



STATE OF CALIFORNIA

**GRANT REQUEST FORM (GRF)**

CEC-270 (Revised 12/2019)

CALIFORNIA ENERGY COMMISSION

**A) New Agreement # ZVI-22-001 (to be completed by CGL office)**

B) Division	Agreement Manager:	MS-	Phone
600 Fuels and Transportation Division	Alex Wan	27	916-805-7477

C) Recipient's Legal Name	Federal ID #
Volvo Technology of America, LLC	56-2131333

D) Title of Project
Volvo Electrified Corridor for Medium- and Heavy-Duty Battery Electric Vehicles

**E) Term and Amount**

Start Date	End Date	Amount
07 / 13 / 2022	03 / 31 / 2026	\$2,000,000

**F) Business Meeting Information**

☐ ARFVTP agreements \$75K and under delegated to Executive Director

Proposed Business Meeting Date 07 / 13 / 2022 ☐ Consent ☒ Discussion

Business Meeting Presenter: Esther Odufuwa Time Needed: 5 minutes

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

**Agenda Item Subject and Description:**

**Volvo Technology of America, LLC.** Proposed resolution approving Agreement ZVI-22-001 with Volvo Technology of America, LLC for a \$2,000,000 grant to accelerate the adoption of medium- and heavy-duty electric vehicles in California through a publicly accessible electrified corridor, and adopting staff's determination that this action is exempt from CEQA. Volvo Technology of America, LLC will deploy two direct current fast chargers (DCFC) at each of five Volvo dealership locations along Interstate 5 and State Route 99 for a total of 10 DCFCs. (General Fund funding) Contact: Esther Odufuwa. (Staff Presentation: 5 minutes)

**G) California Environmental Quality Act (CEQA) Compliance**

1. Is Agreement considered a "Project" under CEQA?

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

Explain why Agreement is not considered a "Project":

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

2. If Agreement is considered a "Project" under CEQA:

a) ☐ Agreement **IS** exempt.

☐ Statutory Exemption. List PRC and/or CCR section number:

☒ Categorical Exemption. List CCR section number: 15301 & 15303

☐ Common Sense Exemption. 14 CCR 15061 (b) (3) Explain reason why Agreement is exempt under the above section:



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The project is categorically exempt from the provisions of CEQA pursuant to Class 1 and 3 Categorical Exemptions of the State CEQA Guidelines. Operation and minor alteration of existing facilities and vehicle operations are categorically exempt from the provisions of CEQA under the Class 1 categorical exemption for the operation, repair, maintenance, and/or minor alteration of existing structures, facilities, and/or mechanical equipment involving negligible expansion of existing use (14 CCR § 15301). New Construction and Conversion of Small Structures and Equipment for the EV chargers is exempt from CEQA under the Class 3 Categorical Exemption (14 CCR §15303).

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

Check all that apply

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

**H) List all subcontractors (major and minor) and equipment vendors, including those listed in the grant application: (attach additional sheets as necessary)**

<b>Legal Company Name:</b>	<b>Budget</b>
Zeco Systems, Inc.- DBA Shell EV Charging Solutions Americas (Current budget: \$2,000,000 CEC/\$11,692 Match)	\$2,011,692
VFS US LLC (Current Budget-Match only)	\$738,595
Volvo Group North America, LLC (Current Budget-Match only)	\$69,300
TEC Equipment, Inc. (Current Budget-Match only)	\$180,171
TBD Site Installation Contractor (Current Budget) (Vendor)	\$153,911
TBD Site Installation Contractor (Current Budget) (Vendor)	\$186,304
TBD Site Installation Contractor (Current Budget) (Vendor)	\$216,916
TBD Site Installation Contractor (Current Budget) (Vendor)	\$270,980
TBD Site Installation Contractor (Current Budget) (Vendor)	\$152,316

**I) List all key partners, including those listed in the grant application: (attach additional sheets as necessary)**

<b>Legal Company Name:</b>
Western Truck Sales
Affinity Truck Sales
Pacific Gas & Electric Company
Turlock Irrigation District



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**J) Budget Information**

<b>Funding Source</b>	<b>Funding Year of Appropriation</b>	<b>Budget List Number</b>	<b>Amount</b>
General Funding	FY 21/22	601.129ZEV	\$2,000,000
Funding Source			\$
Funding Source			\$
Funding Source			\$
Funding Source			\$

R&amp;D Program Area: Select Program Area TOTAL: \$

Explanation for "Other" selection

Reimbursement Contract #:

Federal Agreement #:

**K) Recipient's Contact Information****1. Recipient's Administrator/Officer**

Name: Michael Ippoliti

Address: 575 Anton Blvd., Suite #860

City, State, Zip: Costa Mesa, CA 92663

Phone: 336-301-3834

E-Mail: [michael.ippoliti@volvo.com](mailto:michael.ippoliti@volvo.com)**2. Recipient's Project Manager**

Name: Subbu Arumugam

Address: 7900 National Service Rd.

