



STATE OF CALIFORNIA

GRANT REQUEST FORM (GRF)

CEC-270 (Revised 12/2019)

CALIFORNIA ENERGY COMMISSION

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

B) Division	Agreement Manager:	MS-	Phone
Fuels and Transportation	Madison Jarvis	27	916-237-2555

C) Recipient's Legal Name	Federal ID #
FreeWire Technologies, Inc.	46-487451

D) Title of Project
Enabling TNC EV Adoption through the Deployment of Battery-Integrated DC Fast Chargers in Central California

E) Term and Amount

Start Date	End Date	Amount
7/13/2022	5/31/2024	\$601,911

F) Business Meeting Information

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

Proposed Business Meeting Date 6/8/2022 ☐ Consent ☒ Discussion

Business Meeting Presenter Madison Jarvis Time Needed: 5 minutes

Please select one list serve. Select

Agenda Item Subject and Description:

FREEWIRE TECHNOLOGIES, INC. Proposed resolution approving Agreement ARV-22-001 with FreeWire Technologies, Inc. for a \$601,911 grant to deploy battery-integrated direct current fast charger (DCFC) infrastructure in Central California with the goal of enabling electric vehicle adoption among Transportation Network Company (TNC) drivers, and adopting staff's determination that this action is exempt from CEQA. (Clean Transportation Program Funding)
Contact: Madison Jarvis (Staff Presentation: 5 minutes)

G) California Environmental Quality Act (CEQA) Compliance

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

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

Explain why Agreement is not considered a "Project":

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

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

a) ☒ Agreement **IS** exempt.

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

☒ Categorical Exemption. List CCR section number: Cal. Code Regs., tit. 14 sec. 15303, and 15304

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

**GRANT REQUEST FORM (GRF)**

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. Specifically, the fast-charging equipment to be installed is approximately the size of a pay phone and the level two charging equipment is the size of a parking meter. The equipment will be installed in a paved parking lot. Therefore, the project falls within section 15303 and will not have a significant effect on the environment.

Cal. Code Regs., tit. 14, sect. 15304 provides that projects which consist of minor public or private alterations in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees except for forestry and agricultural purposes are categorically exempt from the provisions of CEQA. In this project, minor trenching may be necessary to lay two-inch conduit from the electrical panel to the charging equipment, totaling approximately 2 cubic feet per foot of distance from the electrical panel, to connect the proposed new electric vehicle charging station equipment to an electrical supply panel. The trenching will take place on currently paved ground, will not involve the removal of any trees, and surface will be restored. Therefore, the project falls within section 15304 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

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



STATE OF CALIFORNIA

GRANT REQUEST FORM (GRF)

CEC-270 (Revised 12/2019)

CALIFORNIA ENERGY COMMISSION

Legal Company Name:	Budget
British-American Petroleum Corporation	\$ 221,078.00
TBD (Subcontractor of BP)	\$ 40,000.00
TBD (Subcontractor of BP)	\$ 50,000.00

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

Legal Company Name:
British-American Petroleum Corporation
Uber

J) Budget Information

Funding Source	Funding Year of Appropriation	Budget List Number	Amount
ARFVTP	FY 20/21	601.118M	\$601,911
Funding Source			\$
Funding Source			\$
Funding Source			\$

R&D Program Area: Select Program Area TOTAL: \$601,911

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: 1933 Davis St, Ste 301A

City, State, Zip: San Leandro, CA 94577

Phone: (617) 921-2290

E-Mail: bkee@freewiretech.com

L) Selection Process Used

☒ Competitive Solicitation Solicitation #: GFO-21-601

☐ First Come First Served Solicitation Solicitation #: - -

M) The following items should be attached to this GRF

1. Exhibit A, Scope of Work

2. Exhibit B, Budget Detail

3. CEC 105, Questionnaire for Identifying Conflicts

4. Recipient Resolution

5. CEQA Documentation

☒ N/A

☐ N/A

☒ Attached

☒ Attached

☒ Attached

☐ Attached

☒ Attached



STATE OF CALIFORNIA
GRANT REQUEST FORM (GRF)
CEC-270 (Revised 12/2019)

