

GRANT REQUEST FORM (GRF)

CEC-270 (Revised 10/2015)

CALIFORNIA ENERGY COMMISSION

New Agreement ARV-16-010 (To be completed by CGL Office)

Division	Agreement Manager:	MS-	Phone
600 Fuels and Transportation Division	Thanh Lopez	6	916-654-3929

Recipient's Legal Name	Federal ID Number
Recargo, Inc.	27-0961980

Title of Project
Recargo California Electric Highway

Term and Amount	Start Date	End Date	Amount
	03 / 15 / 2017	03 / 31 / 2020	\$ 2,450,000

Business Meeting Information
 ARFVTP agreements \$75K and under delegated to Executive Director.

Proposed Business Meeting Date	02 / 15 / 2017	<input type="checkbox"/> Consent	<input checked="" type="checkbox"/> Discussion
Business Meeting Presenter	Thanh Lopez	Time Needed:	5 minutes

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

Agenda Item Subject and Description

RECARGO, INC. Proposed resolution approving Agreement ARV-16-010 with Recargo, Inc. for a \$2,450,000 grant to install direct current fast charging stations with both CHAdEMO and SAE Combined Charging System (CCS) connectors, as well as level 2 charging stations at sites along United States Highway 101 and State Route 152. These electric vehicle charging stations will now allow electric vehicle drivers to travel the entire length of each corridor with an increased confidence in their vehicle's range capability and quick re-charging capabilities.

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. (Attach draft NOE)
 Statutory Exemption. List PRC and/or CCR section number:
 Categorical Exemption. List CCR section number:

§15301 "Existing Facilities"
§15302 "Replacement or Reconstruction"
§15303 "New Construction or Conversion of Small Structures"
§15304 "Minor Alterations to Land"

 Common Sense Exemption. 14 CCR 15061 (b) (3)
 Explain reason why Agreement is exempt under the above section:
 This project is exempt because the electric vehicle charges will be installed in existing parking lots involving negligible or no expansion of use, and may include alterations to existing mechanical equipment on the facility. There will be limited numbers of new, small electric vehicle chargers on the existing parking lot structure. The project includes replacement or reconstruction of existing utility systems. All power will be provided from the existing electrical panel and the work includes installations of conduit, wiring, electrical connections and mounting equipment. Other activities may include minor alterations to land where minor trenching may be required to bring power from local sources to the proposed electric vehicle chargers, including backfilling where the surface is restored.
- b) Agreement **IS NOT** exempt. (Consult with the legal office to determine next steps.)
 Check all that apply
- | | |
|---|---|
| <input type="checkbox"/> Initial Study | <input type="checkbox"/> Environmental Impact Report |
| <input type="checkbox"/> Negative Declaration | <input type="checkbox"/> Statement of Overriding Considerations |
| <input type="checkbox"/> Mitigated Negative Declaration | |

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

Legal Company Name:	Budget
Black & Veatch, Inc.	\$ 1,352,843
TBD, Construction and Installation of EV charging stations	\$ 456,861
TBD, Site Survey	\$ 42,000

**Exhibit A
SCOPE OF WORK**

TECHNICAL TASK LIST

Task #	CPR	Task Name
1		Administration
2	X	Project Coordination and Design
3		Equipment Installation
4		Media and Public Outreach
5		Operations and Maintenance
6		Data Collection and Analysis

KEY NAME LIST

Task #	Key Personnel	Key Subcontractor(s)	Key Partner(s)
1	Ashley Horvat, Brian Kariger		
2	Ashley Horvat, Nick Wilkd, Norman Hajjar, Brian Kariger, Forrest North	Black & Veatch	
3	Ashley Horvat, Brian Kariger	Black & Veatch	BTC Power
4	Ashley Horvat, Brian Kariger, Norman Hajjar	Black & Veatch	North Coast Plug-in Electric Vehicle Coordinating Council
5	Ashley Horvat, Nick Wild, Brian Kariger, Norman Hajjar		BTC Power
6	Ashley Horvat, Nick Wild, Brian Kariger, Norman Hajjar		University of California, Los Angeles