City, State, Zip: Greensboro, NC 27409

Phone: 336-662-1680

E-Mail: [subbu.arumugam@volvo.com](mailto:subbu.arumugam@volvo.com)**L) Selection Process Used**☒ Competitive Solicitation Solicitation #: GFO-20-605☐ First Come First Served Solicitation Solicitation #: - -**M) The following items should be attached to this GRF**

- |   |   |  |
|---|---|--|
| 1. Exhibit A, Scope of Work                         | <input checked="" type="checkbox"/>     | Attached                                     |
| 2. Exhibit B, Budget Detail                         | <input checked="" type="checkbox"/>     | Attached                                     |
| 3. CEC 105, Questionnaire for Identifying Conflicts | <input checked="" type="checkbox"/>     | Attached                                     |
| 4. Recipient Resolution                             | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> Attached            |
| 5. CEQA Documentation                               | <input type="checkbox"/> N/A            | <input checked="" type="checkbox"/> Attached |

\_\_\_\_\_  
**Agreement Manager**\_\_\_\_\_  
**Date**\_\_\_\_\_  
**Office Manager**\_\_\_\_\_  
**Date**\_\_\_\_\_  
**Deputy Director**\_\_\_\_\_  
**Date**

## Exhibit A

### SCOPE OF WORK

#### TECHNICAL TASK LIST

Task #	CPR	Task Name
1		Administration
2		Quarterly Steering Committee
3	X	Design and Build of Stations
4		Station Network Setup
5	X	Operation and Maintenance of Charging Sites for Vehicles Across MD/HD Segments
6		Data Collection and Analysis
7		Project Fact Sheet

#### KEY NAME LIST

Task #	Key Personnel	Key Subcontractor(s)	Key Partner(s)
1	Michael Ippoliti (Volvo Technology of America, LLC (VTA)), Manuel Aguirre (VFS US LLC (VFS)), Subbu Arumugam (Volvo Group North America, LLC (VGNA))	VTA, VGNA, Zeco Systems, Inc. – DBA Shell EV Charging Solutions Americas (Zeco), TEC Equipment, Inc. (TEC Equipment)	Western Truck Sales, Affinity Truck Sales
2	Manuel Aguirre (VFS), Jason Miles (VFS), Ryan Yoes (VGNA), John Mason (Zeco), Josh Patria (Zeco), Salim Morsy (Zeco), Wayne Hammond (TEC Equipment), Mike Furst (VGNA), Jennifer Edwards (VGNA)	VGNA, Zeco, TEC Equipment	Pacific Gas & Electric Company (PG&E), Turlock Irrigation District, Western Truck Sales, Affinity Truck Sales
3	Manuel Aguirre (VFS), Subbu Arumugam (VGNA), Ryan Yoes (VGNA), John Mason (Zeco), Josh Patria (Zeco), Salim Morsy (Zeco), Wayne Hammond (TEC Equipment)	VGNA, TEC Equipment, Zeco	Western Truck Sales, Affinity Truck Sales

<b>Task #</b>	<b>Key Personnel</b>	<b>Key Subcontractor(s)</b>	<b>Key Partner(s)</b>
4	Manuel Aguirre (VFS), Jason Miles (VFS), Ryan Yoes (VGNA), Mike Furst (VGNA), John Mason (Zeco), Josh Patria (Zeco), Salim Morsy (Zeco), Wayne Hammond (TEC Equipment)	VGNA, TEC Equipment, Zeco	Western Truck Sales, Affinity Truck Sales
5	Manuel Aguirre (VFS), Aravind Kailas (VTA), Michael Ippoliti (VTA) Jason Miles (VFS), Ryan Yoes (VGNA), John Mason (Zeco), Josh Patria (Zeco), Salim Morsy (Zeco), Wayne Hammond (TEC Equipment)	VTA, VGNA, TEC Equipment, Zeco	Western Truck Sales, Affinity Truck Sales
6	Manuel Aguirre (VFS), Jason Miles (VFS), Jennifer Edwards (VGNA)	VGNA, TEC Equipment, Zeco	Western Truck Sales, Affinity Truck Sales
7	Manuel Aguirre (VFS), Jason Miles (VFS), John Mason (Zeco), Josh Patria (Zeco), Salim Morsy (Zeco), Wayne Hammond (TEC Equipment)	VGNA, TEC Equipment, Zeco	Western Truck Sales, Affinity Truck Sales

