# **Questions and Answers**

**GFO-24-610**

**Medium- and Heavy-Duty Zero-Emission Vehicle Port Infrastructure**

**June 13, 2025**

**Addendum 3**

The addendum includes revisions to A49. Added language appears in **bold underline**, and deleted language appears in [~~strikethrough~~] and within square brackets.

The following answers are based on California Energy Commission (CEC) staff’s interpretation of the questions received. It is the Applicant’s responsibility to review the purpose of the solicitation and to determine whether or not their proposed project is eligible for funding by reviewing the Eligibility Requirements within the solicitation. The CEC cannot give advice as to whether or not a particular project is eligible for funding, because not all proposal details are known.

Unless indicated otherwise, all section numbers identified are from Addendum #2 of the solicitation manual (Addendum #2) For example, “Section II.B” refers to Section II.B of Addendum #2.

***Project Eligibility & Requirements***

**Q1:** **We are considering applying to GFO-24-610 to support the installation of innovative electric, zero-emission mobile cargo handling equipment at a small California port located in an Assembly Bill (AB) 617 community. The equipment is a shiploader that would be used for moving cargo that is essential to clean energy and manufacturing supply chains. Would a project focused on zero-emission cargo handling equipment be considered an eligible project under this solicitation?**

A1: If the mobile shiploader supports port operations, the electric charging or hydrogen refueling infrastructure necessary to fuel the shiploader may be an eligible project if all GFO requirements are met, including but not limited to, the purchase, installation, and deployment of the required minimum number of charger ports or hydrogen fueling positions.

**Q2: Would the CEC consider projects that meet the intended utility capacity requirements of the minimum charger counts, but deploy fewer, higher-powered chargers? There is a concern that the minimum required charger counts will restrict site designs and preclude sites that can achieve the total throughput and site capacity of a 40x200 kW charger site (8MW) but may not have physical space for 40 individual chargers. This would also likely restrict applicants from developing MegaWatt Charging System (MCS)-capable charging infrastructure in or around Ports through this funding opportunity.**

A2: No, the minimum deployment requirement for charging ports or hydrogen fueling positions for the applicable Applicant Group must be met. Refer to Section I.G. and Section II.B. Chargers proposed to be installed at either a Small Port or a Large Port may be multi-port chargers.

**Q3: Can you please confirm if Distributed Energy Resource (DER) technologies listed under Section E. Eligible Project Costs are only eligible to use as match share, or if they would be reimbursable by the CEC under this GFO?**

A3:Renewable Distributed Energy Resources (DER) technologies may be eligible as match share costs, but not as CEC reimbursable costs.Also, please note that nonrenewable DER technologies are **NOT** eligible for CEC reimbursement or the Applicant’s match share. As stated in Section II.E.3., “Commercially available energy storage, renewable distributed energy resources (DER), and/or renewable energy generation equipment such as photovoltaic solar panels separately metered for electric charging (match share only). Mobile refuelers and chargers and temporary power solutions, such as 100% renewable linear generators (a linear generator may use 100% renewable natural gas, 100% renewable hydrogen, or a combination of both totaling 100% renewable fuel) (match share only).”

As stated in Section II.E., “Costs incurred for the following are ineligible for reimbursement and match share cost. This is not an exhaustive list: …

* Nonrenewable DERs, such as generators that use nonrenewable fossil fuels”

**Q4: Would the CEC allow for an Applicant to use this funding to expand an existing site’s current EV charging infrastructure (if they met all other GFO requirements)?**

A4: Yes, funding can support the new installation of in-ground fueling infrastructure for battery electric or hydrogen fuel cell electric medium- and heavy-duty vehicles and/or port equipment and/or off-road equipment. All reimbursable expenditures must be expended within the approved term of the grant agreement. CEC reimbursable funding cannot be used towards EV charging infrastructure purchased prior to an executed grant agreement.