GLOSSARY

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

Term/Acronym	Definition
ARFVTP	Alternative and Renewable Fuel and Vehicle Technology Program
CAM	Commission Agreement Manager
CAO	Commission Agreement Officer
CCS	Combined Charging Standard
CPR	Critical Project Review
DCFC	Direct Current Fast Charger
Energy Commission	California Energy Commission
FTD	Fuels and Transportation Division
PEV	Plug-in Electric Vehicle
PEVCC	Plug-in Electric Vehicle Coordinating Council
Recipient	Recargo, Inc.
SAE	Society of Automotive Engineers
SAE CCS	Society of Automotive Engineers Combined Charging System
SR-152	State Route 152

Term/Acronym	Definition
US-101	United States Highway 101
ZEV	Zero Emission Vehicle

BACKGROUND

Assembly Bill (AB) 118 (Núñez, Chapter 750, Statutes of 2007), created the Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP). The statute authorizes the California Energy Commission (Energy Commission) to develop and deploy alternative and renewable fuels and advanced transportation technologies to help attain the state’s climate change, clean air, and alternative energy policies. AB 8 (Perea, Chapter 401, Statutes of 2013) re-authorizes the ARFVTP through January 1, 2024. The ARFVTP has an annual budget of approximately \$100 million and provides financial support for projects that:

- Reduce California’s use and dependence on petroleum transportation fuels and increase the use of alternative and renewable fuels and advanced vehicle technologies.
- Produce sustainable alternative and renewable low-carbon fuels in California.
- Expand alternative fueling infrastructure and fueling stations.
- Improve the efficiency, performance and market viability of alternative light-, medium-, and heavy-duty vehicle technologies.
- Retrofit medium-and heavy-duty on-road and non-road vehicle fleets to alternative technologies or fuel use.
- Expand the alternative fueling infrastructure available to existing fleets, public transit, and transportation corridors.
- Establish workforce training programs and conduct public outreach on the benefits of alternative transportation fuels and vehicle technologies.

The Energy Commission issued solicitation GFO-15-603 to fund projects that will install direct current fast charging stations (DCFC) along major corridors that will fill in the existing gaps for interregional travel for electric vehicles travelling in the state. To be eligible for funding under GFO-15-601, the projects must also be consistent with the Energy Commission’s ARFVTP Investment Plan updated annually. In response to GFO-15-603, Recargo, Inc. (Recipient) submitted application numbers 34 – 36, which was proposed for funding in the Energy Commission’s Notice of Proposed Awards on October 10, 2016. Recipient’s applications, the Notice of Proposed Awards for GFO-15-603, and GFO-15-603 is hereby incorporated by reference into this Agreement in their entirety.

In the event of any conflict or inconsistency between the terms of the Solicitation and the terms of the Recipient’s Application, the Solicitation shall control. In the event of any conflict or inconsistency between the Recipient’s Application and the terms of the Energy Commission’s Award, the Commission’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:

A principal barrier to plug-in electric vehicle (PEV) adoption is a lack of reliable, prolific, and strategically connected high-powered DCFC along major travel corridors to facilitate long distance travel in a PEV. Research from PlugInsights, Recargo's research division, shows that the ability to reliably travel long distances in a PEV is critical to the acceleration of PEV adoption beyond early adopters. Automakers have introduced over 20 modern PEV models since 2010, but the PEV industry has yet to come up with a coherent business model for providing the very basic fueling infrastructure to facilitate travel beyond the limited range of these PEVs, with the exception of Tesla. As of September 2016, with over 230,000 PEVs on California roads, California remains the market leader for PEV adoption and leads the nation in the number of DCFC deployed. Yet, the state still does not have a connected statewide network of DCFC that afford non-Tesla EV drivers the freedom to traverse the state unbridled by a lack of reliable charging solutions.