CALIFORNIA ENERGY COMMISSION

Agreement Manager

Date

Office Manager

Date

Deputy Director

Date

Exhibit A SCOPE OF WORK

TECHNICAL TASK LIST

Task #	CPR	Task Name
1		Administration
2		Uber EV Driver Outreach Plan
3		Driver Enrollment and Validation
4	X	Construction, Commissioning, and Operations
5		Data Collection and Analysis
6		Project Fact Sheet

KEY NAME LIST

Task #	Key Personnel	Key Subcontractor(s)	Key Partner(s)
1	Brian Kee	N/A	FreeWire, BP and Uber
2	David Case, Adam Gromis and Ashwin Dias	N/A	FreeWire, BP and Uber
3	Tony Forte and Jordan Barody	TBD after RFP process	FreeWire and BP
4.	Brian Kee, Adam Gromis, David Case and Barton Sidles	N/A	FreeWire, BP and Uber
5.	Brian Kee, Adam Gromis and David Case	N/A	FreeWire and Uber

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
CEC	California Energy Commission
CPR	Critical Project Review
CTP	Clean Transportation Program

Term/ Acronym	Definition
FTD	Fuels and Transportation Division
Recipient	FreeWire Technologies, Inc.
DCFC	Direct Current Fast Charger
EV	Electric Vehicle
TNC	Transportation Network Company

Background

Assembly Bill (AB) 118 (Núñez, Chapter 750, Statutes of 2007), created the Clean Transportation Program. The statute authorizes the California Energy Commission (CEC) to develop and deploy alternative and renewable fuels and advanced transportation technologies to help attain the state's climate change, clean air, and alternative energy policies. AB 8 (Perea, Chapter 401, Statutes of 2013) re-authorizes the Clean Transportation Program through January 1, 2024. The Clean Transportation Program 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.

On August 31, 2021, the CEC released a Grant Funding Opportunity entitled "Charging Access for Reliable On-Demand Transportation Services (CARTS)." This competitive grant solicitation was to support electric vehicle (EV) charging infrastructure for high mileage on-demand transportation services including services such as ride-hailing, taxis, and meal and grocery delivery. In response to GFO-21-601, the Recipient submitted application #20 which was proposed for funding in the CEC's Notice of Proposed Awards on February 14, 2022. GFO-21-601 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:

Per the CEC's Assembly Bill 2127 Electric Vehicle Charging Infrastructure Assessment (AB 2127 Report), "CARB estimates that California TNC vehicles accounted for 1.2 percent of all light-duty vehicle miles traveled in 2018, and TNC vehicle emissions per passenger mile traveled were roughly 50 percent higher than the statewide passenger vehicle average, largely due to miles driven with no passengers in the car."¹

With CARB mandating that EVs need to account for 90% of ride-hailing vehicle miles traveled in California by 2030,² TNCs are exploring methods for promoting EV adoption among their fleets. While there are several factors deterring TNC drivers from purchasing an EV, one major barrier is the lack of direct current fast charger (DCFC) infrastructure in densely populated areas. TNC EV drivers have different charging needs compared to non-TNC drivers. TNC EV drivers demonstrate a need to charge their vehicles at all hours of the day. In addition to this, TNC EV drivers average 2.5 DC fast charges a day, with the average charging session providing 20 kWh to the vehicle.³

The current level of DCFC infrastructure in the Greater Sacramento Area is not adequate to support future DCFC demand by TNCs.

To enable the widespread adoption of EVs among TNC drivers, California must continue to deploy DCFC infrastructure that can provide charging to TNC drivers at rates that compare favorably to operating an internal combustion engine (ICE) vehicle. It is vital the DCFC technology utilized can minimize operating costs so that prospective site hosts can offer those rates.

Goals of the Agreement:

The goal of this Agreement is to increase electric vehicle miles traveled (eVMT) by TNC drivers by deploying 5 DCFCs across Stockton, CA and Orangevale, CA, in addition to reducing deadhead miles created by Uber drivers. This project will leverage Uber's EV charging utilization model to determine sites where eVMT will be maximized. The project will use battery backup systems integrated with the DCFC, reducing the operating expenses for the site hosts which can result in a lower charging rate for TNC EV drivers.

