



STATE OF CALIFORNIA

GRANT REQUEST FORM (GRF)

CEC-270 (Revised 12/2019)

CALIFORNIA ENERGY COMMISSION

A) New Agreement # ZVI-21-011 (to be completed by CGL office)

B) Division	Agreement Manager:	MS-	Phone
Fuels and Transportation Division	Alexander Wan	27	916-805-7477

C) Recipient's Legal Name	Federal ID #
Schneider National Carriers, Inc.	75-1669971

D) Title of Project
Schneider National Class 8 ZEV Blueprint

E) Term and Amount

Start Date	End Date	Amount
12 / 08 / 2021	06 /30/2023	\$ 200,000

F) Business Meeting Information

ARFVTP agreements \$75K and under delegated to Executive Director
 Proposed Business Meeting Date 12 / 08 / 2021 Consent Discussion
 Business Meeting Presenter Kate Reid Time Needed: 5 minutes
 Please select one list serve. Altfuels (AB 118 -ARFVTP)

Agenda Item Subject and Description:

SCHNEIDER NATIONAL CARRIERS, INC. Proposed resolution approving Agreement ZVI-21-011 with Schneider National Carriers, Inc. for a \$200,000 grant to prepare a blueprint document and a suite of tools that will facilitate the rapid transition of its facilities and fleets to support the widespread deployment of medium- and heavy-duty zero-emission vehicles (ZEV) and distributed energy resource technologies to enable scale ZEV goods movement operations in California and adopting staff's determination that this action is exempt from CEQA. (General Fund funding).
 Contact: Kate Reid. (Staff Presentation: 5 minutes)

G) California Environmental Quality Act (CEQA) Compliance

- 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
- If Agreement is considered a "Project" under CEQA:
 - Agreement **IS** exempt.
 Statutory Exemption. List PRC and/or CCR section number:
 Categorical Exemption. List CCR section number: 14 CCR section 15306 – Information Collection
 Common Sense Exemption. 14 CCR 15061 (b) (3) Explain reason why Agreement is exempt under the above section:
 Cal. Code Regs, tit. 14, §15306, Information Collection, provides that projects which consist of basic data collection, research and resource evaluation activities



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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	\$ 55,000.00
Daimler Trucks North America LLC	\$ 57,450.00
Black & Veatch Corporation	\$ 87,550.00
TBD	\$7,500.00

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

Legal Company Name:
Southern California Edison
Pacific Gas & Electric
City of San Bernardino
City of Stockton
South Coast Air Quality Management District
San Joaquin Valley Air Pollution Control District

J) Budget Information

Funding Source	Funding Year of Appropriation	Budget List Number	Amount
General Fund	FY 21/22	601.129ZEV	\$200,000
Funding Source			\$
Funding Source			\$
Funding Source			\$
Funding Source			\$

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



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Explanation for "Other" selection

Reimbursement Contract #:

Federal Agreement #:

K) Recipient's Contact Information

1. Recipient's Administrator/Officer

Name: Matt Hart

Address: 801 K St., Floor 28

City, State, Zip: Sacramento, CA
95814

Phone: 650-796-6288

E-Mail: matt@buildmomentum.io

2. Recipient's Project Manager

Name: Jeremy Hock

Address: 3101 S Packerland Dr

City, State, Zip: Green Bay, WI
54313

Phone: (920) 592-7847

E-Mail: Hockj1@schneider.com

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 | <input checked="" type="checkbox"/> | Attached |
| 2. Exhibit B, Budget Detail | <input checked="" type="checkbox"/> | Attached |
| 3. CEC 105, Questionnaire for Identifying Conflicts | <input checked="" type="checkbox"/> | Attached |
| 4. Recipient Resolution | <input checked="" type="checkbox"/> | N/A |
| 5. CEQA Documentation | <input checked="" type="checkbox"/> | N/A |
| | <input type="checkbox"/> | Attached |
| | <input type="checkbox"/> | 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		Community Outreach and Stakeholder Engagement
3	X	California Facilities Infrastructure Design
4		Holistic ZEV Infrastructure Evaluation
5		California Deployment Strategy and Knowledge Transfer
6		Project Fact Sheet
7		Blueprint