Goals of the Agreement:

The goals of this agreement are to:

- Transform the PEV market by building the Recargo California Electric Highway, a network of reliable high-powered DCFC at attractive locations, which respond easily to future technology advancements, utilizing a sustainable nationwide business model that connects the fueling directly to the cost of the vehicle, and most importantly maintains a high caliber and simple user experience.
- Accelerate the PEV industry by focusing on deploying infrastructure and providing reliable information through Recargo's smartphone app (PlugShare) and various other mediums that can funnel outreach to the over 450,000 users who have downloaded the PlugShare app.
- Support the multi-state zero-emission vehicle (ZEV) effort to get 3.3 million ZEVs on the road by the year 2025 by providing reliable data, charging infrastructure, and industry expertise.
- Advance the California Governor's goals to expand ZEV infrastructure to support 1 million ZEVs by 2020.

Objectives of the Agreement:

The objectives of this Agreement are to:

- Deploy up to thirty-three electric vehicle charging stations at 11 sites between the Oregon Border and Santa Rosa along United States Highway 101 (US-101) and at 3 sites between State Route 99 and Gilroy along State Route 152 (SR-152) that are easily accessible to the public, safe, well lit, and well maintained. Each site will include at least:

- One (1) 150 kW dual port DC fast charger consisting of one CHAdeMO charging connector port and one Society of Automotive Engineers Combined Charging System (SAE CCS) charging connector port.
- One (1) J1772-compliant level 2 charger.
- One (1) expansion stub out. Each stub out will include a 2-inch minimum spare conduit run with pull-rope sized, installed, and located per the National Electric Code for future installation of wiring supporting up to a 480VAC, 4-wire, 125 kW load; and be capped off.
- Signage including:
 - Highway signage in both directions on the system and at the exit where applicable that are compliant with the Manual on Uniform Traffic Control Devices
 - Trailblazer signage
 - Signage at the charging station parking space(s).
- Safety bollards
- Lighting (if necessary)
- Three sites will have an energy storage unit installed to offset demand during peak hours by storing energy during periods of low use and using that energy during peak hours.
- Coordinate with regional stakeholders, including the local readiness PEV Coordinating Councils to ensure siting is in line with local expectations, conduct local outreach efforts (including a California Coast Statewide PEV Tourism initiative), hold ribbon cuttings, workshops and planning sessions, coordinate with local school districts to host PlugShare PEV School Curriculum at charging station-opening events in concert with automakers and local dealers.
- Operate and maintain the stations for a minimum of 5 years, maintaining at least 99% station uptime at all sites along this corridor as well as respond to any issues within 48 hours at the most and remedy any complex station repairs within at the most 2-5 days of initial notice.
- Train site host partners' staff on PEV basics, usage of station hardware and software to enable them basic knowledge to assist drivers, enable efficient onsite policies to maximize station usage, and to use online and telephone customer support functions.
- Track and measure station adoption and utilization rates over the duration of the project.
- Analyze usage trends to forecast future station locations in the region.

- Track and calculate equivalent greenhouse gas emissions reductions and gasoline gallons displaced.

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 Energy Commission Accounting Office. The Recipient shall bring their Project Manager, Agreement Administrator, Accounting Officer, and any others determined necessary by the Recipient or specifically requested by the CAM to this meeting.
- Discuss the following administrative and technical aspects of this Agreement:
 - Agreement Terms and Conditions
 - Critical Project Review (Task 1.2)
 - Match fund documentation (Task 1.6) No reimbursable work may be done until this documentation is in place.
 - Permit documentation (Task 1.7)
 - Subcontracts needed to carry out project (Task 1.8)
 - The CAM’s expectations for accomplishing tasks described in the Scope of Work
 - An updated Schedule of Products and Due Dates
 - Monthly Progress Reports (Task 1.4)
 - Technical Products (Product Guidelines located in Section 5 of the Terms and Conditions)
 - Final Report (Task 1.5)

Recipient Products:

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

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 Energy Commission and the Recipient. The goal of this task is to determine if the project should continue to receive Energy Commission 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 Commission Agreement Officer, the Fuels and Transportation Division (FTD) program lead, other Energy Commission staff and Management as well as other individuals selected by the CAM to provide support to the Energy Commission.