Objectives of the Agreement:

The objectives of this Agreement are to:

1. Deploy 5 DCFCs across Stockton and Orangevale.
2. Measure the impact the DCFCs have on increasing eVMT for TNC drivers and reducing deadhead miles.
3. Quantify the savings to the site hosts by using battery-integrated DCFC.

¹ AB 2127 Electric Vehicle Charging Infrastructure Assessment: Analyzing Charging Needs to Support Zero-Emission Vehicles in 2030. California Energy Commission. Publication Number: CEC-600-2021-001, January 2021, Page 18

² California Regulator Adopts EV Mandate for Uber, Lyft Ride-Hail Fleets, *Reuters*, 20 May 2021

³ AB 2127 Electric Vehicle Charging Infrastructure Assessment: Analyzing Charging Needs to Support Zero-Emission Vehicles in 2030. California Energy Commission. Publication Number: CEC-600-2021-001, January 2021, Page 19

TASK 1 ADMINISTRATION

Task 1.1 Attend Kick-off Meeting

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

The Recipient shall:

- Attend a “Kick-Off” meeting with the CAM, the Commission Agreement Officer (CAO), and a representative of the CEC Accounting Office. The Recipient shall bring their Project Manager, Agreement Administrator, Accounting Officer, and any others determined necessary by the Recipient or specifically requested by the CAM to this meeting.
- Provide a written statement of project activities that have occurred after the notice of proposed awards but prior to the execution of the agreement using match funds. If none, provide a statement that no work has been completed using match funds prior to the execution of the agreement. All pre-execution match expenditures must conform to the requirements in the Terms and Conditions of this Agreement.
- Discuss the following administrative and technical aspects of this Agreement:
 - Agreement Terms and Conditions
 - Critical Project Review (Task 1.2)
 - Match fund documentation (Task 1.7) No reimbursable work may be done until this documentation is in place.
 - Permit documentation (Task 1.8)
 - Subawards needed to carry out project (Task 1.9)
 - The CAM’s expectations for accomplishing tasks described in the Scope of Work
 - An updated Schedule of Products and Due Dates
 - Monthly Calls (Task 1.4)
 - Quarterly Progress Reports (Task 1.5)
 - Technical Products (Product Guidelines located in Section 5 of the Terms and Conditions)
 - Final Report (Task 1.6)

Recipient Products:

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

Commission Agreement Manager Product:

- Kick-Off Meeting Agenda

Task 1.2 Critical Project Review (CPR) Meetings

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

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

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

The CAM shall:

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

The Recipient shall:

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

CAM Products:

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

Recipient Product:

- CPR Report(s)

Task 1.3 Final Meeting

The goal of this task is to closeout this Agreement.

The Recipient shall:

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

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

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

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

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

Products:

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

Task 1.4 Monthly Calls

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

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

The CAM shall:

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

The Recipient shall:

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

Product:

- Email to CAM concurring with call summary notes.

Task 1.5 Quarterly Progress Reports

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

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

The Recipient shall:

- Prepare a Quarterly Progress Report which summarizes all Agreement activities conducted by the Recipient for the reporting period, including an assessment of the ability to complete the Agreement within the current budget and any anticipated cost overruns. Progress reports are due to the CAM the 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 one bound copy of the Final Report with the final invoice.

Products:

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

Task 1.7 Identify and Obtain Matching Funds

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

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

The Recipient shall:

- Prepare a letter documenting the match funding committed to this Agreement and submit it to the CAM at least 2 working days prior to the kick-off meeting. If no match funds were part of the proposal that led to the CEC awarding this Agreement and none have been identified at the time this Agreement starts, then state such in the letter. If match funds were a part of the proposal that led to the CEC awarding this Agreement, then provide in the letter a list of the match funds that identifies the:
 - Amount of each cash match fund, its source, including a contact name, address and telephone number and the task(s) to which the match funds will be applied.

