STATE OF CALIFORNIA

GRANT REQUEST FORM (GRF)

CEC-270 (Revised 12/2019) CALIFORNIA ENERGY COMMISSION

A) New Agreement # ZVI-21-010

B) Division	Agreement Manager:	MS-	Phone
600 Fuels and Transportation Division	Sarah Williams	27	9169319425

C) Recipient's Legal Name	Federal ID #
Prospect Silicon Valley	27-0220018

D) Title of Project
Twin Rivers Unified School District School Bus Fleet Electrification Study

E) Term and Amount

Start Date	End Date	Amount
12 / 08 / 2021	7/15/2023	$ 190,048

F) Business Meeting Information

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

Proposed Business Meeting Date 12 / 8 / 2021 ☒ **Consent** ☐ Discussion

Business Meeting Presenter Sarah Williams Time Needed: 0 minutes

Please select one list serve. Altfuels

Agenda Item Subject and Description:

PROSPECT SILICON VALLEY. Proposed resolution approving Agreement ZVI-21-010 with Prospect Silicon Valley for a $190,048 grant to develop a planning blueprint document that will outline the transition of Twin Rivers Unified School District's diesel school bus fleet to battery electric school buses while mitigating the operational challenges and risks of deploying new technologies into existing operations, and adopting staff's determination that this action is exempt from CEQA.

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 section 15306 – Information Collection. Cal. Code Regs, tit. 14, §15306, Information Collection, provides that projects which consist of basic data collection, research and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource are categorically exempt from the provisions of CEQA. This project consists of developing a planning document for possible, future deployment of zero emission vehicles and related infrastructure equipment. The project will not cause direct physical changes to

the environment, and there will be no physical construction. This project involves data collection, technology assessment, public outreach, administrative coordination efforts, planning, and similar activities. Therefore, the proposed project will have no significant effect on the environment and is categorically exempt under section 15306.

☐ 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: (attach additional sheets as necessary)

Legal Company Name:	**Budget**
Novaworks Foundation	$ 15,000
Ideas Consulting Inc.	$ 55,000
Denise Penrose	$ 55,000

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

Legal Company Name:
Twin Rivers Unified School District

J) Budget Information

Funding Source	Funding Year of Appropriation	Budget List Number	Amount
General Fund	2021-22		$190,048
Funding Source			$
Funding Source			$
Funding Source			$
Funding Source			$

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

Explanation for “Other” selection

Reimbursement Contract #: Federal Agreement #:

K) Recipient’s Contact Information

1. **Recipient’s Administrator/Officer**

Name: Doug Davenport
Address: 1608 Las Plumas Ave.
City, State, Zip: San Jose, CA 95133
Phone: 415-867-7498

E-Mail:
doug.davenport@prospectsv.org

2. Recipient's Project Manager

Name: Andrew Huynh

CALIFORNIA ENERGY COMMISSION
Address: 1608 Las Plumas Ave.
City, State, Zip: San Jose, CA 95133
Phone: 415-867-7498
E-Mail: andrew.huynh@prospectsv.org

L) Selection Process Used

☒ Competitive Solicitation Solicitation #: GFO-20-601

☐ First Come First Served Solicitation Solicitation #: - -

M) The following items should be attached to this GRF

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

_____ _____
Agreement Manager **Date**

_____ _____
Office Manager **Date**

_____ _____
Deputy Director **Date**

Exhibit A
SCOPE OF WORK

TECHNICAL TASK LIST

Task #	Task Name
1	Administration
2	Community Engagement and ZEV Impact Assessment
3	EVSE charging, infrastructure, and site analysis
4	Evaluation of Innovative Technologies
5	Environmental Benefits and Economic Impact
6	Workforce Development and Local Community Outreach
7	Project Fact Sheet
8	Blueprint

GLOSSARY

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

Term/ Acronym	Definition
BEB	Battery Electric Bus
CAM	Commission Agreement Manager
CAO	Commission Agreement Officer
CEC	California Energy Commission
Clean Transportation Program	Formerly known as Alternative and Renewable Fuel and Vehicle Technology Program
CPR	Critical Project Review
FTD	Fuels and Transportation Division
GHG	Greenhouse Gas
Recipient	Prospect Silicon Valley
TRUSD	Twin Rivers Unified School District