The CAM shall:

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

The Recipient shall:

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

CAM Products:

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

Recipient Product:

- CPR Report(s)

Task 1.3 Final Meeting

The goal of this task is to closeout this Agreement.

The Recipient shall:

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

This meeting will be attended by, at a minimum, the Recipient, the Commission Grants Office Officer, and the Commission Agreement Manager. 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 Commission Agreement Manager.

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 Commission Agreement Manager will determine the appropriate meeting participants.

The administrative portion of the meeting shall be a discussion with the Commission Agreement Manager and the Grants Officer about the following Agreement closeout items:

- What to do with any equipment purchased with Energy Commission funds (Options)
- Energy Commission's request for specific "generated" data (not already provided in Agreement products)
- Need to document Recipient's disclosure of "subject inventions" developed under the Agreement
- "Surviving" Agreement provisions
- Final invoicing and release of retention
- Prepare a schedule for completing the closeout activities for this Agreement.

Products:

- Written documentation of meeting agreements

- Schedule for completing closeout activities

Task 1.4 Monthly Progress Reports

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

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

The Recipient shall:

- Prepare a Monthly Progress Report, which summarizes all Agreement activities conducted by the Recipient for the reporting period, including an assessment of the ability to complete the Agreement within the current budget and any anticipated cost overruns. Each progress report is due to the Commission Agreement Manager within 10 days of the end of the reporting period. The recommended specifications for each progress report are contained in Section 6 of the Terms and Conditions of this Agreement.
- In the first Monthly Progress Report and first invoice, document and verify match expenditures and provide a synopsis of project progress, if match funds have been expended or if work funded with match share has occurred after the notice of proposed award but before execution of the grant agreement. If no match funds have been expended or if no work funded with match share has occurred before execution, then state this in the report. All pre-execution match expenditures must conform to the requirements in the Terms and Conditions of this Agreement.

Product:

- Monthly Progress Reports

Task 1.5 Final Report

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

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

The Final Report shall be a public document. If the Recipient has obtained confidential status from the Energy Commission 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.

The Recipient shall:

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

Products:

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

Task 1.6 Identify and Obtain Matching Funds

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

The costs to obtain and document match fund commitments are not reimbursable through this Agreement. Although the Energy Commission budget for this task will be zero dollars, the Recipient may utilize match funds for this task. Match funds shall be spent concurrently or in advance of Energy Commission funds for each task during the term of this Agreement. Match funds must be identified in writing and the associated commitments obtained before the Recipient can incur any costs for which the Recipient will request reimbursement.

The Recipient shall:

- Prepare a letter documenting the match funding committed to this Agreement and submit it to the Commission Agreement Manager at least 2 working days prior to the kick-off meeting. If no match funds were part of the proposal that led to the Energy Commission 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 Energy Commission 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 Commission Agreement Manager if during the course of the Agreement additional match funds are received.
- Notify the Commission Agreement Manager within 10 days if during the course of the Agreement existing match funds are reduced. Reduction in match funds must be approved through a formal amendment to the Agreement and may trigger an additional CPR meeting.

Products:

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

Task 1.7 Identify and Obtain Required Permits

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

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

The Recipient shall:

- Prepare a letter documenting the permits required to conduct this Agreement and submit it to the Commission Agreement Manager 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 Commission Agreement Manager.
- Acquire all necessary permits to start construction at each location.
- As permits are obtained, send a copy of each approved permit to the Commission Agreement Manager.
- If during the course of the Agreement permits are not obtained on time or are denied, notify the Commission Agreement Manager 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 package (if applicable)

Task 1.8 Obtain and Execute Subcontracts

The goal of this task is to ensure quality products and to procure subcontractors required to carry out the tasks under this Agreement consistent with the Agreement Terms and Conditions and the Recipient's own procurement policies and procedures. It will also provide the Energy Commission an opportunity to review the subcontracts to ensure that the tasks are consistent with this Agreement, and that the budgeted expenditures are reasonable and consistent with applicable cost principles.

