



STATE OF CALIFORNIA

GRANT REQUEST FORM (GRF)

CEC-270 (Revised 12/2019)

CALIFORNIA ENERGY COMMISSION

A) New Agreement # ZVI-22-025

B) Division	Agreement Manager:	MS-	Phone
Fuels and Transportation	Lauren Jansen	27	916-931-9605

C) Recipient's Legal Name	Federal ID #
FreeWire Technologies, Inc.	46-4847451

D) Title of Project
Deploying Battery-Integrated DCFC in Rural Community Centers Across Southern California

E) Term and Amount

Start Date	End Date	Amount
1/25/2023	12/30/2024	\$ 921,940

F) Business Meeting Information

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

Proposed Business Meeting Date 1/25/2023 Consent Discussion

Business Meeting Presenter: Time Needed:

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

Agenda Item Subject and Description:

FreeWire Technologies, Inc. Proposed resolution approving Agreement ZVI22-025 for a \$921,940 grant to install EV charging infrastructure to support rural communities, and adopting staff's determination that this action is exempt from CEQA. The proposed project will include the installation of five DCFCs and five Level 2 chargers across five sites within Monterey and Riverside counties.

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: 14 CCR §§ 15301, 15303.

Cal. Code Regs., tit. 14, sec. 15301 provides that projects which consist of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, and which involve negligible or no expansion of existing or



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former use, are categorically exempt from the provisions of the California Environmental Quality Act. This project involves installation of five direct current electric vehicle fast charging stations and five Level 2 charging stations at various sites. All electric vehicle charging stations will be installed in existing paved parking lots, connected to existing electrical panels, and will involve negligible or no expansion of existing or former use. Therefore, the project falls within section 15301 and will not have a significant effect on the environment.

Cal. Code Regs., tit. 14, sec. 15303 provides that projects which consist of construction and location of limited numbers of new, small facilities or structures; installation of small new equipment and facilities in small structures; and the conversion of existing small structures from one use to another where only minor modifications are made in the exterior of the structure, are categorically exempt from the provisions of CEQA. This project consists of installation of new small equipment to existing sites. Specifically, the fastcharging equipment to be installed is approximately the size of a pay phone and the Level 2 charging equipment is the size of a parking meter. The equipment will be installed in existing, paved parking lots. Therefore, the project falls within section 15303 and will not have a significant effect on the environment.

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

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

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



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

Table with 2 columns: Legal Company Name, Budget. Rows include EV Connect (\$55,750), TBD (subrecipients) (\$99,926), and TBD (materials) (\$77,079).

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

Table with 1 column: Legal Company Name. Rows include Monterey County and Loop Neighborhood Market.

J) Budget Information

Table with 4 columns: Funding Source, Funding Year of Appropriation, Budget List Number, Amount. Includes General Fund and multiple Funding Source rows.

R&D Program Area: N/A TOTAL: \$921,940

Explanation for "Other" selection

Reimbursement Contract #: Federal Agreement #:

K) Recipient's Contact Information

1. Recipient's Administrator/Officer

Name: Jordan Baroody
Address: 1933 Davis St Ste 301A
City, State, Zip: San Leandro, CA 94577
Phone: 530-681-6736
E-Mail: jbaroody@freewiretech.com

2. Recipient's Project Manager

Name: Brian Kee
Address: 1999 Harrison St
City, State, Zip: Oakland, CA 94612
Phone: 617-921-2290
E-Mail: bkee@freewiretech.com

L) Selection Process Used

- Competitive Solicitation Solicitation #: GFO-21-604
First Come First Served Solicitation Solicitation #: - -

M) The following items should be attached to this GRF

- 1. Exhibit A, Scope of Work [X] Attached
2. Exhibit B, Budget Detail [X] Attached
3. CEC 105, Questionnaire for Identifying Conflicts [X] Attached
4. Recipient Resolution [X] N/A [] Attached
5. CEQA Documentation [] N/A [X] Attached



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CALIFORNIA ENERGY COMMISSION

