



STATE OF CALIFORNIA

GRANT AMENDMENT REQUEST FORM (GARF)

CEC-277 (Revised 12/2019)

CALIFORNIA ENERGY COMMISSION

Original Agreement # ARV-19-065 Amendment # 1

Division	Agreement Manager:	MS-	Phone
600 Fuels and Transportation Division	Manuel Aguila	27	916-654-4642

Recipient's Legal Name	Federal ID #
Redwood City Elementary School District	06-32130

Revisions: (check all that apply)	Additional Requirements
☐ Term Extension New End Date: / /	Include revised schedule and complete items A, B, C, & F below.
☒ Budget Augmentation Amendment Amount: \$ 337,089	Include revised budget and complete items A, B, C, D, & F below.
☐ Budget Reallocation	Include revised budget and complete items A, B, C, & F below.
☒ Scope of Work Revision	Include revised scope of work and complete items A, B, C, E, & F below.
☐ Change in Project Location or Demonstration Site	Include revised scope of work and complete items A, B, C, E, & F below.
☐ Novation/Name Change of Prime Recipient	Include novation documentation and complete items A, B, C, & F below.
☐ Terms and Conditions Modification	Include applicable exhibits with bold/underline/ strikeout and complete items A, B, C, & F below.

A) Business Meeting Information**Business Meeting approval is not required for the following types of Agreements:**☐ Minor amendments delegated to Executive Director per December 2013 ResolutionProposed Business Meeting Date 3 / 11 / 2020 ☒ Consent ☐ Discussion

Business Meeting Presenter Sarah Williams Time Needed: minutes

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

Agenda Item Subject and Description:

Proposed resolution approving Amendment 1 to Agreement ARV-19-065 with Redwood City Elementary School District to: 1) increase the number of all-electric school buses and supporting infrastructure from three to four, 2) increase the total award amount by \$337,089, 3) modify bus specifications, and 4) adopt staff's determination that the installation of the charging infrastructure is exempt from CEQA.

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



STATE OF CALIFORNIA

GRANT AMENDMENT REQUEST FORM (GARF)

CEC-277 (Revised 12/2019)

CALIFORNIA ENERGY COMMISSION

Legal Company Name:	Budget
TBD	\$ 240,000.00
	\$ 0.00
	\$ 0.00

C) List all key partners: (attach additional sheets as necessary)

Legal Company Name:

D) Budget Information (only include amendment amount information)

Funding Source	Funding Year of Appropriation	Budget List Number	Amount
Other	FY 18/19	601.110	\$277,089
ARFVTP	FY 18/19	601.118K	\$60,000
Funding Source			\$
Funding Source			\$
Funding Source			\$

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

Explanation for "Other" selection

Federal Agreement #:

E) 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, §15301

☐ Common Sense Exemption. 14 CCR 15061 (b) (3) Explain reason why Agreement is exempt under the above section: The Energy Commission made CEQA findings pertaining to this project, including finding it was categorically exempt under 14 CCR 15301 when the project was originally approved by the Commission on July 15, 2019. The currently proposed changes through this amendment involve a budget augmentation to increase the number of electric buses funded under this agreement from three to four, the addition of a CEC logo on the buses, and a change in bumper color on the buses. These changes will not result in any impact to the environment beyond those already considered in



STATE OF CALIFORNIA

GRANT AMENDMENT REQUEST FORM (GARF)

CEC-277 (Revised 12/2019)

CALIFORNIA ENERGY COMMISSION

July 2019 and do not change the applicability of the categorical exemption under 14 CCR 15301.