The Recipient shall:

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

Products:

- Draft subcontracts
- Final subcontracts

TECHNICAL TASKS

TASK 2 PROJECT COORDINATION AND DESIGN

The goal of this task is to coordinate activities and communications among the project partners, including but not limited to, complete the requisite site acquisition pre-construction activities to finalize sites ready for construction, review proposed charging station locations, execute license agreements, finalize operation strategy and software, including operation and maintenance plans for sites, pricing, usage, and design strategies.

The Recipient shall:

- Prepare and execute site agreements with project partners.
- Begin weekly meetings with the Recargo California Electric Highway team.
- Meet monthly with project partners to track and evaluate project progress, goals, barriers, and project approach.
- Review and approve all charging station locations at each site.
- Coordinate with subcontractor to schedule equipment installation and perform design tasks, which include the following:
 - Define scope of work at each site.
 - Engage utility for each site location.

- Perform a detailed site assessment of each host site. The detailed site assessment process is as such:
 - Define key technical elements.
 - Evaluate electric utility interconnection for new service at each site and identify electrical source location (panel).
 - Determine optimal positioning and confirm layout of charging equipment and associated infrastructure to minimize costs and provide the optimal charging experience at each site.
 - Measure wireless communication suitability.
 - Perform site survey (if necessary) to ensure that installation of charging equipment and associated infrastructure falls within the site host's land boundaries and does not fall within right-of-ways or easements.
- Perform engineering design for each installation site. Verify safety, access, Americans with Disabilities Act requirements, lighting and signage requirements are sufficiently met.
- Develop operation and maintenance plans for sites.
- Develop site-specific installation plans in accordance with the site assessment results.
- Formulate and execute pricing policies for stations, including payment methods.
- Develop charging station usage plan.
- Ensure safety and shelter requirements are met.
- Coordinate signage production and distribution.

Products:

- Electric Highway meeting summaries
- Site agreements
- Site-Specific Installation Plans
- Operation and maintenance plans
- Pricing policies
- Charging station usage plan

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

TASK 3 EQUIPMENT INSTALLATION

The goal of this task is to purchase materials and equipment necessary to construct each of the sites, and then complete all work necessary to complete the installation at all 14 sites. Each site will include at least:

- One (1) 150 kW dual port DC fast charger consisting of one CHAdeMO charging connector port and one SAE CCS charging connector port.
- One (1) J1772-compliant level 2 charger.
- One (1) expansion stub out. Each stub out will include a 2-inch minimum spare conduit run with pull-rope sized, installed, and located per the National Electric Code for future installation of wiring supporting up to a 480VAC, 4-wire, 125 kW load; and be capped off.
- Signage including:
 - Highway signage in both directions on the system and at the exit where applicable that are compliant with the Manual on Uniform Traffic Control Devices
 - Trailblazer signage
 - Signage at the charging station parking space(s).
- Safety bollards
- Lighting (if necessary)

Three of the 14 sites will have an energy storage unit installed to offset demand during peak hours by storing energy during periods of low use and using that energy during peak hours.

The 14 charging sites identified for this agreement are:

#	Site	Address	City	State	ZIP
1	La Joya Mexican Market	10700 US-101	Smith River	California	95567
2	Woodland Villa	15870 US-101	Klamath	California	95548
3	Shoreline Market	120025 US-101	Orick	California	95555
4	Red Lion Hotel	1929 Fourth Street	Eureka	California	95501
5	CC Market	1328 Eeloa Avenue	Rio Dell	California	95562
6	Miranda Market	6685 Avenue of the Giants	Miranda	California	95553
7	Leggett Valley Mercantile	67676 CA-271	Leggett	California	95585
8	Khairzadas Gems & Rugs	44611 Harmon Drive	Laytonville	California	95454
9	JD Redhouse & Company	212 South Main Street	Willits	California	95490
10	Solar Living Center	13771 US-101	Hopland	California	95449
11	Max Machinery	33 Healdsburg Avenue	Healdsburg	California	95448

#	Site	Address	City	State	ZIP
12	Casa De Fruta	10021 Pacheco Pass Highway	Hollister	California	95023
13	Motel 6	28821 Gonzaga Road	Santa Nella	California	95322
14	Café 33	16447 Elgin Avenue	Dos Palos	California	93620

Site Changes

Any change of one or more of the above-identified charging station sites to a new or different proposed site must be effectuated through a mutually-acceptable agreement amendment.