## GLOSSARY

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

<b>Term/ Acronym</b>	<b>Definition</b>
CAM	Commission Agreement Manager
CAO	Commission Agreement Officer
CEC	California Energy Commission
CCS	Combined Charging System
CPR	Critical Project Review
DCFC	Direct Current Fast Charger(s)
EV	Electric Vehicle
EVITP	Electric Vehicle Infrastructure Training Program

<b>Term/ Acronym</b>	<b>Definition</b>
FTD	Fuels and Transportation Division
MD/HD	Medium- and Heavy-Duty
PG&E	Pacific Gas & Electric Company
Project	Volvo Electrified Corridor for Medium and Heavy-Duty Battery Electric Vehicles
Recipient	Volvo Technology of America, LLC
VFS	VFS US LLC
VGNA	Volvo Group North America
VTa	Volvo Technology of America, LLC
Zeco	Zeco Systems, Inc.

## **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 August 7, 2020, the California Energy Commission (CEC) released a Grant Funding Opportunity entitled "BESTFIT Innovative Charging Solutions." This competitive grant solicitation was to demonstrate transformative technology solutions and work to accelerate the successful commercial deployment of electric vehicle (EV) charging for both light-duty and medium- and heavy-duty (MD/HD) applications. In response to GFO-20-605, the Recipient submitted application #30 which was proposed for funding in the CEC's Notice of Proposed Awards on September 9, 2021. GFO-20-605 and Recipient's application are hereby incorporated by reference into this Agreement in their entirety.

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

## **Problem Statement:**

California has set ambitious but necessary climate goals to reduce greenhouse gas emissions to 40 percent below 1990 levels by 2030. One of the main sources of greenhouse gases is the trucking industry, which currently has a heavy reliance on diesel and gasoline. MD/HD battery electric vehicles are on the cusp of going from demonstration projects to full series production and sales, but for the market to fully accept MD/HD EVs there must be sufficient charging infrastructure in place to meet the vehicle's needs. Two of the largest barriers for fleets considering the purchase and use of MD/HD EVs is the cost of infrastructure and range-anxiety.

The “Volvo Electrified Corridor” project addresses both of those issues, by taking on the cost of construction and land requirements and allowing for publicly accessible charging across hundreds of miles on California highways and freeways that are used by the goods movement industry. The “Volvo Electrified Corridor” project will install two chargers at each of five conveniently located Volvo truck dealerships which will reduce range anxiety in MD/HD EV fleets. The project will take on the infrastructure costs and not pass those costs along to customers. By creating an electrified corridor, open to all fleets and vehicles, the project will push the MD/HD EV market years forward, ensuring California fleets need not worry about infrastructure and charging related concerns.

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

The goal of this Agreement is to accelerate the adoption of MD/HD EVs in California through a publicly accessible electrified corridor. The charging stations will alleviate range-anxiety and reduce total cost of ownership for MD/HD EVs by removing the cost of infrastructure installation from fleets. By accelerating adoption of MD/HD EVs, the surrounding communities will benefit from improved air quality and reduced emissions.

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

The objectives of this Agreement are to deploy two Direct Current Fast Chargers (DCFC) at each of five Volvo Truck dealership locations. The DCFCs will have Combined Charging System (CCS) Type 1 standardized connectors that can be utilized by all brands of trucks. The five dealers are located along Interstate 5 and California State Route 99, creating the first electrified corridor in California.

## **TASK 1 ADMINISTRATION**

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

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

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

- Attend a “Kick-Off” meeting with the CAM, the Commission Agreement Officer (CAO), and a representative of the CEC Accounting Office. The Recipient shall bring their Project Manager, Agreement Administrator, Accounting Officer, and any others determined necessary by the Recipient or specifically requested by the CAM to this meeting.
- Provide a written statement of project activities that have occurred after the notice of proposed awards but prior to the execution of the agreement using match funds. If none, provide a statement that no work has been completed using match funds prior to the execution of the agreement. All pre-execution match expenditures must conform to the requirements in the Terms and Conditions of this Agreement.
- Discuss the following administrative and technical aspects of this Agreement:
  - Agreement Terms and Conditions
  - Critical Project Review (Task 1.2)