Agreement Manager

Date

Office Manager

Date

Deputy Director

Date

Exhibit A SCOPE OF WORK

TASK LIST

Task #	CPR	Task Name
1		Administration
2	X	Community Outreach and Engagement
3		Design and Engineering
4		Charger Procurement
5	X	Construction and Commissioning
6		Operations and Maintenance
7		Data Collection and Analysis
8		Project Fact Sheet

KEY NAME LIST

Task #	Key Personnel	Key Subcontractor(s)	Key Partner(s)
1	Brian Kee & Jordan Baroody	N/A	Monterey County, and Loop Neighborhood
2	Brian Kee, Cora Panturad, Jordan Baroody, and Varish Goyal	N/A	Monterey County, and Loop Neighborhood
3	Brian Kee & Jordan Baroody	N/A	Technologies
4	Brian Kee, Cora Panturad, Jordan Baroody, and Varish Goyal	N/A	Monterey County, and Loop Neighborhood
5	Brian Kee, Cora Panturad, and John Ellis	TBD after RFP process	Monterey County, and Loop Neighborhood
6	Brian Kee, Cora Panturad, Jordan Baroody, and Varish Goyal	N/A	Monterey County, and Loop Neighborhood
7	Brian Kee and Jordan Baroody	N/A	Monterey County, and Loop Neighborhood
8	Brian Kee, Cora Panturad, Jordan Baroody, and Varish Goyal	N/A	Monterey County, and Loop Neighborhood

GLOSSARY

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

Term/ Acronym	Definition
CAM	Commission Agreement Manager
CAO	Commission Agreement Officer
CCS	Combined Charging System
CEC	California Energy Commission
CPR	Critical Project Review
CTP	Clean Transportation Program
DCFC	Direct Current Fast Charger
EV	Electric Vehicle
EVITP	Electric Vehicle Infrastructure Training Program
EVSE	Electric Vehicle Supply Equipment
FTD	Fuels and Transportation Division
kW	Kilowatts
kWh	Kilowatt-hour
L2	Level 2
Recipient	FreeWire Technologies, Inc.
SAE	Society of Automotive Engineers
The Project Team	FreeWire Technologies, Inc., Monterey County, and Loop Neighborhood Market

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 December 14, 2021, the California Energy Commission (CEC) released a Grant Funding opportunity (GFO) entitled “Clean Transportation Program Rural Electric Vehicle (REV) Charging.”. This competitive grant solicitation was to demonstrate replicable and scalable business and technology models that can deploy electric vehicle (EV) charging stations to serve rural EV drivers, especially those from low-income or disadvantaged communities who are inadequately served by charging stations. In response to GFO- 21-604, the Recipient submitted application #07 which was proposed for funding in the CEC’s Notice of Proposed Awards on June 24, 2022. GFO-21-604 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:

As California seeks to reduce carbon emissions from transportation, it is vital that EV adoption continues to rise across the state. While urban and wealthier communities have seen high rates of EV adoption, many communities across California have been slower to adopt EVs, including rural and low-income communities. One of the many barriers to increasing EV adoption in rural and low-income communities is the lack of charging infrastructure. Drivers in rural communities tend to drive more than the average driver,¹ yet have little to no access to fast charging, deterring drivers from adopting EVs. To reduce range anxiety for potential EV drivers in rural communities, more fast charging infrastructure needs to be deployed. However, installing fast charging in rural communities often requires distribution upgrades, costly utility infrastructure, a lengthy permitting process, among other challenges that deter direct current fast charger (DCFC) deployments in rural communities.²

This project aims to solve these issues by funding the design, engineering and construction of DCFC and Level 2 (L2) chargers across Riverside and Monterey Counties. Scaling DCFC infrastructure is essential to enabling faster EV adoption in rural communities. However, as the California electric grid system prepares for the increased electricity demand derived from EVs and EV charging, California energy and transportation stakeholders must consider technologies that manage the peak load created by fast charging, as well as technologies that can be deployed without expensive distribution and utility infrastructure.

Goals of the Agreement:

The goals of this Agreement are to increase EV charging access to members of rural and low-income communities across Monterey County and Riverside County and to demonstrate how DCFC containing battery-integrated charging technology can reduce the peak load created by fast charging, which can enable a more scalable approach to building fast charging in grid constrained parts of California.