The Recipient shall:

- Develop the final list of equipment needed for the project and place an order for all equipment and parts needed to install the charging stations at all sites.
- Conduct all work necessary to complete installation of electric vehicle charging station equipment and signage at all sites, including but not limited to:
 - Schedule delivery of charging station to the installation sites.
 - Monitor progress of equipment installation.
 - Provide technical support to contractor on an as needed basis.
 - Add station information to PlugShare's database and the US Department of Energy's Alternative Fuels Data Center website.
 - Prepare for new electric utility service entrance.
 - Perform any required earthwork/trenching/boring.
 - Pour concrete pads for equipment.
 - Install conduit, wiring, and applicable lighting.
 - Patch and seal any concrete, asphalt or other surfaces impacted by trenching.
 - Install service entrance electrical equipment, panel boards and any small transformers and electrical disconnects.
 - Install charging stations as well as expansion stub out for future expansion.
 - Install highway and trailblazer signage.
 - Complete site landscaping.
- Perform necessary checks of the equipment prior to start-up to ensure all equipment is functioning properly, address any findings and take corrective actions.

- Troubleshoot any issues identified.
- Perform start-up and commission the electric vehicle charging stations into service.
- Provide training to site hosts and site host partners. Training may include PEV basics, usage of station hardware and software to enable them basic knowledge to assist drivers, enable efficient onsite policies to maximize station usage, and to use online and telephone customer support functions.

Products:

- Equipment purchase agreements and delivery receipts
- Photographs showing each complete installation at each site location

TASK 4 MEDIA AND PUBLIC OUTREACH

The goal of this task is to increase public awareness of the newly installed electric vehicle charging stations.

The Recipient shall:

- Engage with PlugShare users in pilot to test the corridor traveling experience to obtain user feedback. Prepare and submit to the CAM a Pilot user experience feedback report.
- Coordinate with County departments, PEV industry partners, PEV drivers, automotive dealers, automakers and regional utility company partnerships to announce the project through public workshops and events and disseminate information on regional public access to PEV charging.
- Work with the Energy Commission, site hosts, regional agencies and the media/press to develop public relation plans and activities coincident to station unveiling.
- Develop creative marketing campaigns to maximize exposure in the site owner's communities.
- Coordinate with the Energy Commission and other relevant state and national entities to craft a Statewide California PEV Tourism initiative that Recargo could spearhead to ensure rural and disadvantaged communities reap monetary and non-monetary benefits of the project through other avenues such as increased tourism revenue.
- Contact media, schedule, and attend media events.
- Present project findings with academic partner institutions at industry conferences and beyond.

- Conduct an on the road tour, including a highlight with at least one school in each community, in which Recargo disseminates information via the “PlugShare School” curriculum once the installations are complete, reaching parents and future PEV drivers/aspirational targets.
- Broadcast all project activities via social media platforms, including but not limited to construction activities and/or photos, upcoming details on project progress, and any other relevant information to maintain transparency and involve the charging station users.
- Engage with local stakeholders in disadvantaged and rural communities to host educational workshops and provide information on PEV basics, vehicle and charging station purchasing incentives, and information about PlugShare’s network.

Products:

- Outreach Marketing Materials, including but not limited to, press releases, fliers, brochures, radio spots, social media post templates, and PlugShare School information.
- Media and outreach summary report
- Pilot user experience feedback report

TASK 5 OPERATIONS AND MAINTENANCE

The goal of this task is to provide operations and maintenance for the electric vehicle charging stations and to provide 24/7/365 customer service and expeditious response time to any issues should they occur.