- Match fund documentation (Task 1.7) No reimbursable work may be done until this documentation is in place.
- Permit documentation (Task 1.8)
- Subawards needed to carry out project (Task 1.9)
- The CAM's expectations for accomplishing tasks described in the Scope of Work
- An updated Schedule of Products and Due Dates
- Monthly Calls (Task 1.4)
- Quarterly Progress Reports (Task 1.5)
- Technical Products (Product Guidelines located in Section 5 of the Terms and Conditions)
- Final Report (Task 1.6)

**Recipient Products:**

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

**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
- “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 10<sup>th</sup> 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. If the Recipient has obtained confidential status from the CEC and will be preparing a confidential version of the Final Report as well, the Recipient shall perform the following activities for both the public and confidential versions of the Final Report.

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

**The Recipient shall:**

- Prepare an Outline of the Final Report, if requested by the CAM.
- Prepare a Final Report complying with ADA requirements and following the latest version of the Final Report guidelines which will be provided by the CAM. The CAM shall provide written comments on the Draft Final Report within fifteen (15) working days of receipt. The Final Report must be completed at least 60 days before the end of the Agreement Term.
- Submit one bound copy of the Final Report with the final invoice.

**Products:**

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

### **Task 1.7 Identify and Obtain Matching Funds**

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

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

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

- Prepare a letter documenting the match funding committed to this Agreement and submit it to the CAM at least 2 working days prior to the kick-off meeting. If no match funds were part of the proposal that led to the CEC awarding this Agreement and none have been identified at the time this Agreement starts, then state such in the letter. If match funds were a part of the proposal that led to the CEC awarding this Agreement, then provide in the letter a list of the match funds that identifies the:
  - Amount of each cash match fund, its source, including a contact name, address and telephone number and the task(s) to which the match funds will be applied.
  - Amount of each in-kind contribution, a description, documented market or book value, and its source, including a contact name, address and telephone number and the task(s) to which the match funds will be applied. If the in-kind contribution is equipment or other tangible or real property, the Recipient shall identify its owner and provide a contact name, address and telephone number, and the address where the property is located.
- Provide a copy of the letter of commitment from an authorized representative of each source of cash match funding or in-kind contributions that these funds or contributions have been secured. For match funds provided by a grant a copy of the executed grant shall be submitted in place of a letter of commitment.
- Discuss match funds and the implications to the Agreement if they are reduced or not obtained as committed, at the kick-off meeting. If applicable, match funds will be included as a line item in the progress reports and will be a topic at CPR meetings.
- Provide the appropriate information to the CAM if during the course of the Agreement additional match funds are received.
- Notify the CAM within 10 days if during the course of the Agreement existing match funds are reduced. Reduction in match funds must be approved through a formal amendment to the Agreement and may trigger an additional CPR meeting.

#### **Products:**

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

- Letter that match funds were reduced (if applicable)

### **Task 1.8 Identify and Obtain Required Permits**

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

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

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

- Prepare a letter documenting the permits required to conduct this Agreement and submit it to the CAM at least 2 working days prior to the kick-off meeting. If there are no permits required at the start of this Agreement, then state such in the letter. If it is known at the beginning of the Agreement that permits will be required during the course of the Agreement, provide in the letter:
  - A list of the permits that identifies the:
    - Type of permit
    - Name, address and telephone number of the permitting jurisdictions or lead agencies
  - The schedule the Recipient will follow in applying for and obtaining these permits.
- Discuss the list of permits and the schedule for obtaining them at the kick-off meeting and develop a timetable for submitting the updated list, schedule and the copies of the permits. The implications to the Agreement if the permits are not obtained in a timely fashion or are denied will also be discussed. If applicable, permits will be included as a line item in the Progress Reports and will be a topic at CPR meetings.
- If during the course of the Agreement additional permits become necessary, provide the appropriate information on each permit and an updated schedule to the CAM.
- As permits are obtained, send a copy of each approved permit to the CAM.
- If during the course of the Agreement permits are not obtained on time or are denied, notify the CAM within 5 working days. Either of these events may trigger an additional CPR.

#### **Products:**

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

- A copy of each final approved permit (if applicable)

### **Task 1.9 Obtain and Execute Subawards**

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

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

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

#### **Products:**

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

### **TASK 2 QUARTERLY STEERING COMMITTEE**

The goal of this task is to convene a Steering Committee each quarter to discuss charging service improvements and pathways to implement any required improvements. Throughout this task the Steering Committee will monitor the deployment and ensure that the project equipment does not become outdated. New services developed by Subcontractor or other network providers compatibility can be evaluated.