Background:

Assembly Bill (AB) 118 (Núñez, Chapter 750, Statutes of 2007), created the Clean Transportation Program (formerly known as the Alternative and Renewable Fuel and Vehicle Technology 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 policies. AB 8 (Perea, Chapter 401, Statutes of 2013) re-authorizes the Program through January 1, 2024, and specifies that the CEC allocate up to $20 million per year (or up to 20 percent of each fiscal year's funds) in funding for hydrogen station development until at least 100 stations are operational. 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 CEC issued GFO-20-601 entitled "Blueprints for Medium- and Heavy-Duty Zero-Emission Vehicle Infrastructure" under the CEC's Clean Transportation Program. To be eligible for funding under GFO-20-601, projects must also be consistent with the CEC's current Clean Transportation Program Investment Plan, updated annually. In response to GFO-20-601, the Recipient submitted Proposal #28, which was proposed for funding in the CEC's First Revised Notice of Proposed Awards on August 16, 2021. GFO-20-601 is hereby incorporated by reference into this Agreement in their entirety.

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

Problem Statement:

With more than 24,000 school buses running, School Districts are a major opportunity to reduce GHG emissions and improve air quality in California Communities. The incentives to purchase Battery Electric Buses (BEBs) are there – but the planning is complex and requires expertise and engagement that can be difficult for School Districts to obtain. A comprehensive roadmap of vehicle purchase, charging needs, financial incentives and other factors would aid School Districts in carrying out its sustainability goals, access financing, and provide resilient charging infrastructure that will assure the switch to and all-BEB fleet can be sustained and supported.

In addition to outlining near term school bus fleet electrification actions such as vehicle purchase, charging needs and financial incentives, it is also important to assess longer range challenges such as managed fleet charging, workforce training, vehicle and infrastructure replacement and any other factors crucial for the efficient operations of public electric fleets in the long run. Learnings from school districts who are advanced in electrification progress may inform early planning efforts of fleet electrification for other jurisdictions and enable a long-range perspective.

Goals of the Agreement:

The goal of this Agreement is to provide an EV Blueprint that serves the needs of the Twin River Unified School District (TRUSD) for long-term planning for their electric fleet, and also to share lessons learned with other jurisdictions looking to electrify.

Objectives of the Agreement:

The objectives of this Agreement are to

- provide a Blueprint Plan, which documents impact assessments, charging infrastructure and site analysis, environmental and economic analysis, and any other relevant studies performed for or related to TRUSD's electric bus fleet. Assesses opportunities for innovative technology consideration, long-term implications of electric fleet management and operations, as well as community and workforce considerations
- provide outreach and engagement with schools districts, local government, fleet owners to share lessons learned. And seek alignment and support from community groups, CBOs, workforce groups, universities and job programs, and other groups.

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 California Energy Commission (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.
- Discuss the following administrative and technical aspects of this Agreement:
    - Agreement Terms and Conditions
    - Critical Project Review (Task 1.2)
    - Match fund documentation (Task 1.6) No reimbursable work may be done until this documentation is in place.
    - Permit documentation (Task 1.7)
    - Subcontracts needed to carry out project (Task 1.8)
    - The CAM's expectations for accomplishing tasks described in the Scope of Work
    - An updated Schedule of Products and Due Dates
    - Quarterly Progress Reports (Task 1.4)
    - Technical Products (Product Guidelines located in Section 5 of the Terms and Conditions)
    - Final Report (Task 1.5)

Recipient Products:

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

Commission Agreement Manager Product:

- Kick-Off Meeting Agenda

Task 1.2 Critical Project Review (CPR) Meetings

CPRs provide the opportunity for frank discussions between the CEC 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 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, the Commission Grants Office Officer, 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 and the Grants Officer 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 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. Each progress report is due to the CAM 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 matchexpenditures and provide a synopsis of project progress, if match funds have been expended or if work funded with match share has occurred after the noticeof 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 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.

The Recipient shall:

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

Products:

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

Task 1.6 Identify and Obtain Matching Funds

Matching Funds are not required under this RFP.