**Q5: If an Applicant proposed a project requesting CEC funding to expand an existing site’s current charging infrastructure, can Applicants count existing chargers at the site toward the minimum number of charging ports to be deployed total, or must the funded expansion alone meet the full requirement? For example, if a site at a Large Port already has 30 chargers, would the Applicant need to install 40 additional chargers, or just 10?**

A5: To qualify as an eligible project, Applicants must meet the minimum deployment requirements outlined in the solicitation manual. In the example provided, the proposed project would need to install 20 **new** charging ports (for Group 1: Small Ports) or 40 **new** charging ports (for Group 2: Large Ports), regardless of any existing chargers/charging ports already installed at the site.

**Q6: Can a single application be submitted including more than one charging location serving a single Small or Large Port so long as the requested funding amount is less than $5M?**

A6: Multiple project locations are not allowed within a single application. A project location is defined as a single project site address, however if the Port is the Prime Applicant and the project is located on-port, the application may include multiple sites within the port boundaries (e.g., across terminals), provided all sites **collectively** meet the minimum infrastructure deployment requirements and support the port’s operations.

**Q7: If multiple locations are submitted in one application, can either location be less than 20 charging ports (if for a small port) so long as the combined application includes greater than 20 charging ports (for a small port)?**

A7: Multiple project locations are not allowed within a single application. A project location is defined as a single project site address, however if the Port is the Prime Applicant and the project is located on-port, the application may include multiple sites within the port boundaries (e.g., across terminals), provided all sites **collectively** meet the minimum infrastructure deployment requirements and support the port’s operations.

**Q8: If a fleet is making a portion of its property available for public charging, can a certain number of hours per day, e.g., overnight hours, provide for limited access for the host fleet, while the remainder of the day is open to all fleet users? If so, is there a minimum number of hours required for public access and certain hours of day that must be publicly accessible?**

A8: Yes, a fleet can designate limited public access hours. There is no minimum number of hours required for public access. Refer to Section II.C., Minimum Technical Requirements for Open Retail Electric Vehicle Charging Stations.

**Q9: Can the grant's scope of work include electrified at-berth ships as zero-emission vehicles and ensure that cold-ironing counts as charging infrastructure?**

**For background, a battery railcar has been developed that has a 17.2 MWH capacity and can discharge AC or DC. When moved together in a unit train, it can deliver 1.72 GWH of stored energy to a specific Port.**

A9: Electrified at-berth ships may be eligible as a project as long as the proposed application is for new charging infrastructure and if the installation meets the minimum charging requirements in the GFO, along with all other requirements in the GFO. Refer to Section I.G. Maximum Award Amounts and Minimum Infrastructure Requirements and Section II.B., Project Requirements.

**Q10: Can a hydrogen dispenser project operating mobile hydrogen refuelers serving four different port terminal locations qualify as serving four different positions?**

A10: No. In the example provided, one mobile hydrogen refueler would count as one fueling position, as it may only refuel one vehicle/vessel at a time. Note, that mobile refueling is eligible for match share only.

**Q11: Can proposed projects include existing medium- and heavy-duty (MDHD) vehicles, or must all vehicles be newly procured?**

A11: There is no requirement that the MDHD zero-emission vehicles (ZEVs) be new. The requirements for this solicitation are regarding installation and deployment of new charging or hydrogen refueling infrastructure, and existing vehicles may be supported by that infrastructure for the duration of this agreement. Zero-emission vehicles (purchased, rented, or leased) and vehicle modifications to support charging, i.e., pantograph and wireless/inductive charging applications applicable to the project are not eligible for CEC reimbursement, but may be included in the Applicant’s Match Share. Refer to Section II.E.4., Eligible Project Costs.

**Q12: Are investor-owned utilities (IOUs) allowed to participate as project partners, even if they are not the lead applicant?**

A12: Yes, IOUs may participate as project partners; however, IOUs will not be eligible for CEC reimbursement. IOUs may contribute match share funding.