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

- Define the size of the Steering Committee and nominate participants from stakeholder groups, and also potentially from external experts in community, customer, and technology entities.
- Convene Quarterly Steering Committee meetings to discuss charging service improvements and pathways to implementing new charging service improvements.
- Create a *Quarterly Steering Committee Report* after each meeting, including a list of participants, memoranda on specific topics presented, and a list of actionable next steps and any changes or new charging service improvements. Submit the report to the CAM within 10 days of each quarterly meeting held.

#### **Products:**

- Quarterly Steering Committee Reports

## **TASK 3 DESIGN AND BUILD OF STATIONS**

### **TASK 3.1 Equipment Procurement**

The goal of this task is to order and receive all the equipment necessary to meet the needs of the project. The Recipient will receive 10 direct current fast chargers (DCFCs), each with CCS 1 standardized connector types and plugs.

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

- Draft and finalize *Documentation of Final Equipment Specifications for All Sites* and provide a copy to the CAM.
- Create and document an *Equipment Delivery Schedule* and provide a copy to the CAM.
- Create *Order Requests to Equipment Provider(s)* and provide a copy(ies) to the CAM.
- Receive and document *Receipts of equipment orders* from suppliers and provide a copy(ies) to the CAM.

#### **Products:**

- Documentation of Final Equipment Specifications for All Sites
- Equipment Delivery Schedule
- Order Requests to Equipment Provider(s)
- Receipts of Equipment Orders

### **TASK 3.2 Design and Installation at Site 1 - Oakland**

The goal of this task is to complete all necessary tasks to make ready the Site 1 charging station for use. Those tasks include completing pre-project designs and installing the charging equipment at the charging site.

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

- Review and update all pre-kickoff designs to final versions, if needed.
- Ship site specific equipment to the site location.
- Install equipment at the site location.
- Inspect and test charging equipment with a truck charging event – plug in, charge, unplug.
- Document commissioning of equipment and provide a *Commissioning Report* that summarizes equipment commissioning and provide a copy to the CAM.
- Take *High-quality Photos of Charging Equipment* and provide to the CAM.
- Submit to the CAM an *AB 841 Certification* that certifies the project has complied with all AB 841 (2020) requirements specified in Exhibit C or describes why the AB 841 requirements do not apply to the project. The certification shall be signed by Recipient's authorized representative.

- Submit to the CAM the *Electric Vehicle Infrastructure Training Program (EVITP) Certification Numbers of each EVITP 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:**

- Commissioning Report
- High-quality Photos of Charging Equipment
- AB 841 Certification
- EVITP Certification Numbers of each EVITP Certified Electrician

**TASK 3.3 Design and Installation at Site 2 - Dixon**

The goal of this task is to complete all necessary tasks to make ready the Site 2 charging station for use. Those tasks include completing pre-project designs and installing the charging equipment at the charging site.

**The Recipient shall:**

- Review and update all pre-kickoff designs to final versions, if needed.
- Ship site specific equipment to the site location.
- Install equipment at the site location.
- Inspect and test charging equipment with a truck charging event – plug in, charge, unplug.
- Document commissioning of equipment and provide a *Commissioning Report* that summarizes equipment commissioning and provide a copy to the CAM.
- Take *High-quality Photos of Charging Equipment* and provide to the CAM.
- Submit to the CAM an *AB 841 Certification* that certifies the project has complied with all AB 841 (2020) requirements specified in Exhibit C or describes why the AB 841 requirements do not apply to the project. The certification shall be signed by Recipient's authorized representative.
- Submit to the CAM the *EVITP Certification Numbers* of each EVITP 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:**

- Commissioning Report
- High-quality Photos of Charging Equipment
- AB 841 Certification
- EVITP Certification Numbers of each EVITP Certified Electrician

### **TASK 3.4 Design and Installation at Site 3 - Stockton**

The goal of this task is to complete all necessary tasks to make ready the Site 3 charging station for use. Those tasks include completing pre-project designs and installing the charging equipment at the charging site.