The Recipient shall:

- Operate and maintain the stations for a minimum of 5 years, maintaining at least 99% station uptime at all sites along the corridor as well as respond to any issues within 48 hours at the most and remedy any complex station repairs within at the most 2-5 days of initial notice. **This provision shall survive the completion or termination date of this Agreement.**
- Purchase a 5-year maintenance and warranty plan.
- Submit copies of operations and maintenance manuals to the CAM.
- Coordinate ongoing site maintenance trips to each site as determined by manufacturer’s recommended schedule to maintain warranty.
- Provide charging station users with access to our 24/7/365 call center to report any station issues and respond immediately, with the ability to remotely diagnose and mitigate issues.
- Operate the network using Recargo software.

- Crowd-source users to test corridor travel experience as part of the ongoing operations and maintenance procedures, and often to ensure experience remains seamless, user-friendly, connected to actual user preferences, which will allow Recargo to recalibrate if needed to respond and adapt to evolving user needs.
- Troubleshoot any issues that occur during the planning of the charging sites, installation of the charging stations, and operation (including maintenance issues) of the chargers.

Products:

- Maintenance and Warranty Plan Agreement
- Operations and Maintenance Manuals
- Operations and Maintenance Data such as uptime, usage, and response time will be included in the Final Report
- Crowd-Sourced User Experience Summaries

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 to include the data and analysis in the Final Report.

The Recipient shall:

- Develop data collection test plan.
- Collect 6 months of throughput, usage, and operations data from the project, such as the following:
 - Number of charging events (actual and/or estimated) for each charger over a defined period of time
 - Amount of electricity (actual, averaged, and/or estimated) used per charging event over a defined period of time
 - Types of users (such as local drivers, commuters, long-distance travelers)
 - Estimated cumulative miles driven per defined period of time
 - Charging availability (charging units connected to a vehicle vs. time of day)
 - Charging demand (aggregated electricity demand vs. time of day)
- Track and measure station adoption and utilization rates over the duration of the project. Analyze usage trends to forecast future station locations in the region.

- Upon conducting in-depth analysis of data on an ongoing basis, continue to troubleshoot any issues that occurred during the planning of the charging sites, installation of the charging stations, and operation (including maintenance issues) of the chargers.
- Provide a quantified estimate of the project's carbon intensity values for life-cycle greenhouse gas emissions and the methodology used to provide estimate.
- Track and calculate equivalent greenhouse gas emissions reductions and gasoline gallons displaced. Compare any expectations provided in the proposal to Energy Commission with actual project performance and accomplishments.
- Coordinate and partner with California academic institutions to develop new initiatives and respond to current research needs using data from this project, along with other fast charger deployments, and analyzing that data.
- Collect data, information, and analysis described above and include in the Final Report.

Products:

- Data Collection Information and Analysis shall be included in the Final Report
- Academic research based on Recargo California Electric Highway data collected in partnership with California academia

STATE OF CALIFORNIA

STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION

RESOLUTION - RE: RECARGO, INC.

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

RESOLVED, that the Energy Commission approves Agreement ARV-16-010 from GFO-15-603 with Recargo, Inc. for a \$2,450,000 grant to install direct current fast charging stations with both CHAdeMO and SAE Combined Charging System connectors, as well as level 2 charging stations at sites along United States Highway 101 and State Route 152. These electric vehicle charging stations will now allow electric vehicle drivers to travel the entire length of each corridor with an increased confidence in their vehicle's range capability and quick re-charging capabilities; and

FURTHER BE IT RESOLVED, that the Executive Director or his/her designee shall execute the same on behalf of the Energy Commission.

CERTIFICATION

The undersigned Secretariat to the Commission 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 California Energy Commission held on February 15, 2017.

AYE: [List of Commissioners]

NAY: [List of Commissioners]

ABSENT: [List of Commissioners]

ABSTAIN: [List of Commissioners]

Cody Goldthrite,
Secretariat