**Q13: Can hydrogen compression/distribution sites in addition to hydrogen dispensing positions qualify in the total hydrogen dispenser positions?**

A13: No. Only dispenser positions count toward the minimum deployment requirement.

**Q14: If a project proposes 40 charging positions for some port cargo handling equipment, can it also include charging infrastructure for a marine vessel that serves the port? Would the marine vessel and its charging equipment be eligible for direct CEC funding and/or as match? Specifically, does “port equipment” include harbor craft such as ferries?**

A14: A proposed project may include charging or hydrogen refueling infrastructure to support a marine vessel or harbor craft. The proposed project must meet the minimum charger port or hydrogen fueling position deployment requirements outlined in Section I.G. However, Zero-emission vehicles (purchased, rented, or leased) and vehicle-related expenses (e.g., vehicle parts, labor for vehicle repairs, etc.) are not eligible as CEC reimbursable expenses, but may be included in the Applicant’s Match Share. Refer to Section II.E., Eligible Project Costs.

**Q15: If a proposed project includes multiple types of charging, can a combination of on-water MDHD vehicle hydrogen refuelers/charging along with shoreside or terminal charging infrastructure be combined to meet the positions threshold?**

A15: No. On-water MDHD vehicle hydrogen refuelers / electric chargers are not permitted. Funding will support new installation of in-ground fueling infrastructure, as stated in Section I.A and Section II.E.

**Q16: The solicitation requires a 40-port minimum for proposed medium- and heavy-duty sites at large ports, with a minimum of 200kW/port.  If a proposal includes installing only 10 charging ports, but provides a total of 1.2MW of fast charging capacity (meeting the overall power requirement), would that be acceptable?**

A16: Per Addendum #2, the minimum number of charging ports or hydrogen fueling positions must be met per the Applicant Group designation (i.e., Small Ports: 20 150 kW charging ports or 2 hydrogen fueling positions; Large Ports: 40 150 kW charging ports or 4 hydrogen fueling positions). Refer to Section II.B.2., Charger Port/Hydrogen Refueling Position Minimums.

**Q17: If an applicant’s selected electric vehicle supply equipment (EVSE) has been independently certified for a California IOU make-ready program (SCE Charge Ready, PG&E EV Fleet, SDG&E Power Your Drive) but does not fully meet all of the requirements listed in Section B.5. “Compliance with California EVSE Commercial Device Requirements” and Section C “Minimum Technical Requirements for Open Retail Electric Vehicle Charging Stations,” will the CEC consider the EVSE as acceptable for participation in GFO-24-610?**

A17: As stated in the Solicitation Manual, II.E.2., make-ready equipment is not eligible for CEC reimbursement but may be included as an Applicant’s match share, if it is being paid for by an IOU make-ready program.

A link to eligible electric vehicle charging equipment is provided in Section II.E., Eligible Project Costs, <https://www.energiize.org/infrastructure?section=infrastructure.more-details.technology>, which aligns with available utility make-ready programs. Infrastructure equipment purchased and deployed in the proposed project must meet the requirements outlined in the solicitation manual, including in Section B.5. and if the deployed charging equipment will be for open retail use, the requirements outlined in Section II.C. must also be met.

**Q18: Can a single project application include multiple project sites to achieve the minimum required number of charging ports deployed?**

A18: Multiple project locations are not allowed within a single application. A project location is defined as a single project site address, however if the Port is the Prime Applicant and the project is located on-port, the application may include multiple sites within the port boundaries (e.g., across terminals), provided all sites **collectively** meet the minimum infrastructure deployment requirements and support the port’s operations.

**Q19: Do multiple sites proposed for charging infrastructure within a single application need to be in the same geographic area?**

A19: Multiple project locations are not allowed within a single application. A project location is defined as a single project site address, however if the Port is the Prime Applicant and the project is located on-port, the application may include multiple sites within the port boundaries (e.g., across terminals), provided all sites **collectively** meet the minimum infrastructure deployment requirements and support the port’s operations.

