and distribution methods to the CAM.
- Analyze the outreach strategy needed to reach the adjacent community members of the two sites.
- Determine messaging for community and process for managing feedback.
- Provide a *memo on transparent process for managing feedback* to the CAM.
- Provide a *Community Outreach and Engagement Final Report* to the CAM that includes but is not limited to the following:
    - Summary of activities
    - Impact of outreach and engagement
    - Photographs of events
    - Samples of materials and outreach methods
    - Overview of feedback from the community members of the adjacent sites
    - Recommendations and lessons learned

Products:

- Final list of CBO
- Scopes of Work with CBO
- Memo on communications plan with messaging and distribution methods
- Memo on transparent process for managing feedback
- Community Outreach and Engagement Report

[CPR WILL OCCUR DURING THIS TASK. See Task 1.2 for details.]

TASK 8 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:

- 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 by the proposed project with calculations and assumptions.
- Support 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).
- Promote training and upward mobility including benefits to workers from disadvantaged and/or low-income communities, provide an estimate of the number of training hours during the project, and identify 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.

Products:

- Workforce Plan

TASK 9 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 9.1 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.

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.

Task 9.2 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 changes.
    d. BootNotificationRequest shall be transmitted by the charger to the Central Management System any time the charger is powered on.
    e. BootNotificationResponse shall be transmitted by the Central Management System to the charger in response to any received BootNotificationRequest.

The Recipient Shall:

- 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.
  - Provide digital records in a comma separated values file unless another file format is approved by the CEC for the request.
  - 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 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 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
- Maintenance Records
- Data Dictionary

Task 9.3 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 9.4.

Products:

- Maintenance section of Quarterly Report on Charger and Charging Port Reliability and Maintenance described in Task 9.4

Task 9.4 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 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,** 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.
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. 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.

Products:

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

TASK 10 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 Report

TASK 11 DATA COLLECTION AND ANALYSIS

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

The Recipient shall:

- For all electric vehicle chargers and charging stations installed on or after January 1, 2024:
    - Comply with recordkeeping and reporting standards as described in CEC's regulations. These requirements are not applicable to those electric vehicle chargers and charging stations installed at residential real property containing four or fewer dwelling units.
    - Comply with all industry best practices and charger technology capabilities that are demonstrated to increase reliability, as described in CEC's regulations.
    - Without limitation to other requirements in this grant agreement, Recipient shall comply with any other regulatory requirements, including but not limited to uptime requirements and operation and reliability requirements. Such regulatory requirements may, but will not necessarily, be enacted after execution of this grant agreement. Once regulations are final, they will apply to work under this grant agreement irrespective of when finalized. Any updates to regulations may also be applicable to work under this grant agreement.
    - If the Recipient is an electric vehicle service provider or other third-party entity that is not the site host, the electric vehicle service provider or third-party entity shall provide a disclosure to the site host about the site host's right to designate the service provider or third-party as the entity to report the data on behalf of the site host. The Recipient shall verify receipt by signing the disclosure.
- Collect and report to the CEC:

- 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.

- Once charging becomes operational, submit to the CAM an *Open Retail Attestation Form within* 5 business days.
- Collect and provide the following data:
  - Number, type, date, and location of chargers installed.
  - Nameplate capacity of the installed equipment, in kW for chargers.
  - Number and type of outlets per charger.
  - Location type, such as street, parking lot, hotel, restaurant or shopping center, existing retail gasoline station, etc.
  - Total cost per charger, the subsidy from the CEC per charger, federal subsidy per charger, utility subsidy per charger, and privately funded share per charger.
  - Total kWH electricity consumption by MDHD ZEVs from the site within the terms 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:
  - Number of charging sessions
  - Average charger 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 dispensed
- Types of vehicles using the charging equipment
- Applicable price for charging, including but not limited to: electric utility tariff, EVSP service contract, or public charger price
- Payment method for public charging
- Energy delivered back to grid or station if a bidirectional charging use case (kWh)
- Normal operating hours, up time, 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 reduce and how many short tons of GHG was reduce.
- Identify any current and planned use of renewable energy at the 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

Category	Field	Desired Data Type
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

Category	Field	Desired Data Type
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:

- AB 126 Data Reports
- Open Retail Attestation Form
- Data Collection Information and Analysis Report

TASK 12 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 She*et 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