KEY NAME LIST

Task #	Key Personnel	Key Subcontractor(s)	Key Partner(s)
1	Jeremy Hock	Build Momentum	
2	Jeremy Hock	Build Momentum	
3	Jeremy Hock	Black & Veatch Corporation Daimler Trucks North America LLC	Southern California Edison, Pacific Gas & Electric, Local Jurisdictions (City of San Bernardino, City of Stockton, South Coast Air Quality Management District, and San Joaquin Valley Air Pollution Control District)
4	Jeremy Hock	Daimler Trucks North America LLC Black & Veatch Corporation	Southern California Edison, Pacific Gas & Electric
5	Jeremy Hock	Build Momentum	
6	Jeremy Hock	Build Momentum	
7	Jeremy Hock	Build Momentum Black & Veatch Corporation Daimler Trucks North America LLC	

GLOSSARY

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

Term/ Acronym	Definition
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CAM	Commission Agreement Manager
CAO	Commission Agreement Officer
CapEx	Capital Expenses
CBO	Community-Based Organizations
CEC	California Energy Commission
Clean Transportation Program	Formerly known as Alternative and Renewable Fuel and Vehicle Technology Program
CPR	Critical Project Review
DER	Demand Energy Response
MD/HD	Medium- and Heavy-Duty
OpEx	Operational Expenses
PG&E	Pacific Gas & Electric
Recipient	Schneider National Carriers, Inc.
ROI	Return on Investment
SCE	Southern California Edison
SoCalGas	Southern California Gas Company
VGI	Vehicle-Grid Integration
ZEVs	Zero-Emission Vehicles. This may include on- and off-road vehicles 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, 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.

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

Problem Statement:

California's freight system is one of the state's most important economic drivers, directly employing hundreds of thousands of people across the state, moving more than 40 percent of the nation's imports and exports. The intermodal freight transportation and logistics industries consist of highly diverse and disaggregated set of transportation modes, facilities, equipment, and cargoes, making education about ZEV and ZEV infrastructure options—as well as their deployment—challenging. This Blueprint seeks to address the education and information gap by utilizing the Recipient's unique position as a central convenor and sustainability leader in the logistics industry to showcase and demonstrate the capabilities and innovations around decarbonizing goods movement.

Goals of the Agreement:

The goal of this Agreement is to accelerate the planning, adoption, and deployment of ZEV infrastructure to enable scale ZEV goods movement operations in California.

Objectives of the Agreement:

The objectives of this Agreement are to:

- Engage a broad stakeholder network to develop a comprehensive, economic, and equitable approach to rapidly deploying medium- and heavy-duty (MD/HD) ZEV infrastructure.
- Define facility and driver needs to identify critical performance specifications that are important to each MD/HD ZEV driver and maintaining best-in-class service.
- Identify workforce education and training resources to prepare maintenance technicians for MD/HD ZEVs on the road as well as charging and refueling infrastructure at the Recipient's facilities.
- Advance facility site design to vet the infrastructure design process and identify real-world operability considerations given existing utilization.
- Develop a phased approach to infrastructure deployment that maintains flexibility to react to changes to a nascent market with rapidly evolving technology.
- Develop improved total cost of ownership models to help MD/HD fleet and facility operators better understand the capital expenses (CapEx), operational expenses (OpEx), and rates of return on investment (ROI) associated with both vehicles and infrastructure.
- Identify workforce education and training resources to prepare maintenance technicians for MD/HD ZEVs on the road as well as charging and refueling infrastructure at the Recipient's facilities.

- Map the ecosystem of strategic partners and business model innovations supported by ZEV market adoption.

