STATE OF CALIFORNIA

GRANT REQUEST FORM (GRF)

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

A) New Agreement # ARV-21-026 (to be completed by CGL office)

B) Division	Agreement Manager:	MS-	Phone
600 Fuels and Transportation Division	Tim Olson	44	916-805-7472

C) Recipient's Legal Name	Federal ID #
Port of Stockton	94-6001403

D) Title of Project
Port of Stockton MD/HD Electrification Blueprint

E) Term and Amount

Start Date	End Date	Amount
08 / 11 / 2021	03 / 31 / 2023	$ 200,000

F) Business Meeting Information

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

Proposed Business Meeting Date 08 / 11 / 2021 ☐ Consent ☒ Discussion

Business Meeting Presenter Tim Olson Time Needed: 5 minutes

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

Agenda Item Subject and Description:

PORT OF STOCKTON. Proposed resolution approving ARV-21-026 with the Port of Stockton for a $200,000 grant to develop a planning "blueprint" document that will enhance the transition to zero emission technologies among the ports tenants, Central Valley medium and heavy duty truck fleets, stevedoring, agriculture and maritime industries, and adopting staff's determination that this action is exempt from CEQA. (Clean Transportation Program funding)

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 15306

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

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**
Build Momentum, Inc.	$ 100,000.00
Star Crest	$ 35,000.00
Rebel	$ 35,000.00

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

Legal Company Name:

J) Budget Information

Funding Source	Funding Year of Appropriation	Budget List Number	Amount
ARFVTP	FY 19/20	601.118L	$200,000
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: Jeff Wingfield

   Address: 2201 W. Washington Street

   City, State, Zip: Stockton, CA 95201

   Phone: (209) 946-0246

   E-Mail: jwingfield@stocktonport.com

2. **Recipient's Project Manager**

STATE OF CALIFORNIA

GRANT REQUEST FORM (GRF)

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

Name: Steve Larson Phone: (209) 946-0246

Address: 2201 W. Washington Street E-Mail: slarson@stocktoonport.com

City, State, Zip: Stockton, CA 95201

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**

Port of Stockton
Exhibit A
SCOPE OF WORK

TECHNICAL TASK LIST

Task #	CPR	Task Name
1		Administration
2		Community Outreach and Engagement
3		Preliminary ZEV Fleet Evaluation and Infrastructure Design
4		Resiliency Planning
5		Critical Pathway Analysis
6		California Deployment Strategy and Knowledge Transfer
7		Project Fact Sheet
8		Blueprint

KEY NAME LIST

Task #	Key Personnel	Key Subcontractor(s)	Key Partner(s)
1	Jason Katindoy Jeff Wingfield	Momentum Rebel Marketing Pros (“Rebel”)	
2	Jeff Wingfield	Momentum Rebel Starcrest	
3	Steve Escobar	Momentum Rebel Starcrest	
4	Steve Escobar	Momentum	
5	James Dumont	Momentum	
6	Jeff Wingfield Jason Katindoy	Momentum Starcrest	
7	Jason Katindoy James Dumont	Momentum Rebel	
8	James Dumont Jeff Wingfield Jason Katindoy	Momentum Rebel Starcrest	

Port of Stockton
Exhibit A
SCOPE OF WORK

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
Clean Transportation Program	Formerly known as Alternative and Renewable Fuel and Vehicle Technology Program
CPR	Critical Project Review
DER	Distributed Energy Resources
FTD	Fuels and Transportation Division
Recipient	Port of Stockton
MD/HD	Medium- and Heavy-Duty
ZEV(s)	Zero-Emission Vehicle(s) and Equipment

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.

Port of Stockton
Exhibit A
SCOPE OF WORK

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 #26, which was proposed for funding in the CEC’s Notice of Proposed Awards on April 8, 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:

The Port of Stockton is a unique special district, overseeing one of the West Coast’s busiest “small ports”, providing reliable electric service as a municipal electric utility, and supporting thousands of jobs as an anchor of the Stockton community and the Central Valley. Shipping and trucking activities emit thousands of tons of greenhouse gases and criteria pollutants, the former being a global warming pollutant and the latter affecting local air quality. The Port of Stockton (“Port” or POS) is striving towards a zero-emission future that will see diminished emissions from the ships it serves; the cargo handling equipment (CHE) transferring goods between vessels, trucks, and warehouses; the trucks servicing the port; and, the diverse tenant businesses that include carbon intensive operations such as cement manufacturing and biofuel production. The Port has already begun the process of electrifying portions of its CHE fleet with the ongoing deployment of 18 36,000-lb and 16 8,000-lb lift capacity battery-electric forklifts, two Dannar mobile power units, and one battery-electric rail car mover. With these deployments underway, the Port is rapidly identifying and overcoming challenges to further electrification and unlocking the expansive benefits that greater electrification can provide to the Port, its tenants, and the community the Port serves. Uniquely positioned as both a Port and public electrical utility, the Port is assessing its strategy to support the adoption of ZEVs throughout the local supply chain and port operations–from the arrival of employees, tenants, and visitors, to managing cargo, fueling freight and delivery trucks, and providing reliable, affordable, and resilient electrical service.

Developing ZEV refueling infrastructure for the Port requires an understanding of the types of vehicles, equipment, and vessels to be supported. The proposed project will seek to leverage the Port’s knowledge gained through its ongoing ZEV deployments and demonstrations in order to develop an actionable and replicable series of steps that should be undertaken by a small port of public utility to support public and private adoption of MD/HD ZEVs.

Thoughtful development of ZEV refueling infrastructure can support future development of microgrids, industrial hydrogen utilization, renewable energy use in industrial processes, and combined heat and power systems at the Port.

Goals of the Agreement:

The goals of this Agreement are to accelerate the adoption and deployment of ZEV infrastructure at the Port of Stockton and to develop a series of instructional guides—based

upon actual ZEV deployments—that will facilitate the evaluation, design, and deployment of ZEVs and ZEV infrastructure by small ports, municipal utilities, and port tenants.

Objectives of the Agreement:

The objectives of this Agreement are to:

- Engage internal and external stakeholders to develop a comprehensive, economic, and equitable approach to rapidly deploying MD/HD ZEV infrastructure.
- Coordinate with local AB 617 Community Air Protection Program to ensure Blueprint efforts are supported by the local community and incorporate feedback that supports rapid electrification.
- Inventory existing vehicles and equipment to assess zero-emission transition progress to date and to define opportunities to accelerate the transition.
- Define fleet owner and driver needs to identify critical performance specifications that are important to the ultimate customer and MD/HD ZEV user.
- Identify workforce education and training resources to prepare maintenance technicians for MD/HD ZEVs in operation at the Port and on the road.
- Complete a preliminary design for public- and private-access MD/HD ZEV infrastructure at the Port of Stockton, that will be the starting point of a strategy to achieve net zero emissions by 2035.
- Develop a phased approach to infrastructure deployment that maintains flexibility to react to changes to a nascent market with rapidly evolving technology.
- Map the ecosystem of strategic partners and business model innovations supported by ZEV market adoption.
- Evaluate how the transport routes could be supported with ZEV technologies to increase the sustainability of the Northern California goods movement industry.
- Identify and evaluate technologies, systems, and policies that will enable a resilient, cost-effective, and renewable electricity supply for a net zero emissions port.
- Create an actionable series of implementation guides to facilitate zero emission options by other fleets, ports, and municipal utilities.

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
  - Monthly Progress Reports (Task 1.4)
  - Technical Products (Product Guidelines located in Section 5 of the Terms and Conditions)
  - Final Report (Task 1.5)

Recipient Products:

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

Commission Agreement Manager Product:

- Kick-Off Meeting Agenda

Task 1.2 Critical Project Review (CPR) Meetings

CPRs provide the opportunity for frank discussions between the 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 Monthly Progress Reports

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

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

The Recipient shall:

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

Product:

- Monthly Progress Reports

Task 1.5 Final Report

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

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

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

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 shall be spent concurrently or in advance of CEC 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 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 1.7 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.

Port of Stockton
Exhibit A
SCOPE OF WORK

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 OUTREACH AND STAKEHOLDER ENGAGEMENT

The goal of this task is to bring together a broad and diverse stakeholder audience—including Port of Stockton employees, tenants, operators, visitors, technology developers, community leaders, finance partners, agencies, and technical experts—to foster productive and thoughtful dialogue around a new transportation paradigm; identify challenges, risks, obstacles, and opportunities; and create systems and processes to reduce uncertainty.