Objective of the Agreement:

The objective of this Agreement is to deploy at least five DCFC (10 active ports) and at least five L2 charging stations across Monterey County and Riverside County at rural community centers.

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.

¹ <https://blog.ucsusa.org/cecilia-moura/5-ways-rural-drivers-benefit-from-electric-vehicles/>

² <https://www.transportation.gov/rural/ev/toolkit/ev-benefits-and-challenges/challenges-and-evolving-solutions>

- 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 10th day of each January, April, July, and October. The Quarterly Progress Report template can be found on the ECAMS Resources webpage available at <https://www.energy.ca.gov/media/4691>.

Product:

- Quarterly Progress Reports

Task 1.6 Final Report

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

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

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

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

The Recipient shall:

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

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

Products:

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

Task 1.7 Identify and Obtain Matching Funds

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

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

The Recipient shall:

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

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

Products:

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

Task 1.8 Identify and Obtain Required Permits

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

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

The Recipient shall:

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

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

Products:

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

Task 1.9 Obtain and Execute Subawards

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

The Recipient shall:

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

Products:

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

TECHNICAL TASKS

TASK 2 COMMUNITY OUTREACH AND ENGAGEMENT

The goal of this task is to develop and implement a community outreach plan to increase community awareness on EV charging availability.

The Recipient shall:

- Develop a *Community Outreach and Engagement Plan* for members of the Monterey and Riverside County communities, by:

- Engaging local community groups to ensure the plan is tailored to the respective communities where chargers will be deployed
- Developing physical and digital collateral, providing local community members information on rebates for EVs and expanded charging access
- Execute the Community Outreach and Engagement Plan:
 - Engage with local organizations through digital marketing campaigns
 - Hold at least two Ribbon Cutting Events, one for Monterey County and one for Loop Neighborhoods in Riverside County
 - Perform at least two Community Surveys for each county with a project location (Monterey County and Riverside County) on EV affordability, charging access, and other questions addressing equity in EV adoption
 - Perform other tasks as identified in the Community Outreach and Engagement Plan
- Provide interim updates regarding Community Outreach and Engagement Plan implementation in Quarterly Progress Reports to CAM
- Develop and submit a *Community Outreach and Engagement Impact Report*, that:
 - Summarizes lessons learned from the Community Outreach Plan so future outreach plans are inclusive of community feedback
 - Describes the qualitative and quantitative impacts, specifically on EV adoption and awareness, of the EV charging deployments

Products:

- Community Outreach and Engagement Plan
- Community Outreach and Engagement Impact Report
- Community Outreach Progress Reports, delivered with Quarterly Progress Reports described in Task 1.5

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

TASK 3 DESIGN AND ENGINEERING

The goal of this task is to produce construction documents and calculations needed for at least five DCFCs and at least five L2 charging stations in Riverside and Monterey Counties.

The Recipient shall:

- Perform a site visit to finalize the location of EVSEs at each site
- Verify each site’s electrical capacity, making note of the most resource-minimized pathway to help bring electricity from the utility to the chargers.
- Confirm selection of charger type for site design and obtain estimates of costs for installation through a competitive Request for Proposals
- Determine construction needs for mounting EVSE in existing parking lots, looking for potential hazards and ensuring design compliance with the Americans with Disabilities Act (ADA).
- Complete *Detailed Design and Engineering Drawings* for each site that include, but are not limited to:

- Technical specifications for EVSE
- Location of EVSE
- Wiring and conduit
- Signage as required by the National Electric Code (NEC) and Occupational Safety and Health Administration (OSHA)
- Power capacity and any additional power requirements that necessitate an upgrade
- Single line drawings (including existing site voltage and amperage)
- Load calculations (existing + new = total load)
- Structural Calculations including potential for foundation and equipment anchoring drawings prepared by a civil engineer.

Products:

- Detailed Design and Engineering Drawings (final) for each site

TASK 4 CHARGER PROCUREMENT

The goal of this task is to purchase at least five DCFCs and at least five L2 chargers for five sites in Monterey and Riverside counties.