TASK 1 ADMINISTRATION

Task 1.1 Attend Kick-off Meeting

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

The Recipient shall:

- Attend a “Kick-Off” meeting with the CAM, the Commission Agreement Officer (CAO), and a representative of the CEC Accounting Office. The Recipient shall bring their Project Manager, Agreement Administrator, Accounting Officer, and any others determined necessary by the Recipient or specifically requested by the CAM to this meeting.
- 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

CAM Product:

- Kick-Off Meeting Agenda

Task 1.2 Critical Project Review (CPR) Meetings

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

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

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

The CAM shall:

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

The Recipient shall:

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

CAM Products:

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

Recipient Product:

- CPR Report(s)

Task 1.3 Final Meeting

The goal of this task is to closeout this Agreement.

The Recipient shall:

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

This meeting will be attended by, at a minimum, the Recipient, 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

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 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.
- 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
- 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.

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 industry participants, stakeholders, and advocates to foster productive and thoughtful dialogue around the deployment of alternative fueling infrastructure supporting the transition to sustainable, zero-emission logistics in furtherance of local, regional, and state objectives.

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 its engagement with communities and stakeholders and the goals and intended outcomes of the outreach by stakeholder segment.
- Engage electric utilities to support grid delivery, reliability, and resiliency. Engagement will include:
 - Outreach to Southern California Edison (SCE), in whose territory which the Recipient operates two facilities.
 - Outreach to Pacific Gas & Electric (PG&E), in whose territory which the Recipient operates one facility.
 - Discussions about existing or near-term programs managed by utilities to support the development of MD/HD ZEV infrastructure, including rebates and preferential tariffs.
 - Identification of opportunities and challenges associated with MD/HD ZEV infrastructure deployments.
- Engage hydrogen providers to understand plans for hydrogen production and distribution. Engagement will include:
 - Outreach to Southern California Gas Company (SoCalGas), in whose territory the Recipient operates two facilities.
 - Outreach to PG&E, in whose territory the Recipient operates one facility.

- Discussions about existing or near-term programs managed by utilities to support the development of hydrogen-based MD/HD ZEV infrastructure for on- and off-road applications.
- Identification of opportunities and challenges associated with hydrogen-based MD/HD ZEV infrastructure deployments.
- Outreach to Pacific Northwest National Laboratory or the Center for Hydrogen Safety's Hydrogen Safety Panel.
- Engage local jurisdictions and planning organizations to ensure they are involved in the planning and permitting of the infrastructure. Engagement will include:
 - Outreach to the City of San Bernardino, City of Stockton, South Coast Air Quality Management District, and San Joaquin Valley Air Pollution Control District to assess the permitting process for the installation of ZEV charging or hydrogen refueling infrastructure and relevant DER technologies.
 - Document actions or steps already adopted by applicable local, state, and federal jurisdictions and the impact of those actions or steps on the development of MD/HD ZEV infrastructure and the electrification of the goods movement industry.
- Engage regional workplaces, 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:
 - Outreach to industry associations and businesses that utilize the Recipient's services to understand their perspectives and concerns about the transition to MD/HD ZEVs.
 - Education about new and innovative technologies that solicit dialogue and conversation about the electrification of multimodal transportation and the future of sustainable freight.
 - Work with community colleges, universities, 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.
 - 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 internal the Recipient's divisions, facility and fleet operators, and employees to foster dialogue and communication around new transportation paradigms that are cross cutting between internal stakeholder groups.
- 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:
 - Outreach to clean energy infrastructure financiers with a history of

supporting the development, installation, and operation of renewable energy technologies including DER technologies, microgrids, light duty ZEV infrastructure, and renewable fuels projects.

- Discussions to understand new and innovative business models around energy-as-a-service, incentive and credit monetization, and third-party ZEV fueling operations.
- 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

Products:

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

TASK 3 CALIFORNIA FACILITIES INFRASTRUCTURE DESIGN

The goal of this task is to prepare baseline assessments and initiate ZEV infrastructure facility design for the Recipient's California facilities.