The Recipient shall:

- Prepare a *List of Outreach Targets* to ensure a diverse stakeholder audience.
- Prepare a *Community and Stakeholder Engagement Plan* to identify the purpose of engagement with communities and stakeholders and the goals and intended outcomes of the outreach by stakeholder segment.
- Engage Pacific Gas and Electric (PG&E) to support grid and natural gas delivery, reliability, and resiliency. Port of Stockton will work with PG&E to understand infrastructure upgrades needed to support MD/HD electric vehicle charging and hydrogen refueling.
- Determine a need for hydrogen refueling. If needed, assess options to reform hydrogen from natural gas or electrolyze it from water. As necessary, engage the water utility to understand opportunities and limitations associated with blue hydrogen production.
- Engage City of Stockton, San Joaquin County, San Joaquin Valley Air Pollution Control District, and other relevant regional jurisdictions and planning organizations to ensure they are involved in the planning and permitting of the infrastructure. Identify policy gaps that must be addressed to support rapid, cost-effective deployments of MD/HD ZEVs, ZEV infrastructure, and supporting DER technologies. 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 and a long-term zero emission vision.
- Engage Port tenants, business owners and operators, 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. Engagement will include:
    - Close coordination and engagement with the local AB 617 Community Air Protection Program process currently underway.
    - Outreach to the community about how MD/HD ZEV infrastructure addresses community concerns, including concerns about air quality and management of dry bulk dust.
    - Assess interest in connecting to the proposed project, should electricity generation and/or hydrogen reformation equipment be installed, for the delivery and/or sales of these services to the local community every day or during widespread outages.
    - Education about new and innovative ZEVs, ZEV infrastructure, and DER technologies that solicit dialogue and conversation about ZEVs.
    - Work with community colleges, the California Maritime Academy, 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, operate, and maintain MD/HD ZEV fleets and their supporting infrastructure.
    - Develop an outreach approach tailored to the 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.
- Engage Port of Stockton Board of Directors, management, and employees to foster dialogue and communication around new ZEV management practices, tenant engagement, and opportunities for employee ZEV charging onsite.
- Engage financial institutions to ensure they are educated, involved, and committed to participate in the implementation of the MD/HD ZEV infrastructure blueprint. Engagement will include discussions to understand new and innovative business models around energy-as-a-service, incentive and credit monetization, and third-party ZEV fueling operations to be offered onsite.
- Engage with technology vendors to analyze the combination of technologies and systems that offer the best mix of economic, environmental, and technical performance specific to Port of Stockton.
    - Explore innovative MD/HD charging and hydrogen refueling options to address potential infrastructure barriers, with an eye towards usability and futureproofing for longevity. Technology options may include wireless charging, high-powered charging, overhead catenary systems, solar chargers, robotic chargers, mobile chargers/refuelers, 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 other methods for enhancing facilities management by managing charging and enhancing grid-reliability by providing data to utilities to update the facility load profile and associated impacts on the grid.
- Prepare a *Community and Stakeholder Engagement Report* that includes:
    - Organizations, companies, and stakeholders that received outreach.
    - Summary of the outcomes of such outreach (e.g. engaged in dialogue, declined to participate, did not respond).
    - Overview of topics discussed.
    - Summary of the key findings aggregated by stakeholder segment.
    - Overview of enabling policies, existing, planned, and needed.

Products:

- List of Outreach Targets
- Community and Stakeholder Engagement Plan
- Community and Stakeholder Engagement Report

TASK 3 PRELIMINARY ZEV FLEET SELECTION AND INFRASTRUCTURE DESIGN

The goals of this task are to (1) understand the types of shoreside vehicles that visit and/or operate at the Port of Stockton, and their operational needs, and (2) develop a preliminary design of onsite ZEV fueling and review it with Port staff, PG&E, Port tenants, and trucking fleet operators to ensure its feasibility. The outcome will be a preliminary plan to support ZEV adoption throughout the Port of Stockton supply chain.