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

- Review and update all pre-kickoff designs to final versions, if needed
- Ship site specific equipment to the site location.
- Install equipment at the site location.
- Inspect and test charging equipment with a truck charging event – plug in, charge, unplug.
- Document commissioning of equipment and provide a *Commissioning Report* that summarizes equipment commissioning and provide a copy to the CAM.
- Take *High-quality Photos of Charging Equipment* and provide to the CAM.
- Submit to the CAM an *AB 841 Certification* that certifies the project has complied with all AB 841 (2020) requirements specified in Exhibit C or describes why the AB 841 requirements do not apply to the project. The certification shall be signed by Recipient's authorized representative.
- Submit to the CAM the *EVITP Certification Numbers of each EVITP 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:**

- Commissioning Report
- High-quality photos of charging equipment
- AB 841 Certification
- EVITP Certification Numbers of each EVITP Certified Electrician

### **TASK 3.5 Design and Installation at Site 4 - Fresno**

The goal of this task is to complete all necessary tasks to make ready the Site 4 charging station for use. Those tasks include completing pre-project designs and installing the charging equipment at the charging site.

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

- Review and update all pre-kickoff designs to final versions, if needed.
- Ship site specific equipment to the site location.
- Install equipment at the site location.
- Inspect and test charging equipment with a truck charging event – plug in, charge, unplug.

- Document commissioning of equipment and provide a *Commissioning Report* that summarizes equipment commissioning and provide a copy to the CAM.
- Take *High-quality Photos of Charging Equipment* and provide to the CAM.
- Submit to the CAM an *AB 841 Certification* that certifies the project has complied with all AB 841 (2020) requirements specified in Exhibit C or describes why the AB 841 requirements do not apply to the project. The certification shall be signed by Recipient's authorized representative.
- Submit to the CAM the *EVITP Certification Numbers* of each EVITP 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:**

- Commissioning Report
- High-quality Photos of Charging Equipment
- AB 841 Certification
- EVITP Certification Numbers of each EVITP Certified Electrician

**TASK 3.6 Design and Installation at Site 5 - Bakersfield**

The goal of this task is to complete all necessary tasks to make ready the Site 5 charging station for use. Those tasks include completing pre-project designs and installing the charging equipment at the charging site.

**The Recipient shall:**

- Review and update all pre-kickoff designs to final versions, if needed.
- Ship site specific equipment to the site location.
- Install equipment at the site location.
- Inspect and test charging equipment with a truck charging event – plug in, charge, unplug.
- Document commissioning of equipment and provide a *Commissioning Report* that summarizes equipment commissioning and provide a copy to the CAM.
- Take *High-quality Photos of Charging Equipment* and provide to the CAM.
- Submit to the CAM an *AB 841 Certification* that certifies the project has complied with all AB 841 (2020) requirements specified in Exhibit C or describes why the AB 841 requirements do not apply to the project. The certification shall be signed by Recipient's authorized representative.
- Submit to the CAM the *EVITP Certification Numbers of each EVITP 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:**

- Commissioning Report

- High-quality Photos of Charging Equipment
- AB 841 Certification
- EVITP Certification Numbers of each EVITP Certified Electrician

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

## **TASK 4 STATION NETWORK SETUP**

### **TASK 4.1 Mobile Application Deployment**

The goal of this task is to deploy a mobile application which can be used by Apple IOS and Android operating systems for arranging charging appointments and managing the EV charging process. The existing Subcontractor application meets the functionality needs and will be used for the demonstration. The Subcontractor application will provide a description of the charging infrastructure at each charging site, information on payment types accepted, answers to frequently asked questions, and Customer Service phone numbers.

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

- Validate that the Subcontractor application fits the necessary functionality.
- Deploy the Subcontractor mobile application.
- Collect available data on application usage and record user comments.
- Present available data and comments to Steering Committee at Quarterly meetings and collect any additional feedback from the Steering Committee.
- Create a one-page *Summary Report* describing application usage, comments, functionality, and updates and provide a copy to the CAM.

#### **Products:**

- Summary Report

### **TASK 4.2 Internet Web Presence**

The goal of this task is to create a web location for the project which can encourage the use of the charging sites and help users resolve issues. A page within the existing Volvo Electromobility (EMOB) website will be created, with functionality determined in discussion with the Steering Committee. The web page and the mobile application will serve similar roles while specifically not being redundant: their purpose is to increase charging site traffic and ease the overall charging process for customers.

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

- Meet with Steering Committee to review functionality and design needs for the web presence.
- Determine how to configure landing page within Volvo EMOB website.
- Assemble content and build the page online.
- Present draft version of the landing page to the Steering Committee for feedback.