**Q20: Do multiple sites proposed for charging infrastructure within a single application need to serve the same port?**

A20: Multiple project locations are not allowed within a single application. A project location is defined as a single project site address, however if the Port is the Prime Applicant and the project is located on-port, the application may include multiple sites within the port boundaries (e.g., across terminals), provided all sites collectively meet the minimum infrastructure deployment requirements and support the port’s operations.

**Q21: If port-serving trucks travel inland to pick up or deliver cargo, would inland sites be eligible for infrastructure deployment as long as they directly support port operations?**

A21: Yes. As referenced in Section II.B.3, Project Location, the proposed project must be located on the port *or at a location that directly serves the port*. If not located at a port, the project narrative should describe how the location directly supports the port operations.

**Q22: Is the charger minimum requirement a firm threshold, or is there any flexibility for vessel chargers? The set number of chargers provision is not aligned with the inclusion of "marine" in the off-road category.**

A22: The charger minimum requirement is a firm threshold. Vessel chargers are allowed to count toward the minimum infrastructure deployment requirement; however, all charging ports or refueling positions must be of the same infrastructure type (electric charging or hydrogen refueling) to be eligible for CEC reimbursement. Mixed infrastructure types are allowed, however the secondary infrastructure type would be used as match and would not be subject to the minimum charging port or hydrogen fueling position deployment requirements.

**Q23: What assumptions does the solicitation make regarding access to the ZEV fueling infrastructure? Should the deployed infrastructure be publicly accessible, limited to behind the fence or in-port use by port operators only, or is another access model acceptable?**

A23: Each of the models described in the question are eligible under this GFO. If the infrastructure is located entirely on port property and used solely by port operators, it may be restricted to private access. However, if the deployed infrastructure is located off-port property and the Applicant supports port-related operations, the minimum required deployed charging ports or hydrogen fueling positions may be either depot-based, shared, or publicly accessible.

**Q24: Are hydrogen fueling projects for hydrogen switcher locomotives considered an eligible project under this solicitation?**

A24: Yes, if the hydrogen switcher locomotives are supporting port operations, the hydrogen refueling infrastructure necessary to fuel the locomotives would be an eligible project cost as long as the minimum number of new hydrogen fueling positions are met in the proposed project. That said, the fuel for the hydrogen locomotive is not an eligible CEC reimbursable or match share cost.

**Q25: If the infrastructure is behind-the-fence or located within the port boundaries and is not open to the public (i.e., non retail), how do the requirements in Sections C & D "Minimum Technical Requirements for Open Retail Electric Vehicle Charging Stations/Hydrogen Refueling Stations" apply?**

A25: Sections C & D do not apply to behind-the-fence or private station infrastructure.

**Q26: The solicitation refers to "refueling positions" rather than "refueling stations." Does this mean that one refueling station with multiple dispensers, for example, two, would count as multiple refueling positions?**

A26: Yes. A single station with multiple hydrogen dispensers can count as multiple fueling positions. Refer to Section II.B.2. If applying as a Small Port Applicant, a minimum of 2 heavy-duty hydrogen dispensing positions for simultaneous refueling must be included in the proposed project. Note that the deployed hydrogen refueling position(s) must be capable of simultaneous refueling regardless of Applicant Group.

**Q27: The solicitation specifies that only hydrogen fuel cell equipment is eligible. Given the potential of hydrogen internal combustion engine (ICE) technologies, why did the CEC choose to exclude them from consideration?**

A27: The intent of this solicitation is to provide funds for projects that will deploy MDHD ZEV charging or hydrogen refueling infrastructure for California seaports and land ports of entry. AB 126 (Reyes, Chapter 319, Statutes of 2023) which reauthorized the Clean Transportation Program through July 1, 2035 focused the program on zero-emission transportation. Hydrogen ICE technologies are not considered zero-emission, as they produce oxides of nitrogen (NOx) during operation.