The Recipient shall:

- Engage employees, tenants, and trucking fleet operators to inventory:
    - Number of vehicles that visit the Port each day, number of vehicles in residence at the Port (operate solely at the Port)
    - Vehicle type: light-duty, medium-duty, heavy-duty
    - Vehicle miles traveled to understand range needs
- Engage employees, tenants, and trucking fleet operators to understand:
    - Functional requirements for vehicles and CHE based on their operations and tasks to be completed
    - Perceptions of ZEV models and equipment, to understand concerns about cost, safety, and performance
- Develop *ZEV Requirements* to define specific needs for electric MD/HD ZEV infrastructure and/or hydrogen MD/HD ZEV infrastructure.
    - Fueling options for employees who are considering a ZEV purchase and will commute in their ZEV to the Port
    - Operator requirements for ZEV CHE and other fleet vehicles
    - Optimal fleet management of ZEV CHE and other fleet vehicles
    - Charging and facilities management for tenants and fleet operators to fuel their ZEVs onsite, accounting for offsite range needs

- Engage ZEV vendors to learn about technologies that match the needs outlined in *ZEV Requirements*, building upon discussions in Task 2 wherein Port of Stockton sought input on the portfolio of MD/HD ZEV technologies available. The Port will also review technologies with an eye towards supporting LD ZEVs as needed for employees and visitors to the Port.
- Prepare a *Preliminary ZEV Technology Assessment* that summarizes ZEV models and fueling equipment that meet operational requirements.
- Review relevant standards and operational practices relevant to vehicle fueling and service.
- Develop *Preliminary Design Documents* for the installation and deployment of electric and/or hydrogen ZEVs, ZEV fueling infrastructure, shore power connections, and supporting DER technologies.
    - Identify sites for fueling equipment and onsite electricity generation, hydrogen electrolysis, and/or hydrogen reformation
    - Integration of the equipment into the Port of Stockton distribution supervisory control and data acquisition (DSCADA) to ensure distribution management
    - Integration of operational data with the Port's own utility and PG&E; identify data, back office, and security needs
    - Assess neighboring community interest in excess power or hydrogen delivery, to determine excess capacity needed
    - Prepare conceptual layouts / sketch drawings of major infrastructure components (i.e. storage tanks, chargers, transformers) based on agreed inputs of:
        - Electric and hydrogen ZEV fueling capacity
        - DC fast charging (DCFC) infrastructure capacity
        - Excess electricity and hydrogen generation needed
        - Future zero-emission infrastructure and technology needs, which may include a microgrid, electrification of carbon intensive tenant manufacturing processes, integrated combined heat and power using waste heat from tenant manufacturing processes
- Engage PG&E to identify infrastructure upgrades needed to support the proposed ZEV fueling equipment.
- Prepare *Cost Estimate* for preferred client scenario to inform concept screening and planning (assumed Class 4 or 5 per AACE 18R-97 Cost Estimate Classification System).
- Check set-back distances consistent with vehicle circulation, operation, and fueling safety requirements.
- Check energy service with utility service provider and summarize any off-site cost implications, including for the Port's own utility service as well as PG&E.
- Summarize design insights that may influence scalability to other sites (i.e. unique site factors, climate variability, pinch points, etc).
- Scenario test for resilience of fueling services in event of energy supply disruption and potential size, cost, and business impacts.

Products:

- ZEV Requirements
- Preliminary ZEV Technology Assessment
- Preliminary Design Layout
- Cost Estimate

TASK 4 RESILIENCY PLANNING

The goal of this task is to advance the understanding about how California's small ports and municipal electric utilities can improve their operational resiliency to support critical trade, transit, and economic activity.

The Recipient shall:

- Gather information and review:
    - State of California and relevant national guidance on the role of ports in resilience planning and emergency response, with specific focus on MD/HD ZEV adoption (collected in Task 2 outreach to Planning Organizations and Utilities)
    - Resilience and business continuity plans, including performance priorities, communication pathways, risk appetite (collected in Task 2 outreach to Port of Stockton employees, management, and Board of Directors)
    - Data related to historic outages and energy supply reliability (collected in Task 2 outreach to Utilities)
- Identify Power System Disruption Scenarios (i.e. duration, scale), plausible hazards, and summary qualitative implications of service disruption, exclusive of life safety impacts, (i.e. vehicles not serviced, disrupted deliveries of goods, disrupted electricity and/or hydrogen to the local community), conditions for islanding operations by future microgrids, and communications of service interruptions with the local community.
- Identify Cybersecurity Attack Scenarios (i.e. duration, scale), plausible safety and financial issues, and summary qualitative implications of service disruption, exclusive of life safety impacts (i.e. network breach, compromised equipment control).
- Propose a *Resilience Framework Approach* to inform key stakeholders about policy and planning efforts that include a position on the suitable role of service centers in a resilient California transportation system and the business implications of this service.