The Recipient shall:

- 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 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 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 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 and EV charging.

- 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.
 - Assess the existing infrastructure at two of the Recipient's facilities and develop an *Infrastructure Assessment Summary*.
 - Evaluate 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.
 - Develop *Preliminary Design Drawings* for the Recipient's facilities in San Bernardino and Stockton, CA to identify specific challenges and considerations arising from charging infrastructure or hydrogen refueling infrastructure.
 - Develop a *Construction Design Package* for transitioning the Recipient's facility in San Bernardino to full ZEV operations.

Products:

- Infrastructure Assessment Summary
- Preliminary Design Drawings
- Construction Design Package

[CPR WILL OCCUR DURING THIS TASK. See Task 1.2 for details.]

TASK 4 HOLISTIC ZEV INFRASTRUCTURE EVALUATION

The goal of this task is to develop resources that can support broad ZEV adoption across the Recipient's facilities.

The Recipient shall:

- Identify analytical tools, software applications, and data needed to improve future MD/HD ZEV infrastructure planning activities.
- Create a *Total Cost of Ownership Model* and *Depot Optimization Tool* to help MD/HD fleet and facility operators better understand the capital and operational expenses and rates of return on investment associated with vehicles (*Total Cost of Ownership Model*) and infrastructure (*Depot Optimization Tool*). The model will consider:
 - Impacts to utility rates under various charging and DER deployment scenarios.
 - Relevant information from analyses of technology options conducted in

Task 3.

- Strategies for optimal ZEV infrastructure sizing and siting.
- Types of jobs that will be created for the local community and regional industries.

Products:

- Total Cost of Ownership Model
- Depot Optimization Tool

TASK 5 CALIFORNIA DEPLOYMENT STRATEGY AND KNOWLEDGE TRANSFER

The goal of this task is to develop a strategy to support the scalability and replicability of MHD ZEV infrastructure across the state—at the Recipient’s sites and with fleet and ecosystem partners. This task will organize information from Tasks 2, 3, and 4 to effectively communicate the results to stakeholders.

The Recipient shall:

- 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.
- 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, 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.
- Develop a list of targeted events and industry conferences at which the Project Team can share its knowledge of and experience with the electrification planning process with diverse stakeholders. This may include events such as ACT Expo, Work Truck Show, and the Green Truck Summit and through key associations such as EPRI, Smart Electric Power Alliance, Edison Electric Institute, NACFE, NFTA, and CALSTART.
- Prepare *Blueprint Stakeholder Presentation* for sharing at the targeted events and industry conferences.

Products:

- Blueprint Stakeholder Presentation

TASK 6 PROJECT FACT SHEET

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

The Recipient shall:

- Prepare an *Initial Project Fact Sheet* at start of the project that describes the project and the expected benefits. Use the format provided by the CAM.
- Prepare a *Final Project Fact Sheet* at the project’s conclusion that describes the

project, the actual benefits resulting from the project, and lessons learned from implementing the project. Use the format provided by the CAM.

- Provide at least (6) six *High Quality Digital Photographs* (minimum resolution of 1300x500 pixels in landscape ratio) from the project.

Products:

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

TASK 7 BLUEPRINT

The goal of this task is to formalize the information gathered through all Technical Tasks 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)

STATE OF CALIFORNIA

STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION

RESOLUTION: SCHNEIDER NATIONAL, INC.

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

RESOLVED, that the CEC approves Agreement ZVI-21-011 with Schneider National, Inc. for a \$200,000 grant to prepare a blueprint document and a suite of tools that will facilitate the rapid transition of its facilities and fleets to support the widespread deployment of MD/HD ZEVs and distributed energy resource technologies to enable scale ZEV goods movement operations in California; 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