**Q28: Is there a requirement that the infrastructure and equipment funded through this solicitation must be human operated?**

A28: No. The infrastructure and equipment do not need to be human operated to qualify for funding, though they must be commercially available technologies.

**Q29: How should Applicants address site control for land that they do not own at ports? Does the application require that a specific site (i.e., space or footprint) already be secured, or a designated common area footprint that is already reserved for the proposed project?**

A29: Applicants must document site control in the Project Narrative. Site control includes, but is not limited to leases, ownership, or access rights. If Applicants do not have secured site host agreements in place, they must describe in the Project Narrative how they plan to obtain a site host agreement or lease, and provide an estimated timeline for securing the site including how this process can be expedited. Additionally, Applicants must submit a letter of commitment from the current owner of the site of the proposed station location, or if the proposed site is operated by another entity other than the site owner, applications must also include a letter of commitment from the current operator of the site. Note that if a Port is the Prime Applicant and the project is located on-port, the application may include multiple sites within the port boundaries (e.g., across terminals). In this instance, Port Applicants must submit letters of commitment from the site operator of each proposed station location.

Additionally, if the current lease agreement for an eligible project site is valid for less than the required six years, the Applicant must commit to operating that station until the current lease ends and make a good faith effort to extend the lease to continue operation for the full six years. Refer to Section III.D.2.a., Project Readiness and Section III.D.8., Letters of Commitment.

**Q30: Is there a minimum local storage requirement for hydrogen stations?**

A30: No. There is no storage requirement for hydrogen stations.

**Q31: Is there a minimum dispensing rate requirement (kg/min) for hydrogen fuel dispensers?**

A31: No, there is no minimum dispensing rate requirement in kg/min in the solicitation manual, however, if the hydrogen refueling station will be open retail, the refueling station shall conform to the most recent published version of SAE International J2601 (fueling protocols). Refer to Section II.D.3.

**Q32: If a hydrogen refueling station supports port operations, but is located outside of port boundaries, is there any distance requirement between port and refueling station?**

A32: No, there is not a set distance requirement in the solicitation. However, the location must directly serve the port/port operations. Section II.A.1. states that “Non-port applicants will be required to either provide a letter of support from a port or otherwise describe in the project narrative how the project will support a port or ports.” Additionally, Section II.B.3., Project Location, states that the project must be located at a location that directly serves the port. If not located at a port, the Project Narrative should describe how the location directly supports the port operations.

**Q33: Are hybrid solutions that include both hydrogen refueling and battery-electric charging capabilities, using green hydrogen as the fuel source for both, permissible, provided that all other solicitation requirements are met?**

A33: Yes. The application must identify which infrastructure type is the principal and that infrastructure type will be eligible for CEC funding. The secondary infrastructure type is allowed, but must be match share only. The secondary infrastructure type proposed would not be required to install the minimum infrastructure requirements in the solicitation.

**Q34: Is an off-grid internal combustion engine and genset that provides Level 3 EV High Power High voltage 480V that runs on Propane, Natural Gas or Hydrogen eligible?**

A34: No. Internal combustion engine equipment or equipment that runs on propane and natural gas is not eligible under this solicitation.

**Q35: Would installation of non-combined charging system (CCS) connectors, such as wireless inductive charging be considered an eligible project?**

A35: Yes, wireless inductive charging is an eligible project.

**Q36: Are there minimum specifications or preferred standards for charging systems (e.g., plug type, interoperability, software communication standards)?**

A36: Yes. Refer to Section II.B.5. for California EVSE Commercial Device requirements.