The Recipient shall:

- Receive CAM written approval prior to purchase and ensure chargers meet the requirements as found in the GFO-21-604 solicitation manual, including, but not limited to:
 - Public chargers must meet applicable requirements, including those of Senate Bill 454 (Corbett, Chapter 418, Statutes of 2013), the California Air Resources Board Electric Vehicle Supply Equipment (EVSE) Standards, and the California Department of Food and Agriculture Division of Measurement Standards, for public chargers.
 - DCFC are to be networked, capable of remote diagnostics, connected to a network's back-end software, and have a minimum charging rate of 50 kW.
 - At least 50 percent of the total number of DCFC connectors must be SAE standard CCS at each site. At least 50 percent of the total number of L2 charging connectors must be SAE standard J1772 at each site
 - Equipment must be able to withstand extreme weather conditions associated with the deployment area, including extreme temperature, flooding, heavy rains, and high winds.
- Provide CAM with a copy of *Purchase Order(s)* from vendor
- Provide CAM with *Inventory Checklist* for DCFC (self-supplied equipment) to ensure wholesale cost of the equipment

Products:

- Purchase Order(s)
- Inventory Checklist

TASK 5 CONSTRUCTION AND COMMISSIONING

The goal of this task is to construct and commission at least one DCFC and one L2 charging station at each of five sites across Monterey and Riverside counties.

The Recipient shall:

- Prepare and provide a *Construction and Installation Plan* that describes for each proposed EV charging site the budget and schedule for the completion of all construction, installation, and commissioning activities. The *Construction and Installation Plan* will include:
 - A list of construction and installation milestones
 - A Gantt chart and detailed project schedule
 - A risk mitigation strategy
 - A plan for quality control and quality assurance
 - A map of street signage at project location
- Prepare and provide a *Written Notification of Site Readiness* for each site that will notify the CAM that the site has been prepared to initiate construction/installation
- Install the chargers and complete construction of each site
- Prepare and provide a *Construction and Installation Report* that will evaluate the actual construction activities for each site compared to the Construction Plan. The *Construction and Installation Report* will include, but will not be limited to:
 - A final schedule of completed milestones
 - A description of lessons learned
 - A summary of any major project changes if relevant
- Prepare and provide a *Commissioning Plan*, which will include for each site:
 - A description of the equipment to be commissioned
 - A description of the quality control and quality assurance practices for the test methodology
- Prepare and provide a *Commissioning Report*, which will include for each site:
 - A Written Notification of Completion of Commissioning
 - Results of actual equipment commissioned
 - Results of quality control and quality assurance practices utilized in testing
- Submit an *AB 841 Certification* that certifies the project has complied with all AB 841 (2020) requirements specified in the Agreement Terms and Conditions or describes why the AB 841 requirements do not apply to the project. The certification shall be signed by Recipient's authorized representative.
- Submit *EVITP Certification Numbers* of each Electric Vehicle Infrastructure Training Program certified electrician that installed electric vehicle charging infrastructure or equipment. EVITP Certification Numbers are not required to be submitted if AB 841 requirements do not apply to the project.

Products:

- Construction and Installation Plans
- Written Notification of Site Readiness
- Construction and Installation Report
- Commissioning Plan
- Commissioning Report
- AB 841 Certification
- EVITP Certification Numbers

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

TASK 6 OPERATIONS AND MAINTENANCE

The goal of this task is to ensure that the chargers installed in the project are operational at least 97 percent of a charging site's standard hours of operation for five years after commissioning.

Task 6.1 Operations

The Recipient shall:

- Operate the installed charging stations during the term of this agreement.
- Ensure that the chargers installed in the project are operational at least 97 percent of a charging site's standard hours of operation for five years after commissioning. Without limitation to other rights and remedies which the CEC may have, including but not limited to survival provisions specified in the Terms and Conditions of this agreement, this requirement to ensure operability for five years after commissioning shall survive the completion or termination date of this agreement. In addition to other requirements in the Terms and Conditions of this agreement, all CEC-reimbursable expenditures must be incurred within the agreement term.