- 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

F) The following items should be attached to this GARF (as applicable)

- | | | |
|---|---|--|
| 1. Exhibit A, Scope of Work | ☐ N/A | ☒ Attached |
| 2. Exhibit B, Budget Detail | ☐ N/A | ☒ Attached |
| 3. CEQA Documentation | ☐ N/A | ☒ Attached |
| 4. Novation Documentation | ☒ N/A | ☐ Attached |
| 5. CEC 105, Questionnaire for Identifying Conflicts | | ☒ Attached |

Agreement Manager

Date

Office Manager

Date

Deputy Director

Date

Exhibit A SCOPE OF WORK

TECHNICAL TASK LIST

Task #	CPR	Task Name
1		Administration
2		Charging Infrastructure: Utility Company Coordination
3	X	Charging Infrastructure: Engineering and Design
4		Charging Infrastructure: Purchase Equipment and Execute Service Agreements
5		Charging Infrastructure: Installation and Implementation
6		Procure Electric School Bus(es)
7		Scrap Replaced School Bus(es)
8		Data Collection and Analysis

KEY NAME LIST

Task #	Key Personnel	Key Subcontractor(s)	Key Partner(s)
1			
2			
3			

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
CPR	Critical Project Review
FTD	Fuels and Transportation Division
Recipient	Redwood City Elementary School District

BACKGROUND

Senate Bill 110 (SB 110), Chapter 55, Statutes of 2017 allocates funding to public school districts, county offices of education, and joint power authorities currently operating home-to-school transportation programs on behalf of local educational agencies, for school bus replacement grants through a program administered by the Energy Commission, in consultation with the California Air Resources Board (CARB). SB 110 appropriated remaining funds in the Proposition 39 K-12 Grant Program Funds and established the Clean Energy Job Creation Program for the purpose of funding a new School Bus Replacement Program, in addition to two other school related energy efficiency programs.

Assembly Bill (AB) 118 (Núñez, Chapter 750, Statutes of 2007), created the Alternative and Renewable Fuel and Vehicle Technology Program (now known as the Clean Transportation Program). 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 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.

The California Energy Commission issued solicitation GFO-17-607 to provide funding opportunities under both the School Bus Replacement Program to fund projects that replace the oldest diesel school buses in California with electric vehicle (EV) school buses and the Clean Transportation Program to fund infrastructure projects that support the EV school buses. To be eligible for funding under GFO-17-607 (the "Solicitation"), the projects must also be consistent with the Clean Transportation Program Investment Plan updated annually. In response to the Solicitation, Recipient submitted *Proposal #139* (the "Application"), which was proposed for funding in the Energy Commission's Notice of Proposed Awards issued on June 3, 2019. Both the Application and the Solicitation are hereby incorporated by reference into this Agreement.

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:

School bus fleets are aging, and our communities have poor air quality. Replacing school buses with zero emission school buses will address both of these issues.

Goals of the Agreement:

The goal of this Agreement is to improve air quality and reduce school energy costs, while providing students with necessary school transportation. This agreement also supports the state's overall energy goals such as the Low Carbon Fuel Standard target for 2030 and the SB 32 target goal to reduce greenhouse gas emissions 40 percent below the 1990 level by 2030.

Objectives of the Agreement:

The objectives of this Agreement are to purchase electric school bus(es) to replace diesel buses which will be removed from service and scrapped, and install or upgrade electric bus charging infrastructure.

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:
 - o Agreement Terms and Conditions
 - o Critical Project Review (Task 1.2)
 - o Match fund documentation (Task 1.6) No reimbursable work may be done until this documentation is in place.
 - o Permit documentation (Task 1.7)
 - o Subcontracts needed to carry out project (Task 1.8)
 - o The CAM’s expectations for accomplishing tasks described in the Scope of Work
 - o An updated Schedule of Products and Due Dates
 - o Quarterly Progress Reports (Task 1.4)
 - o Technical Products (Product Guidelines located in Section 5 of the Terms and Conditions)
 - o 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:

- o What to do with any equipment purchased with Energy Commission funds (Options)
 - o Energy Commission's request for specific "generated" data (not already provided in Agreement products)
 - o Need to document Recipient's disclosure of "subject inventions" developed under the Agreement
 - o "Surviving" Agreement provisions
 - o 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 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 or 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 Quarterly 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:

- Quarterly 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 electronic 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 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 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:

- o 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.
 - o 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 1.7 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:
 - o A list of the permits that identifies the:
 - Type of permit
 - Name, address and telephone number of the permitting jurisdictions or lead agencies
 - o 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.
- 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 (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:

- Letter describing the subcontracts needed, or stating that no subcontracts are required
- Draft subcontracts
- Final subcontracts

Task 1.9 Media Communications

The goal of this task is to establish the lines of communication and procedures for conducting media activities.