**Q37: For hydrogen refueling infrastructure, is there a preferred or required pressure level (e.g., 350 bar vs. 700 bar) or fueling standard required for medium- and heavy-duty vehicles?**

A37: If applying as a Small Port, a minimum of 2 heavy-duty hydrogen dispensing positions for simultaneous refueling must be included in the proposed project with at least 1 of the positions dispensing at 700-bar. If applying as a Large Port, a minimum of 4 heavy-duty hydrogen dispensing positions for simultaneous refueling must be included in the proposed project with at least 2 of the positions dispensing at 700-bar. If the hydrogen refueling station will be open retail, the refueling station shall conform to the most recent published version of SAE International J2601 (fueling protocols). Refer to Section II.B.2. and II.D.3.

**Q38: Will the CEC accept multiple applications from the same Applicant for either group (Small and Large ports)? Additionally, can an Applicant submit proposals for both groups?**

A38: Applicants may submit multiple applications for each Applicant Group as long as each application is separate and distinct; however, no Applicant will be eligible for more than a total award of $15 million. Refer to Section I.G. A separate and distinct application means there is no overlap with respect to the tasks described in the Scope of Work (Attachment 02) of the application.

**Q39: For hydrogen refueling infrastructure, is there a requirement to support hydrogen powered watercraft? Given the port focused nature of the solicitation, is the ability to refuel waterborne vessels expected or required?**

A39: Charging or refueling of watercraft is not a requirement of this solicitation. However, Applicants may include infrastructure to support watercraft, provided all solicitation requirements are met.

**Q40: If battery-electric charging is proposed for a Large Port, can the project include charging infrastructure for a harbor vessel? If so, would the project still need to meet the minimum requirement of 40 new charging ports? For example, a proposed vessel charging project may only need two charging ports. In this example, would the project need to include charging ports beyond just the vessel charging in order to meet the requirement minimum charging port count?)**

A40: Yes, a proposed project may include in-ground charging or hydrogen refueling infrastructure to support a harbor vessel. The proposed project would need to meet the minimum charger port or hydrogen fueling position deployment requirements outlined in Section I.G., which in the example provided, would require additional charging ports to be deployed at the site for other MDHD vehicles and/or port equipment and/or off-road equipment.

**Q41: Could the CEC funding offered for this solicitation be used to develop next generation refueling technology? What would be the minimum Technology Readiness Level needed to apply for this solicitation?**

A41: No. Section II.E.5. delineates research and development; lab-scale research and validation; proof of concepts, functions, and prototype development; paper studies or research projects as ineligible for reimbursement and match share costs. Charging and hydrogen refueling infrastructure technologies proposed in an application must be commercially available to be considered eligible under this solicitation.

**Q42: Would "time fill" versus “fast fill” for hydrogen fueling qualify as a fueling solution if the infrastructure is behind-the-fence or on port property for heavy-duty ZEVs?**

A42: Yes, as long as the other hydrogen fueling requirements outlined in the solicitation manual are met. If the hydrogen refueling station will be open retail, the refueling station shall conform to the most recent published version of SAE International J2601 (fueling protocols). Refer to Section II.D.3.

**Q43: We have developed a low cost, fast-charging battery locomotive, and are working with a California port interested in deploying this solution. Locomotive emissions significantly contribute to the environmental impact of port operations, particularly in terms of nitrogen oxides (NOₓ), particulate matter (PM), and carbon dioxide (CO₂). This solution not only electrifies the locomotive, but it also integrates overhead solar and storage infrastructure to supply clean energy to the port. Given this, can you confirm whether battery-electric locomotives and their associated charging infrastructure are eligible under this solicitation?**

A43: If the battery locomotive is supporting port operations, the charging infrastructure necessary to charge the locomotive would be an eligible project and cost, as long as the charging port minimums and other solicitation requirements are met in the proposed project. That said, the locomotive and the solar and battery storage noted in the given example are not eligible for CEC reimbursement, though they may be eligible as match share if the energy storage is commercially available and the photovoltaic solar panels are separately metered for electric charging. Refer to Section II.E., Eligible Project Costs.