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 CEC 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 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 1.8 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 CEC 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 CAM 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

TECHNICAL TASKS

TASK 2: COMMUNITY ENGAGEMENT AND ZEV IMPACT ASSESSMENT

The goal of this task is to document the initial planning stages that TRUSD went through for fleet electrification such as impact assessment, feasibility analysis and stakeholder engagement etc. With particular focus on how risks and uncertainties surrounding the design, permitting, planning, and financing of the ZEV infrastructure are addressed.

The Recipient shall:

- Document actions or steps already adopted by the local jurisdiction and the impact of those actions or steps on the development of ZEV infrastructure.
- Document past and on-going engagements with:
    - utilities to support grid delivery, reliability, and resiliency, and address impacts of EV charging on utility rates.
    - local jurisdictions and planning organizations to ensure they are involved in the planning and permitting of the infrastructure.
    - regional workplaces, business owners, and operators in the planning process and education on the benefits of ZEV transportation.
    - regional community-based organizations, community leaders, California Native American Tribes, and potentially affected local residents in the planning process and education on the benefits of ZEV transportation.
    - financial institutions to ensure they are educated, involved, and committed to participate in the implementation of the MD/HD ZEV blueprint.
- Identify analytical tools, software applications, and data used for planning activities.
- Identify each task or area of responsibility of the project partners and stakeholder groups

Products:

- Description of Stakeholder roles and summary of engagement
    - Project partner
    - utility
    - local jurisdiction and planning organizations
    - regional workforce organization
    - CBO & community leaders
    - financial institutions
    - any other relevant stakeholders

- Task 2 Report summarizing tools and approach for ZEV infrastructure planning, description of project partners, project responsibilities, and baseline assessments and current fleet conditions.

TASK 3 EVSE CHARGING, INFRASTRUCTURE, AND SITE ANALYSIS

The goal of this task is to document implementation progress of MD/HD ZEVs and ZEV charging or refueling infrastructure and future goals

The Recipient shall:

- Provide data collection for fleet operations, vehicle usage, routes and driving patterns
- Document quantitative goals and timelines for installation and implementation of MD/HD electric vehicle (EV) charging infrastructure within the project.
- Document charging/fueling analysis: Identify Electric Charging requirements for MD/HD Vehicles
- Document site locations for MD/HD ZEV infrastructure deployment and the rationale for being considered optimal.

Products:

- Task 3 Report which shall include, but is not limited to:
  - Current fleet conditions summary and projections for future conditions
  - Current and future site and charging infrastructure
  - Long term goals for fleet and infrastructure management

TASK 4: EVALUATION OF INNOVATIVE TECHNOLOGIES

The goal of this task is to assess and analyze the combination of technologies and systems that potentially offer the best mix of economic, environmental, and technical performance specific to the region.

The Recipient shall:

- Explore innovative charging and refueling options to address potential infrastructure barriers. Technologies could include wireless, high-powered, curbside, streetlamp, and intersection chargers, solar chargers, robotic chargers, mobile chargers/refuelers, or autonomous garages.

- VGI and dynamic response assessment: Include appropriate vehicle grid integration (VGI) standards, interoperable EV infrastructure, and other methods for enhancing grid-reliability by providing data to utilities to predict charging behavior and associated impacts on the grid.
- Energy Storage assessment: Include how the project integrates energy storage for the electricity grid or uses curtailed or dedicated renewable energy as a source for renewable hydrogen.
- Vehicle and charger OEM assessment: Include the use of interoperable MD/HD charging connectors and/or charging interfaces compatible with MD/HD vehicles sold by multiple original automotive equipment manufacturers for widespread use across California and North America.

Products:

- Innovative Technology Report

TASK 5: ENVIRONMENTAL BENEFITS AND ECONOMIC IMPACT

The goal of this task is to document existing environmental, social, and economic goals/impact attained with ZEV transition, and provide projections for the future.

The Recipient shall:

- Identify goals to reduce greenhouse gas (GHG) emissions, criteria air pollutants, and toxic air contaminants for the region, and the emitters at the local level that would need to be targeted.
- Identify the benefits that would accrue to disadvantaged communities (DACs), low-income communities, priority populations, and/or tribal lands to the maximum extent possible. Address health and safety, access and education, financial benefits, economic development, and consumer protection.
- Summarize the types of jobs that are/will be created for the local community.