The Recipient shall:

- Follow the instructions included in Exhibit A-2 Media & Communications Guide.

Products:

- Any deliverable required by the Exhibit A-2 Media & Communications Guide

TECHNICAL TASKS

TASK 2 CHARGING INFRASTRUCTURE: UTILITY COMPANY COORDINATION

The goals of this task are: (1) to determine if Recipient's utility company has an electric charging infrastructure program, and determine if the project qualifies for the program; and (2) to submit forms to allow the Energy Commission to access utility data in order to quantify the costs and benefits of the project.

The Recipient shall:

- Contact electric utility company to inquire about electric vehicle infrastructure program.
- Determine if utility company offers an electric vehicle infrastructure program.
- Determine if the project qualifies to receive funding.
- If the project does qualify, apply to receive funding.
- Prepare and provide a Written Notification of Electric Utility Funds to the CAM. The Written Notification will discuss include:
 - o The date(s) of Recipient inquiry to the electric utility company about an electric vehicle infrastructure program
 - o A short description of electric vehicle infrastructure program(s) offered by the utility company
 - o Whether the project qualifies to receive funding
 - o If the project does qualify to receive funding, the date Recipient applied to receive funding
 - o If the Recipient did apply, a description of the status of the application
- Complete and submit to the CAM a Utility Data Release Authorization Form and Facility and Service Account Information Form, which will be provided to Recipient by the CAM. Public Resources Code section 26240(a) requires an entity that receives funds from the Clean Energy Job Creation Program Fund to authorize its local electric and gas utilities to provide 12 months of past and ongoing usage and billing records at the school facility site level to the Energy Commission. This authorization will allow the Energy

Commission to access both historical (the past 12 months) and future utility billing data. This data will help quantify the costs and benefits of school bus replacement projects.

Products:

- Written Notification of Electric Utility Funds
- Utility Data Release Authorization Form
- Facility and Service Account Information Form

TASK 3 CHARGING INFRASTRUCTURE: ENGINEERING AND DESIGN

The goal of this task is to complete all required design and engineering work, among all project subcontractors and other project participants, to enable successful construction of electric vehicle charging infrastructure.

The Recipient shall:

- Inspect facility location and determine necessary design and planning work.
- Complete engineering, design, and construction plans for facility.
- Prepare and provide an Engineering and Design Plan for each site to the CAM. The Engineering and Design Plan(s) will include, but is not limited to:
 - o Final engineering documents
 - o Final design documents
- Prepare and provide an Installation and Upgrade Schedule to the CAM. The Installation and Upgrade Schedule will include, but is not limited to:
 - o The order of installations for each site
 - o A list of installation milestones
 - o A timeline for completion of milestones
 - o An update, as necessary, to the milestones and timeline

Products:

- Engineering and Design Plan(s)
- Installation and Upgrade Schedule

[CPR WILL OCCUR DURING THIS TASK. SEE TASK 1.2 FOR DETAILS.]

TASK 4 CHARGING INFRASTRUCTURE: PURCHASE EQUIPMENT AND EXECUTE SERVICE AGREEMENTS

The goal of this task is to procure the electric vehicle charging equipment, execute any necessary service agreements and procure any other eligible equipment needed for charging infrastructure installation.