***Eligible Reimbursable and Match Share Costs***

**Q44: Can "Eligible Project Costs" such as grid infrastructure (e.g., transformers, electrical panels, conduit, wiring, meters, installation costs, stub-outs, demand management equipment, planning and engineering design, commissioning, utility service upgrades) standalone in support of EV chargers or EVSE for existing planned charger projects?**

A44: No. To be eligible for funding, applications must include charger deployment that meets the minimum requirements outlined in Section I.G. While some grid infrastructure costs are eligible costs, they cannot be funded as standalone projects. Refer to Section II.E., Eligible Project Costs.

**Q45: May we earmark funds for a charger port project that is currently in a design phase to be implemented at a future date?**

A45: No. Funds under this solicitation cannot be reserved or earmarked for projects still in the design phase. Applications must propose projects ready to proceed with deployment within the required timeline. The proposed project will be evaluated against several criteria outlined in Section IV.E., Evaluation Criteria, including Project Readiness, which has a minimum passing score requirement in order to be eligible for funding. The timeline for CEQA compliance must also be provided in the application. Refer to Section III.D.10., CEQA Worksheet (Attachment 10). Proposed projects recommended for funding must complete the CEQA process within 6 months of the release date of the NOPA. The CEC reserves the right to cancel proposed awards that do not meet this CEQA compliance deadline and recommend funding for the next, highest-scoring passing proposal submitted under this solicitation.

**Q46: Can IOUs provide cost share?**

A46: Yes.

**Q47: Is a security fence allowable to protect vehicles and drivers if it can be opened by the general public through an on-site manager?**

A47: Yes. However, a fence is not an eligible CEC reimbursable expense.

**Q48: Can a loan satisfy the cash match requirement?**

A48: Yes.

**Q49: Can the funds from this solicitation be used to support projects that are partially grant-funded and already underway? Additionally, how do the match fund requirements apply in such cases?**

A49: [~~No.~~] **Billable design and/or construction** [~~W~~]**w**ork **and/or equipment procurement** that is already in progress or completed prior to grant execution is ineligible for match or reimbursable funding. **However, work that is expected to occur within the term of a grant agreement may be eligible for CEC funding or match share.** The proposed project must meet the minimum charging port or hydrogen fueling position deployment requirements for work that occurs after the grant agreement is executed. **This means that the minimum charging ports or hydrogen fueling positions must be constructed and installed during the term of the agreement.** Match share expenditures are allowable under a CEC agreement only if they are incurred after execution of an awarded agreement. Refer to Section II.E., Eligible Project Costs, and Section II.F., Match Funding Requirements.

**Q50: The solicitation indicates that onsite hydrogen generation is only eligible as a match cost. Is hydrogen conditioning equipment, such as compressors, purifiers, or liquefiers, directly connected to generation equipment eligible for reimbursement as a direct expense?**

A50: No. Renewable hydrogen production equipment is eligible as a match cost, which means the associated conditioning equipment that is integrated with or dependent on the generation equipment is also only eligible as match. Only equipment and infrastructure directly supporting eligible dispensing operations are eligible for CEC reimbursement. Refer to Section II.E., Eligible Project Costs.

**Q51: Are profit margins allowed in direct expenses?**

A51: Profit is not allowable for the Prime Applicant. However, subrecipients are allowed to include up to a maximum total of 10% profit, fees or mark-ups on their own actual allowable expenses less any expenses budgeted to sub-subrecipients (i.e., profit, fees and markups are not allowed on lower tier subrecipient expenses). Refer to Section III.D.F., Budget Forms (Attachment 5).