Products:

- Economic, Social, and Environmental Impact Report
- Summary list of potential jobs created

TASK 6: WORKFORCE DEVELOPMENT AND LOCAL COMMUNITY OUTREACH

The goal of this task is to develop action plan to enable training, education, and readiness for the local community workforce for ZEV transition

The Recipient shall:

- Work with community colleges, CBOs and community leaders to develop workforce development strategies that will enable training, education, and readiness for the local community workforce to obtain the requisite knowledge, skills and abilities to develop, support, and maintain the ZEV fleets.
- Develop an outreach strategy tailored to local community, supported by education and outreach materials appropriate for potentially affected residents, in the languages needed for the community, to educate on the planning efforts and potential future impacts.

Products:

- Draft Action Plan for Workforce development and Community Outreach
- Final Action Plan for Workforce Development and Community Outreach

TASK 7: PROJECT FACT SHEET

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

The Recipient shall:

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

Products:

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

TASK 8: KNOWLEDGE TRANSFER OF FLEET ELECTRIFICATION BEST PRACTICES

The goal of this task is to implement an outreach and engagement plan that shares lessons learned from TRUSD's bus fleet electrification with relevant audience, such as neighboring jurisdictions, school districts in California and any other public or private fleet owners. This task will develop a variety of material that summarizes findings and best practices, which will assist in the outreach and education effort, such as meeting presentations, webinars and project update posts.

The Recipient shall:

- Prepare a brief outreach plan with list of invitees, outreach approach and proposed events
- Carry out the outreach plan and invite relevant attendees, prepare engagement material, host events and coordinate on follow up engagement actions
- Prepare a Draft and Final Project Presentation aim to share results and lessons learned from project.

Products:

- Outreach plan with list of proposed invitees
- Draft and Final Project Presentation
- Attendee record from outreach events

TASK 9: BLUEPRINT

The goal of this task is to provide a Blueprint document that captures the School District's past and current progress with fleet electrification and include assessment of current conditions and recommended steps to achieve long range goals for its BEB fleet.

The Recipient shall:

- Develop a Blueprint that outlines transitioning to a BEB fleet while mitigating the operational challenges and risks of deploying new technologies into existing operations. The implementation plan will start with a baseline assessment of existing BEB plans and include a detailed analysis of the technologies chosen by the school district for its future fleet, recommendations for charging infrastructure, an evaluation of the facility infrastructure, a resiliency plan, and full cost analysis.

Products:

- Draft Blueprint Plan
- Final Blueprint Plan

- **Project Task Items**

The ZEV blueprint for MD/HD infrastructure should include, but is not limited to, the following:

1. Identify the actions and milestones needed for implementation of MD/HD ZEVs and ZEV charging or refueling infrastructure, as follows:
    - Quantitative goals and specific, realistic timelines for installation and implementation of MD/HD electric vehicle (EV) charging and/or hydrogen refueling infrastructure within the project.
    - Potential sites, maps, and accessibility to travel routes identified for proposed MD/HD charging and/or refueling.
        - Identify optimal locations for MD/HD ZEV infrastructure deployment and the rationale for being considered optimal.
        - MD/HD vehicle usage and driving patterns in order to maximize and optimize the type and placement of ZEV infrastructure to support the MD/HD ZEVs.

2. Minimize the risks and uncertainties surrounding the design, permitting, planning, and financing of the ZEV infrastructure network through engagement.
    - Engage utilities to support grid delivery, reliability, and resiliency.
    - Address impacts of increased charging on utility rates.
    - Engage local jurisdictions and planning organizations to ensure they are involved in the planning and permitting of the infrastructure.
    - Engage regional workplaces, business owners, and operators in the planning process and education on the benefits of ZEV transportation.
    - Engage regional community-based organizations (CBOs), community leaders, California Native American Tribes, and potentially affected local residents in the planning process and education on the benefits of ZEV transportation. With regional organizations, determine if a community needs assessment is warranted and develop an appropriate scope.
    - Engage financial institutions to ensure they are educated, involved, and committed to participate in the implementation of the MD/HD ZEV infrastructure blueprint.

3. Analyze the combination of technologies and systems that offer the best mix of economic, environmental, and technical performance specific to the project/region.
    - Explore innovative MD/HD charging and hydrogen refueling options to address potential infrastructure barriers. Technology options may include wireless charging, high-powered charging, overhead catenary systems, solar chargers, robotic chargers, mobile chargers/refuelers, curbside, streetlamp, and intersection chargers, or autonomous garages.