Products:

- Resilience Framework Approach

TASK 5 CRITICAL PATHWAY ANALYSIS

The goal of this task is to segment phased portions of the overall MD/HD ZEV infrastructure buildout and develop a prioritization methodology for technology innovations in MD/HD ZEV infrastructure while maintaining flexibility for future technological improvements and reducing risk that early investment is abandoned.

The Recipient shall:

- Identify steps already taken, or that will need to be taken, to ensure a safety plan is in place for needed hydrogen refueling infrastructure. This may include, but is not limited to, coordination with the Pacific Northwest National Laboratory's Hydrogen Safety Panel and hydrogen fuel producers.
- Document a roadmap from the *Preliminary Design* developed in Task 3 to support future zero emission business and technological needs. This *Zero Emission Transition Strategy* will continue and build upon the *Preliminary Design* to:

  - Support for delivery and/or sales of electricity and/or hydrogen to the local community (based on Task 2 engagement)
  - Support for employee ZEV adoption and onsite fueling (based on Task 2 and Task 3 engagement)
  - Support for third-party MD/HD fleet operators visiting the Port on a transient basis to help
  - Groundwork for future DER technologies, including microgrids, industrial electrification, and combined heat and power development (based on Task 2 and Task 3 engagement)
- Identify the actions and milestones needed for implementation of MD/HD ZEVs and ZEV charging or refueling infrastructure and supporting DER technologies, as follows:
  - Quantitative goals and specific, realistic timelines for installation and implementation of private- and public-access MD/HD ZEV charging and/or hydrogen refueling infrastructure within the Port.
  - Quantitative goals and specific, realistic timelines for installation of upstream electrical infrastructure, on-site renewable energy generation, and DER technologies to support widespread electrification.
- Develop a *Prioritization Framework* identifying a framework for phasing in infrastructure investment. The *Prioritization Framework* is expected to include:
  - Phased approach to infrastructure deployment
  - Description of the approach to determining appropriate phases
  - Incorporation of quantitative goals, actions, and milestones

Products:

- Zero Emission Transition Strategy
- Prioritization Framework

TASK 6 CALIFORNIA DEPLOYMENT STRATEGY AND KNOWLEDGE TRANSFER

The goal of this task is to work with key stakeholders and industry partners to develop a strategy for rapid deployment of MD/HD ZEV infrastructure across California's small ports and municipal utilities.

The Recipient shall:

- Summarize the types of jobs that will be created for the local community.
- 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.
  - For the purposes of this agreement, 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 agreement, 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: www.arb.ca.gov/cci-communityinvestments.
  - For the purposes of this agreement, tribal lands refer to lands located in the State of California that are tribally owned lands, buildings, or facilities.
- Create a *California Deployment Strategy* that includes the benefits to California and describes the approach to deploying ZEV infrastructure at small ports and municipal utilities.

Products:

- California Deployment Strategy

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 BLUEPRINT

The goal of this task is to formalize the information gathered through the Task 2 Community and Stakeholder Engagement and Task 3 Blueprint Information Assessment into a formal Blueprint that can be shared with key stakeholders.

The Recipient shall:

- Prepare a *Blueprint Outline* that conveys the intended structure of the *Blueprint* and the intended goals and outcomes of major sections.
- Integrate findings from the Technical Tasks into the *Blueprint Outline*

- Complete *Blueprint draft*
- Incorporate feedback as provided by the CAM
- Prepare *Blueprint final*

Products:

- Blueprint Outline
- Blueprint (draft and final)

RESOLUTION NO: 21-0811-8h

STATE OF CALIFORNIA

STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION

RESOLUTION PORT OF STOCKTON

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-21-026 with the Port of Stockton for a $200,000 grant to develop a planning blueprint document that will enhance the transition to zero emission technologies among the port's tenants, Central Valley medium and heavy-duty truck fleets, stevedoring, agriculture and maritime industries; 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 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 August 11, 2021.

AYE:
NAY:
ABSENT:
ABSTAIN:

_____
Liza Lopez
Secretariat