- Amount of each in-kind contribution, a description, documented market or book value, and its source, including a contact name, address and telephone number and the task(s) to which the match funds will be applied. If the in-kind contribution is equipment or other tangible or real property, the Recipient shall identify its owner and provide a contact name, address and telephone number, and the address where the property is located.
- Provide a copy of the letter of commitment from an authorized representative of each source of cash match funding or in-kind contributions that these funds or contributions have been secured. For match funds provided by a grant a copy of the executed grant shall be submitted in place of a letter of commitment.
- Discuss match funds and the implications to the Agreement if they are reduced or not obtained as committed, at the kick-off meeting. If applicable, match funds will be included as a line item in the progress reports and will be a topic at CPR meetings.
- Provide the appropriate information to the CAM if during the course of the Agreement additional match funds are received.
- Notify the CAM within 10 days if during the course of the Agreement existing match funds are reduced. Reduction in match funds must be approved through a formal amendment to the Agreement and may trigger an additional CPR meeting.

Products:

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

Task 1.8 Identify and Obtain Required Permits

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

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

The Recipient shall:

- Prepare a letter documenting the permits required to conduct this Agreement and submit it to the CAM at least 2 working days prior to the kick-off meeting. If there are no permits required at the start of this Agreement, then state such in the letter. If it is known at the beginning of the Agreement that permits will be required during the course of the Agreement, provide in the letter:
 - A list of the permits that identifies the:
 - Type of permit

- Name, address and telephone number of the permitting jurisdictions or lead agencies
 - The schedule the Recipient will follow in applying for and obtaining these permits.
- Discuss the list of permits and the schedule for obtaining them at the kick-off meeting and develop a timetable for submitting the updated list, schedule and the copies of the permits. The implications to the Agreement if the permits are not obtained in a timely fashion or are denied will also be discussed. If applicable, permits will be included as a line item in the Progress Reports and will be a topic at CPR meetings.
- If during the course of the Agreement additional permits become necessary, provide the appropriate information on each permit and an updated schedule to the CAM.
- As permits are obtained, send a copy of each approved permit to the CAM.
- If during the course of the Agreement permits are not obtained on time or are denied, notify the CAM within 5 working days. Either of these events may trigger an additional CPR.

Products:

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

Task 1.9 Obtain and Execute Subawards

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

The Recipient shall:

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

Products:

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

- Final subcontracts (if requested)

TECHNICAL TASKS

TASK 2 UBER EV DRIVER OUTREACH PLAN

The goal of this task is to initiate a marketing campaign to promote the availability of the DCFCs to Uber drivers.

The Recipient shall:

- Develop an *Uber EV Driver Outreach Plan* targeted at Uber drivers that will:
 - Engage with Uber drivers, informing them of the availability of FreeWire's chargers, including location, as well as in-app links to FreeWire web pages.
 - Promote charging stations that will provide discounted charging rates for EV drivers.
- Prepare and submit a copy of the *Uber EV Driver Outreach Plan*.
- Quantify impacts of the *Uber EV Driver Outreach Plan* through a *Campaign Evaluation Report* and submit a copy.

Products:

- Uber EV Driver Outreach Plan
- Campaign Evaluation Report

TASK 3 DRIVER ENROLLMENT AND VALIDATION

The goal of this task is to develop a process to track charger usage by Uber EV drivers. The task will contribute to Data Collection and Analysis in Task 5.

The Recipient shall:

Develop a *Driver Enrollment and Validation Process* to track Uber EV driver charging utilization

- Develop and submit quarterly a *Data Analysis Report* which will include, but is not limited to:
 - Data to assess charger utilization by EV drivers using the Uber platform and evaluate eVMT for Uber rideshare services.
 - Relevant data and information required to develop lessons learned and best practices for future eStation projects.

Products:

- Driver Enrollment and Validation Process
- Quarterly Data Analysis Report

TASK 4 CONSTRUCTION, COMMISSIONING, AND OPERATIONS

The goal of this task is to complete all fabrication and construction and installation activities for the two project sites and complete all testing and commissioning activities for five DCFCs. Upon successful commissioning, both station operations will commence.