- Include appropriate Vehicle-Grid Integration (VGI) standards and open standards-based network communications.
    - Include the ability to support emerging connectors and/or interfaces for heavy-duty vehicles, open standards-based network communications, the inclusion of appropriate VGI standards, and/or other methods for enhancing grid-reliability by providing data to utilities to predict charging behavior and associated impacts on the grid.
    - Include how the project integrates energy storage for the electricity grid or uses curtailed or dedicated renewable energy as a source for renewable hydrogen.
- Include the use of interoperable MD/HD charging connectors and/or charging interfaces compatible with MD/HD vehicles sold by multiple original automotive equipment manufacturers for widespread use across California and North America.
- Include other methods for enhancing grid-reliability by providing data to utilities to predict charging behavior and associated impacts on the grid.

4. Document actions or steps already adopted by the local jurisdiction and the impact of those actions or steps on the development of MD/HD ZEV infrastructure.

5. Identify analytical tools, software applications, and data needed to improve future MD/HD ZEV infrastructure planning activities.

6. Identify each task or area of responsibility required of the project partners and stakeholder groups to develop a replicable approach for other fleets transitioning to zero-emission.

7. Develop an outreach strategy tailored to local community, supported by education and outreach materials appropriate for potentially affected residents, in the languages needed for the community, to educate on the planning efforts and potential future impacts.

8. Work with community colleges, CBOs and community leaders to develop workforce development strategies that will enable training, education, and readiness for the local community workforce to obtain the requisite knowledge, skills, and ability to develop, support, and maintain the MD/HD ZEV fleets.

9. Summarize the types of jobs that will be created for the local community.

10. Identify goals to reduce greenhouse gas (GHG) emissions, criteria air pollutants, and toxic air contaminants for the region, and the emitters at the local level that would need to be targeted.

11. Identify the benefits that would accrue to disadvantaged communities (DACs), low-income communities, priority populations, and/or tribal lands to the maximum extent possible. Address health and safety, access and education, financial benefits, economic development, and consumer protection.

    - For the purposes of this solicitation, DACs are defined as communities scoring in the top 25th percentile according to the most recent California Communities Environmental Health Screening Tool: CalEnviroScreen Version 3.0 (https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30)
    - For the purposes of this solicitation, priority populations include residents of (1) census tracts identified as disadvantaged by California Environmental Protection Agency per SB 535, (2) census tracts identified as low-income per AB1550, or (3) a low-income household per AB 1550. The following web link provides interactive maps to aid in determining geographic eligibility for disadvantaged and low-income communities: https://webmaps.arb.ca.gov/PriorityPopulations/ For the purposes of this solicitation, tribal lands refer to lands located in theState of California that are tribally owned lands, buildings, or facilities.

TASK 10 DATA COLLECTION

The goal of this task is to collect data from the project and include this in regular progress reports and the Final Report, if any, according to statutory requirements. Because this is only a blueprint planning agreement, it is not expected that there will be any physical construction that would result in data collection, as listed below. However, if this agreement did result in physical construction, the minimum data collection requirements are listed below.

The Recipient shall:

Collect the following data:

- 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

- Data on chargers over a twelve-month period, including:

    - Number of charging or refueling sessions

    - Average session duration

    - Average kWh or kg dispensed

    - Average charger or refueling station downtime

Submit all data described above, if any, in a quarterly progress report throughout the duration of the agreement.

Discuss data, information, and analysis described above, if any, in the Final Report

Products:

- Data collection on other relevant data and information described above, if any, will be submitted electronically in a quarterly progress report.
- Data collection, analysis, and discussion, if any, will be included in the Final Report.

RESOLUTION NO: 21-1208-1c

STATE OF CALIFORNIA

STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION

RESOLUTION: PROSPECT SILICON VALLEY

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-21-010 with Prospect Silicon Valley for a $190,048 grant to develop a planning blueprint document that will outline the transition of Twin Rivers School District's diesel school bus fleet to battery electric school buses while mitigating the operational challenges and risks of deploying new technologies into existing operations; 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 December 8, 2021

AYE:
NAY:
ABSENT:
ABSTAIN:

_____
Liza Lopez
Secretariat