- Implement any feedback from the Steering Committee to the design and function of the website.
- Put the landing page up on the Volvo EMOB public website.
- Collect data on page views and record user comments.
- Present data and comments to Steering Committee at quarterly meetings and collect any additional feedback from the Steering Committee.
- Update the website in real time when required due to a new station opening, when a station is down, and other necessary items.
- Write the *Internet Web Presence Chapter/Section of the Final Report*, with website screenshots, work conducted, updates implemented, user comments, functionality, and metrics such as page views. Provide a copy to the CAM.

**Products:**

- Internet Web Presence Chapter/Section of the Final Report

**TASK 4.3 Customer Service Line**

The goal of this task is to enable a functioning customer service line to support charging infrastructure users and potential users. The project team will maximize cost-effectiveness by utilizing existing Subcontractor call center tools and processes.

**The Recipient shall:**

- Confirm Subcontractor Call Center procedures, process flow and call script(s) are appropriate for the project application.
- Determine if a dedicated contact line is needed or if Subcontractor standard call center processes will achieve the goals.
- Implement *Customer Service Call Script(s)* and *Customer Service Process Flow Chart* for the project sites and provide a copy to the CAM.
- Open customer service hotline and maintain it as long as the stations operate.
- Collect call records, usage data on hotline callers, user feedback, and response times and create an annual report.
- Present to the Steering Committee on a quarterly basis and receive feedback.
- Implement feedback from the Steering Committee to the call script, process flow chart, and other customer service hotline operations.
- Write a *Customer Service Chapter/Section of the Final Report*, summarizing customer service hotline activity including summaries of call records, usage data, response times, Steering Committee feedback, and changes to procedures. Provide a copy to the CAM.

**Products:**

- Customer Service Call Scripts
- Customer Service Process Flow Chart
- Customer Service Chapter/Section of the Final Report

#### **TASK 4.4 DEALERSHIP TRAINING**

The goal of this task is to train staff at each charging site dealer location, to ensure a trained staff member is always present. The training will cover the charging site infrastructure, how to use the charging equipment with all current MD/HD EV products, a list of frequently asked questions, and how to escalate any concerns or interests to the core project team when necessary. Having trained staff at each project dealership will ensure that charging sessions are a smooth process for users, and if any issues arise they can be quickly addressed by staff on-site.

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

- Work with the dealerships to identify appropriate existing personnel to participate in the training.
- Develop a draft version of the dealership training, utilizing Subcontractor's training material.
- Conduct a meeting with the Steering Committee to review the draft dealership training and identify areas to improve.
- Incorporate all identified feedback from the Steering Committee into the dealership training.
- Finalize *Dealership Training Materials* and provide a copy to the CAM.
- Hold at least one training workshop at each of the five project dealerships after charging sites are commissioned.
- Receive and record feedback from participants of dealership trainings.
- Collect feedback from infrastructure users on trained staff's ability to meet their needs.
- Incorporate feedback to the dealership training, where required.

##### **Products:**

- Dealership Training Materials

#### **TASK 4.5 OUTREACH**

The goal of this task is to conduct sufficient and varied outreach activities to promote the project charging sites, use of charging equipment, adoption of MD/HD EVs, distribute education materials, describe project benefits, and gather community feedback on project activities. The project team will gather community feedback and adjust project activities to align with input.

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

- Create a *Listing of EV Charging Websites sharing Volvo Corridor Locations* to highlight the broad communication of the Volvo charging corridor site locations and site-specific information. Provide a copy to the CAM.
- Create one-page report titled *Brief Report and Presentation of Volvo Charging Corridor Outreach* to summarize the education, promotional and benefits information developed. Provide a copy to the CAM.

- Create *Step-by-step Instructions for using Charging Equipment* and place prominently at all charging sites. Provide a copy to the CAM.
- Give *Presentations about the Project's Activities and Benefits* to relevant local organizations and at government meetings to support cross-promotion by those entities. Provide a copy to the CAM.
- Summarize presentations in a *Memorandum for the Quarterly Steering Committee Reports*. Provide a copy to the CAM.
- Develop *Copies of the Promotional and Informational Signage used at Charging Sites*. Provide a copy to the CAM.
- Acquire *Copies of Published Article(s) with Project Information* in industry publications with copies in Quarterly Steering Committee reporting. Submit copies to the CAM.