The Recipient shall:

- Prepare and submit a *Procurement Plan* for a total of five DCFCs at the Stockton and Orangevale sites that will detail the process for procurement of equipment, materials, and services in a manner that provides transparency into the selection process and the rationale for optimizing the quality of services and equipment provided with price. The Procurement Plans will include, but will not be limited to:
 - A description of the bid packages to be assembled.
 - Bid package specifications will be based on five (5) DCFC and based on:
 - Boost Charger as a stationary DCFC unit that utilizes an integrated 160 kWh battery system to deliver up to 150 kW to one or 75 kW to two EVs simultaneously, while only drawing up to 27 kW from the grid to recharge the integrated battery unit using low voltage and widely available 240-volt or 208-volt input power.
 - A methodology for receiving and evaluating responses.
- Execute the *Procurement Plan*.
- Prepare and submit a *Construction and Installation Plan* for the two proposed EV charging sites (Stockton and Orangevale). The *Construction and Installation Plan* will outline 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 Gannt chart and detailed project schedule.
 - A risk mitigation strategy.
 - A plan for quality control and quality assurance.
- Prepare and submit a *Written Notification of Site Readiness* for each site that will notify the CAM that the site has been prepared to initiate construction and installation.
- Implement the *Construction and Installation Plan*.
- Prepare and submit a *Construction and Installation Report* for the facility that will evaluate actual construction activities compared to the *Construction and Installation 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 submit a *Commissioning Plan*, which will include:
 - A description of the equipment to be commissioned.
 - A description of the quality control and quality assurance practices for the test methodology.
- Prepare and submit a *Commissioning Report*.
- Prepare and submit a *Written Notification of Completion of Commissioning* for each of the proposed installations, that will notify the CAM that all testing and commissioning activities have been completed, and that the project is now ready to commence operations.
- Implement the *Commissioning Plan*.

Products:

- Procurement Plan
- Construction and Installation Plan
- Written Notification of Site Readiness
- Construction and Installation Report
- Written Notification of Completion of Construction and Installation
- Commissioning Plan
- Commissioning Report
- Written Notification of Completion of Commissioning

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

Task 5 DATA COLLECTION AND ANALYSIS

The goal of this task is to collect operational data from the project, to analyze that data for economic and environmental impacts, and to include the data and analysis in the Final Report and a monthly progress report for the final 12 months of the data collection period.

The Recipient shall:

- Collect and provide a minimum of 12 months of data on deployed charging equipment, submitted electronically each month in a *Monthly Data Collection Progress Report*. Data on charging events for deployed infrastructure shall include, but is not limited to:
 - Number of charging or refueling sessions
 - Average charger or refueling station 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 or kg dispensed
- Types of vehicles using the charging equipment
- Applicable price to the driver or user for charging
- Payment method for public charging
- Energy delivered back to grid or facility if a bidirectional charging use case (kWh)
- Normal operating hours, up time, downtime, and explanations of variations
- Collect and provide the following data to be included in the Final Report:
 - Number, type, date and location of chargers or hydrogen refueling stations installed.
 - Nameplate capacity of the installed equipment, in kW for chargers and kg/day for hydrogen.
 - Number and type of outlets per charger.
 - Location type, such as street, parking lot, hotel, restaurant or multi-unit housing.
 - Total cost per charger or refueling station, the subsidy from the CEC per charger or refueling station, federal subsidy per charger or refueling station, utility subsidy per charger or refueling station, and privately funded share per charger or refueling station.
 - 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 at the facility.
 - Describe any energy efficiency measures used in the facility that may exceed Title 24 standards in Part 6 of the California Code Regulations.
 - Provide data on potential job creation, economic development, and increased state revenue as a result of expected future expansion.
 - Provide a quantified estimate of the project's carbon intensity values for life-cycle greenhouse gas emissions.
 - Compare any project performance and expectations provided in the proposal to CEC with actual project performance and accomplishments.

Products:

- Monthly Data Collection Progress Report
- Data collection information and analysis will be included in the Final Report

TASK 6 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 ARV-22-001 with FreeWire Technologies, Inc. for a \$601,911 grant. This project will deploy battery integrated DCFC infrastructure in Central California with the goal of enabling EV adoption among transportation network company (TNC) drivers; and

FURTHER BE IT RESOLVED, that the Executive Director or their designee shall execute the same on behalf of the CEC.

CERTIFICATION

The undersigned Secretariat to the CEC does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the CEC held on July 13, 2022.

AYE:

NAY:

ABSENT:

ABSTAIN:

Liza Lopez

Secretariat