Task 6.2 Maintenance

The Recipient shall:

- Perform regular preventive maintenance, including visual inspection, performance testing, functional validation, and reporting.
- Monitor network performance.
- Dispatch maintenance technicians in a timely manner and address malfunctions and repairs within 48 hours of initial notice.
- Provide charging station users with 24/7 call center service that will assist users with any technical issues encountered at the stations.
- Prepare a *Stations Operations Report* for each project site sent quarterly to the CAM after station commissioning through the term of this agreement. The report will include a summary of uptime measures, calculation of uptime, and number of dispatch events needed during the quarter.

Product:

- Stations Operations Reports delivered with the Quarterly Progress Reports described in Task 1.5

Task 6.3 Recordkeeping and Reporting

The Recipient shall:

- Keep and maintain a record of the standard hours of operation for each site, including any changes over the operational period.
- Keep and maintain detailed records of maintenance and repairs. Records shall include:
 - Whether the maintenance was scheduled preventive maintenance or response to an identified issue
 - Date and time the need for corrective maintenance was reported, if applicable
 - Date and time maintenance began
 - Date and time maintenance was completed
 - Narrative describing nature of maintenance required
 - Any component failures / replacements
- Keep and maintain a record of the operative status of each connector from the time the equipment is commissioned until the end of the operational period defined by this agreement.
 - The record shall include any time the Recipient knows or is notified that a connector is incapable of delivering a charge, for example by observation, by receipt of a service call, by notice of power outage or telecommunications outage, or other means.
 - For any networked chargers, Recipient shall record the time and the operative status of each connector every 15 minutes.
 - For example, a central system using OCPP 1.6 could send `TriggerMessage.req`, `'requestedMessage' = 'StatusNotification'` and record both the `TriggerMessage.conf` and `StatusNotification.req` sent by the charge point in response.
 - Excluded downtime shall be recorded, including any supporting documentation from an independent party, e.g., notice from an electric utility of a power outage or police report of vandalism. The record shall include an explanation of the cause of the downtime, why it should be considered excluded downtime, and the efforts made to minimize the downtime.
- Make these records available, in a standard electronic format of the CEC's choosing, to the CEC within 10 business days of a written request by the CEC.
- Without limitation to other rights and remedies which the CEC may have, including but not limited to survival provisions specified in the Terms and Conditions of this agreement, the requirements for recordkeeping and reporting under this Task shall remain in effect for five years after commissioning and shall survive the completion or termination date of this agreement. In addition to other requirements in the Terms and Conditions of this agreement, all CEC-reimbursable expenditures must be incurred within the agreement term.
- The requirements for recordkeeping and reporting under this Task are in addition to requirements specified in this Agreement's Terms and Conditions, section 18.b, Retention of Records, and any other applicable Terms and Conditions.

Products:

- Record of standard hours of operation
- Record of the operative status of each connector
- Records of maintenance and repairs

Task 6.4 Definitions

- a) Central System: The central system that communicates with one or more chargers, for example, to authorize users, monitor charger status, and/or collect, transmit, record, and manage other information.
- b) Connector: A connector is what is plugged into a vehicle to charge it.
- c) Charging Site: A physical location with one or more chargers.
- d) Charger: A device that safely supplies electrical power to an electric vehicle through connectors. Where a device has multiple connectors or can serve multiple parking spaces, the number of chargers is equal to the number of vehicles that can be simultaneously charged.
- e) Downtime: Any period of time within the standard hours of operation in which a charger is not operational.

For networked chargers, a period in which the charge point's response to the central system's request for notification of operative status indicates that the connector or charge point is in an inoperative state is downtime.