**Products:**

- Listing of EV Charging Websites sharing Volvo Corridor Locations
- Brief Report and Presentation of Volvo Charging Corridor Outreach
- Step-by-step Instructions for using Charging Equipment
- Presentations about the Project's Activities and Benefits
- Memorandum for the Quarterly Steering Committee Reports.
- Copies of Promotional and Informational Signage used at Charging Sites
- Copies of Published Article(s) with Project Information

**TASK 5 OPERATION AND MAINTENANCE OF CHARGING SITES FOR VEHICLES ACROSS MD/HD SEGMENTS**

The goal of this task is to maintain constant operation of the charging infrastructure and handle maintenance of the charging infrastructure to keep all sites operational continuously. The project team will complete routine maintenance at the charging sites and be ready to complete any planned and unplanned maintenance required by charging sites to ensure down time is kept to a minimum.

**The Recipient shall:**

- Create planned maintenance procedures for charging sites.
- Create unplanned maintenance procedures for charging sites.
- Review feedback on planned and unplanned maintenance procedures from Steering Committee.
- Implement feedback into planned and unplanned maintenance procedures for charging sites.
- Collect and analyze weekly reports from Subcontractor Sky Network, which includes charge and session duration, energy delivered in kilowatt-hours, peak power delivered in kilowatts, payment method, price charged to the customer, and the number of unique vehicles and frequency of repeat vehicles.

- Consolidate weekly reports into a *Monthly Site Report from Subcontractor Network*. Provide a copy to the CAM.
- Complete quarterly maintenance tests on charging infrastructure to confirm proper functioning.
- Complete planned and unplanned maintenance of charging infrastructure at all charging stations.
- Report to Quarterly Steering Committee meetings of any issues that have occurred and have been addressed in the last quarter. Implement any additional feedback as required to procedures.
- Summarize testing, maintenance, and any issues addressed in a *Memorandum for the Quarterly Steering Committee Reports*. Provide a copy to the CAM.

**Products:**

- Monthly Site Report from Subcontractor Sky Network
- Memorandum for the Quarterly Steering Committee Reports

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

**TASK 6 DATA COLLECTION AND ANALYSIS**

The goal of this task is to collect operational data from the project, to analyze that data for economic and environmental impacts, and to include the data and analysis in the Final Report.

**The Recipient shall:**

- Develop data collection test plan for deployed charging equipment.
- Troubleshoot any issues identified.
- Collect and provide the following data:
  - Number, type, date and location of chargers stations 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 multi-unit housing.
  - 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.
- 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 session, 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 facility if a bidirectional charging use case (kWh)
- Maximum capacity of the new fueling system
- 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
- Duty cycle of the current fleet and the expected duty cycle of future vehicle acquisitions
- Number of unique vehicles and frequency of “repeat vehicles”
- Identify any current and planned use of renewable energy at the facility.
- Identify the source of the alternative fuel.
- Describe any energy efficiency measures used in the facility that may exceed Title 24 standards in Part 6 of the California Code Regulations.
- Provide data on potential job creation, economic development, and increased state revenue as a result of expected future expansion.
- Provide a quantified estimate of the project’s carbon intensity values for life-cycle greenhouse gas emissions.
- Compare any project performance and expectations provided in the proposal to CEC with actual project performance and accomplishments.

**Products:**

- Data collection test plan for deployed charging equipment
- Data collection information and analysis will be included in the Final Report

## **TASK 7 PROJECT FACT SHEET**

The goal of this task is to develop an initial and final-project fact sheet that describes the CEC-funded project and the benefits resulting from the project for the public and key decision makers.

### **The Recipient shall:**

- Prepare an *Initial Project Fact Sheet* at start of the project that describes the project and the expected benefits. Use the format provided by the CAM.
- Prepare a *Final Project Fact Sheet* at the project's conclusion that describes the project, the actual benefits resulting from the project, and lessons learned from implementing the project. Use the format provided by the CAM.
- Provide at least (6) six *High Quality Digital Photographs* (minimum resolution of 1300x500 pixels in landscape ratio) of pre and post technology installation at the project sites or related project photographs.

### **Products:**

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

**STATE OF CALIFORNIA**  
**STATE ENERGY RESOURCES**  
**CONSERVATION AND DEVELOPMENT COMMISSION**

**RESOLUTION: Volvo Technology of America, 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-22-001 with Volvo Technology of America, LLC for a \$2,000,000 grant to accelerate the adoption of medium- and heavy-duty electric vehicles in California through a publicly accessible electrified corridor. Volvo Technology of America, LLC will deploy two direct current fast chargers (DCFC) at each of five Volvo dealership locations along Interstate 5 and State Route 99 for a total of 10 DCFCs; 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 July 13, 2022.

AYE:

NAY:

ABSENT:

ABSTAIN:

\_\_\_\_\_  
Liza Lopez  
Secretariat