The Recipient shall:

- Prepare and submit to the CAM an Equipment List that includes a list of all equipment and service agreements necessary to complete Task 5. Any equipment listed below under Equipment Specifications Requirements must meet the requirements listed in that section. Recipient must receive CAM written approval prior to purchasing equipment on the Equipment List.
- Procure equipment and execute service agreements

Products:

- Equipment List

Equipment Specifications Requirements:

- A Level 2 EV charger must meet all of the following requirements in order to be eligible under this Agreement:
 - o Be new and purchased after agreement execution date
 - o Be networked: equipment and network must have remote diagnostics and be capable of “remote start” and usage data collection.
 - o Have a minimum 2-year networking agreement (eligible towards total project cost)
 - o Be capable of delivering electricity to a plug-in electric vehicle at a minimum of 6.2 kW
 - o Be Energy Star Certified
- A Direct Current Fast Charger (DCFC) must meet all of the following requirements in order to be eligible under this Agreement:
 - o Be new and purchased after agreement execution date
 - o Include DCFC charging stations with Combined Charging System (CCS) networked connector. Equipment and network must have remote diagnostics and be capable of “remote start” and usage data collection
 - o Have a minimum 5-year networking agreement (eligible towards total project cost)
 - o Capable of delivering electricity to a plug-in electric vehicle at a minimum of 50 kW or greater
 - o Must be approved by a Nationally Recognized Testing Laboratory Program (NRTL)
 - o **Please Note:** buses must be purchased according to the specifications listed in Task 6. Buses with these specifications do not have the ability to charge with DCFC. If the Recipient is considering purchasing a DCFC, Recipient must contact the CAM for more information.
- Photovoltaic solar panels must meet all of the following requirements in order to be eligible under this Agreement:
 - o Be connected to EV chargers
 - o Be separately metered.

EV infrastructure costs that are eligible for reimbursement under this Agreement must be directly related to school bus EV infrastructure supporting the electric school buses funded under this Agreement. These costs can include, but are not limited to:

- Electric vehicle supply equipment (EVSE)
- Transformer
- Electric Panels

- Energy storage equipment
- Photovoltaic solar panels
- Installation costs (labor and materials)
- Utility service upgrades
- Planning and engineering design costs
- Network agreement with network provider
- Extended warranties
- Stub-outs
- Demand management equipment

Task 5 CHARGING INFRASTRUCTURE: INSTALLATION AND IMPLEMENTATION

The goal of this task is to conduct site preparation, install, and commission charging equipment and associated electrical infrastructure.

The Recipient shall:

- Implement Engineering and Design Plan(s) and Installation and Upgrade Schedule (Task 3) to prepare site for equipment installation.
- Install electric vehicle charging station(s) at site.
- Inspect and verify equipment complies with all applicable safety regulations and meets all equipment specification requirements listed in Task 4. Prepare and provide Written Notification of Inspection Completion to the CAM.
- Perform commissioning and final inspections to verify that installation meets the design intent and requirements.
- Ensure that all charging stations are properly provisioned on the network.
- Provide training to site hosts.
- Ensure the proper operations of each charging station.
- Provide Photographs of Completed Installation to the CAM.
- Ensure charging infrastructure is installed and operational prior to taking delivery of the bus(es) in Task 6.

Products:

- Written Notification of Inspection Completion
- Photographs of Completed Installation

TASK 6 PROCURE ELECTRIC SCHOOL BUS(ES)

The goal of this task is to procure new electric school bus(es) in accordance with Exhibit B, Budget.

The Recipient shall:

- Determine whether Recipient will procure its electric school bus(es) from the Energy Commission awarded bus manufacturer/dealer from Solicitation GFO-18-604 or conduct its own bid to select an electric school bus manufacturer/dealer. Recipients that conduct their own bid must use their own established procurement procedures while adhering to all applicable state and local laws and the terms and conditions of this Agreement. Once Recipient has made a decision, submit an Email Stating What Method is Being Used to Purchase Bus(es) to CAM.
- Procure new electric school bus(es) that include, but are not limited to, the following specifications:
 - (1) Each bus must meet or exceed all applicable local, state, and federal laws, ordinances and requirements, including but not limited to all applicable safety and air quality regulations, and those reasonably anticipated.
 - (2) Each bus must have the ability to charge with level 2 SAE J-1772 charging.
 - (3) Each bus must be capable of vehicle-to-grid (V2G) bi-directional charging and discharging via use of type 1 CCS.
 - The bus(es) must be designed so that no hardware or firmware changes are necessary to allow the bus(es) to serve demand that is independent of the utility grid (e.g. vehicle-to-load functions that are “islanded” or electrically separated from the utility system).
 - The bus(es) must be able to receive a remote update enabling grid-interconnected V2G functions (e.g. vehicle-to-building functions connected to the utility system), upon completion of applicable requirements for safe electrical interconnection.
 - (4) Each bus must include all of the following:
 - Telematics (GPS data and vehicles mileage) with remote access.
 - All electric heating and air conditioning for the driver and students.
 - A sound generator for variable speeds for low speed safety.
 - LED interior and exterior lights, including fog lights.
 - At least 1 spare wheel and 1 spare tire. All tires must be appropriate for chassis.
 - Body parts that are rust proofed after fabrication, and before assembly. Body shall be fully undercoated under floor, skirt panels and wheel wells prior to mounting on chassis.
 - AM/FM/CD/PA radio installed. Include wiring for 2-way radio system.
 - First aid kit, dry fire extinguisher, triangle warning devices in container, sun visor, California Highway Patrol (CHP) certificate holder, and hand held stop sign and holder.
 - Maintenance manual provided. Manual must include wiring diagrams and recommended service requirements for vehicle. A digital copy of maintenance manual must be provided as well.
 - Two front and two rear frame mounted tow hooks.

- Regenerative braking.
 - Handrail for passenger entrance/exit.
- (5) Each bus must have a warranty that covers at least:
- Battery: Seven (7) years, unlimited miles or cycles
 - Chassis frame and cross members: body shell (floor, side walls, roof, front and rear sections) must include rust-through.
 - School bus seat and barrier frames: Eight (8) years, unlimited miles or cycles.
 - Materials and workmanship relating to the installation of the air conditioning: Two (2) years, unlimited miles or cycles
 - All original components not covered above or warranted by other manufacturers: Five (5) years, unlimited miles or cycles.
- (6) Bus(es) must be CHP certifiable and must receive CHP Certification before being placed in active service.
- (7) Bus(es) must be certified and issued an Executive Order by the California Air Resources Board (CARB) in accordance with the provisions of the California *Interim Certification Procedures for 2004 and Subsequent Model Hybrid-Electric and Other Hybrid Vehicles, in the Urban Bus and Heavy-Duty Vehicle Classes*, amended by CARB on October 21, 2014, or subsequent revisions:
<http://www.arb.ca.gov/regact/2013/hdghg2013/hdghgfrohybridinterimcp.pdf>.
- (8) Bus(es) must be current model year available.
- (9) Type A buses must have at least:
- A range of at least 70 miles per full charge.
 - A 16 student capacity, or reduced seat count as appropriate for wheel chair position(s).
 - A minimum GVWR of 8,000.
- (10) Type C buses must have at least:
- A range of at least 100 miles per full charge.
 - A 44 student capacity, or reduced seat count as appropriate for wheel chair position(s).
- (11) Type D buses must have at least:
- A range of at least 100 miles per full charge.
 - A 70 student capacity, or reduced seat count as appropriate for wheel chair position(s).
- (12) Each bus must display a logo designed by the Energy Commission's Media Office to ensure each bus recognizes the sponsorship of the Energy Commission. The 12x12 inch logo will be displayed on the passenger side window of the school bus below the bottom edge of the passengers' side window glass and not closer than 12 inches from any required sign. The logo shall not be used for any other purpose unless approved by the CAM in writing. The CAM will provide the logo to Recipient prior to bus purchase.
- (13) Each bus must have ~~blue~~ **green** bumpers and wheels. The CAM will provide the ~~blue~~ **green** color specifications to Recipient prior to bus purchase.
- Submit Copy of Purchase Order for Bus(es) to the CAM.
 - Submit Certification of Bus Order which includes a signed certification that Recipient's bus order(s) meet specifications (1) through (13) listed above.
 - Take delivery of bus(es).