- For example, in OCPP 1.6 intervals when StatusNotification.req protocol data unit Status Field = 'Unavailable' or 'Faulted' OR errorCode Field = 'ConnectorLockFailure', 'GroundFailure', 'HighTemperature', 'InternalError', 'OverCurrentFailure', 'OverVoltage', 'PowerMeterFailure', 'PowerSwitchFailure', 'ReaderFailure', 'ResetFailure', or 'UnderVoltage' are "downtime."
- f) Excluded downtime: A period of downtime, within the standard hours of operation, caused by any of the following:
 - Electric Grid Power Loss: Power supplied by the electric utility for a site is not supplied at levels required to for minimum function of chargers / station. This may include, but is not limited to, service outages due to utility equipment malfunction or public safety power shut-offs.
 - Accident, Vandalism or Theft: Physical damage to the charger for events such as vehicle collision with a charger, theft of charging cables, damage to connectors from mishandling, and damage to screens. Excluded downtime is limited to a maximum of 5 days for each event.
 - Telecommunication Network Outages: Loss of communication between a charger and a central system due to cellular or internet service provider system outages that are beyond the control of the Recipient.
 - Planned Outage for Maintenance or Upgrade: Any planned maintenance indicated in the funding Recipient's Operations and Maintenance Plan, submitted with application for funding, or an updated Plan approved by the CAM in advance of the planned outage.
 - Extraordinary Events: Unforeseeable events that would have been impossible to plan for using commercially reasonable methods.

g) Operational: A charging port is considered operational when its hardware and software are both online and available for use, or in use, and the charging port successfully dispenses electricity as expected.

h) Uptime: Uptime is calculated as:

$$Uptime = \frac{(Total\ Standard\ Hours\ of\ Operation - Downtime + Excluded\ Downtime)}{Total\ Standard\ Hours\ of\ Operation} \cdot 100\%$$

TASK 7 DATA COLLECTION AND ANALYSIS

The goal of this task is to collect and analyze operational data from the project for economic and environmental impacts in quarterly progress reports and the Final Report.

The Recipient shall:

- For all electric vehicle chargers and charging stations installed on or after January 1, 2024:
 - Comply with recordkeeping and reporting standards as described in CEC's regulations. These requirements are not applicable to those electric vehicle chargers and charging stations installed at residential real property containing four or fewer dwelling units.
 - Comply with all industry best practices and charger technology capabilities that are demonstrated to increase reliability, as described in CEC's regulations.
 - Without limitation to other requirements in this grant agreement, Recipient shall comply with any other regulatory requirements, including but not limited to uptime requirements and operation and maintenance requirements. Such regulatory requirements may, but will not necessarily, be enacted after execution of this grant agreement. Once regulations are final, they will apply to work under this grant agreement irrespective of when finalized. Any updates to regulations may also be applicable to work under this grant agreement.
 - If the Recipient is an electric vehicle service provider or other third-party entity that is not the site host, the electric vehicle service provider or third-party entity shall provide a disclosure to the site host about the site host's right to designate the service provider or third-party as the entity to report the data on behalf of the site host. The Recipient shall verify receipt by signing the disclosure.
- Collect and provide the following data:
 - Number, type, date, and location of chargers installed.
 - Nameplate capacity of the installed equipment, in kW for chargers.
 - Number and type of outlets per charger.
 - Location type, such as street, parking lot, hotel, restaurant, or 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, electric vehicle service provider (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)
- Normal operating hours, uptime, downtime, and explanations of variations
- Gallons of gasoline and/or diesel fuel displaced (with associated mileage information)
- Expected air emissions reduction, for example:
 - Non-methane hydrocarbons
 - Oxides of nitrogen
 - Particulate Matter
 - Formaldehyde
- Identify any current and planned use of renewable energy.
- Describe any energy efficiency measures used that may exceed Title 24 standards in Part 6 of the California Code of Regulations.
- Provide data on potential job creation, economic development, and increased state revenue as a result of the project and any 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.
- Submit the data described above electronically in a quarterly progress report throughout the duration of the agreement.
- Collect data, information, and analysis described above and include in the Final Report.

Products:

- Data on charger installations and charging events will be submitted electronically in Quarterly Progress Reports.

- Data collection information and analysis will be included in the Final Report.

TASK 8 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: FreeWire Technologies, Inc.

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

RESOLVED, that the CEC approves Agreement ZVI-22-025 for a \$921,940 grant to install EV charging infrastructure to support rural communities. The proposed project will include the installation of five DCFCs and five Level 2 chargers across five sites within Monterey and Riverside counties; 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 January 25, 2023.

AYE:
NAY:
ABSENT:
ABSTAIN:

Dated:

Liza Lopez
Secretariat