- Confirm bus(es) is functioning as expected.
- Put new bus(es) in rotation as part of the bus fleet. Prepare and provide Written Notifications of Bus(es) in Service to the CAM.
- Submit copies of the bus registration documentation to the CAM, including but not limited to:
 - o Current DMV School Bus Registration(s)
 - o Current CHP Safety Certification(s) (CHP 292)
 - o California Air Resources Board Executive Order Number
- Provide Photograph(s) of the Bus(es) to the CAM after delivery.

Products:

- Email Stating What Method is Being Used to Purchase Bus(es)
- Copy of Purchase Order for Bus(es)
- Certification of Bus Order
- Written Notification of Bus(es) in Service
- Copy of Current DMV School Bus Registration(s)
- Copy of Current CHP Safety Certification(s) (CHP 292)
- California Air Resources Board Executive Order Number
- Photograph(s) of Bus(es).

TASK 7 SCRAP REPLACED SCHOOL BUS(ES)

The goal of this task is to scrap the old school bus(es) that were replaced in Task 6 to ensure that they are not producing emissions.

The Recipient shall:

- Remove from service the old diesel school bus(es) for which the Recipient has received a replacement bus(es) and scrap each old diesel bus within 12 months from delivery of the new electric replacement school bus.
- Provide a copy of the Dismantler Certification Form to the CAM, completed and signed by dismantler and dated within 12 months from delivery of the new electric replacement school bus.

Products:

- Dismantler Certification Form

TASK 8 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. Formulas will be provided for calculations. A Final Report data collection template will be provided by the Energy Commission.

The Recipient shall:

- Develop data collection test plan.
- Troubleshoot any issues identified.
- Collect data, information, and analysis and develop a Final Report which includes:
 - o Total gross project costs.
 - o Length of time from award of bus(es) to project completion.
 - o Fuel usage before and after the project.

- o 12 months of throughput, usage, and operations data from the project including, but not limited to:
 - Maximum capacity of the new charging infrastructure vs. miles per gallon of diesel bus(es) being replaced
 - Duty cycle of the current fleet and the expected duty cycle of future electric bus acquisitions
 - Specific jobs and economic development resulting from this project
 - Vehicle miles traveled by each new school bus
 - Maintenance and fueling costs for new bus(es) and infrastructure.
 - Maintenance and fueling costs of replaced diesel bus(es) and infrastructure
 - Number of students served by new bus(es)
 - Electricity use by infrastructure
- o Identify any current and planned use of renewable energy at the facility.
- o Identify the source of the alternative fuel.
- o Provide data on potential job creation, economic development, and increased state revenue as a result of expected future expansion.
- o Provide a quantified estimate of the project's carbon intensity values for life-cycle greenhouse gas emissions.
- o Compare any project performance and expectations provided in the proposal to Energy Commission with actual project performance and accomplishments.

Products:

- Data Collection Test Plan
- Data collection information and analysis will be included in the Final Report

STATE OF CALIFORNIA

STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION

RESOLUTION - RE: REDWOOD CITY ELEMENTARY SCHOOL DISTRICT

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 Amendment 1 to Agreement ARV-19-065 with Redwood City Elementary School District to: (1) increase the number of all-electric school buses and supporting infrastructure from three to four; (2) increase the total award amount by \$337,089; (3) modify bus specifications; and (4) adopt staff's determination that the installation of the charging infrastructure is exempt from CEQA; and

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

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 CEC held on March 11, 2020.

AYE:

NAY:

ABSENT:

ABSTAIN:

Cody Goldthrite
Secretariat