***Miscellaneous***

**Q52: In the context of entities serving or supporting a port, how does the CEC define “serving or supporting” a port?**

A52: For the purposes of this solicitation, “serving or supporting a port” may include, but is not limited to: MDHD fleets transporting goods to or from a port to warehouses, distribution centers, railways or other logistics hubs; MDHD fleets and Cargo Handling Equipment operating within a port, including ship-to-shore transfers and intra-terminal movement of goods; offshore support vessels (e.g., tugboats) that assist in the safe and efficient docking, departure, or movement of cargo and container vessels. If Applicants are not located at a port, the project narrative should describe how port operations are supported.

**Q53: What is the CEC’s definition of “seaport”?**

A53: For the purposes of this solicitation, “seaport” refers to the 12 ports listed in the California Legislative Analyst’s Office *Overview of California Ports* (August 17, 2023) available at <https://lao.ca.gov/handouts/resources/2023/Ports-Overview-081723.pdf>.

The 12 eligible seaports are:

1. Port of Long Beach
2. Port of Los Angeles
3. Port of Richmond
4. Port of Oakland
5. Port of Stockton
6. Port of San Francisco
7. Port of Redwood City
8. Port of Hueneme
9. Port of San Diego
10. Port of West Sacramento
11. Humbold Bay Harbor District
12. Port of Benicia

**Q54: What is the CEC’s definition of “land port of entry”? For example, are border crossings the only eligible facilities, or could this include other types of inland freight hubs or intermodal transfer points? Are truck freight depots eligible?**

A54: For the purposes of this solicitation, “land ports of entry” refer to the designated border crossings identified by the U.S. Department of Transportation’s Bureau of Transportation Statistics available at <https://data.bts.gov/stories/s/myhq-rm6q>.

Eligible land ports of entry include:

* San Ysidro
* Otay Mesa
* Tecate
* Calexico West
* Calexico East
* Andrade

Inland freight hubs, intermodal transfer points, truck freight depots, etc. are also eligible. Non-port applicants will be required to provide a letter of support from a port or otherwise describe in the project narrative how the project will support the port.

**Q55: What is the CEC’s definition of “make-ready equipment”?**

A55: For the purposes of this solicitation, “make-ready equipment” includes installation of wiring, conduit, etc. for a charging or refueling site without installing the actual charging system or dispensing platform.

**Q56: Is there a minimum award size?**

A56: Yes. Group 1: Small Port applications must request a minimum award of $4.0 million. Group 2: Large Port applications must request a minimum award of $8.0 million. Refer to Section I.G.

**Q57: Is there a minimum required timeframe for operational data reporting under this solicitation?**

A57: Yes. Awarded projects must conduct 12 months of demonstration and data collection on the deploying charging or hydrogen refueling infrastructure within the term of the agreement. In addition, recipients of awarded projects shall comply with the reliability performance standards, recordkeeping, reporting, and maintenance requirements for EV chargers installed, as outlined in the Scope of Work template (Attachment 2). While the data is collected daily, it must be reported to the CEC on a quarterly basis. Refer to Section II.B.4., Data Collection.

**Q58: Is there a deadline by which time CEQA must be completed?**

A58: The CEQA worksheet must be completed and submitted with the application packet. Projects recommended for funding must complete the CEQA process within 6 months of the release date of the NOPA. The CEC reserves the right to cancel proposed awards that do not meet this CEQA compliance deadline and recommend funding for the next, highest-scoring passing proposal submitted under this solicitation. Refer to Section III.D.10., CEQA Worksheet (Attachment 10).

**Q59: Is there an encumbrance deadline associated with the funding offered in this solicitation?**

A59: Yes. This solicitation is supported by multiple funding sources, each with its own encumbrance deadline.

**Q60: Does the Executive Summary have a page limit?**

A60: The Executive Summary has a two-page limit. Refer to Section III.C. of the solicitation manual.

**Q61: The Scope of Work template (Attachment 2) requires contractors to “submit an AB 841 Certification that certifies the project has complied with all AB 841 (2020) requirements specified in the Agreement Terms and Conditions or describes why the AB 841 requirements do not apply to the project.” Will the CEC provide this certification template? If not, where can this be accessed for review in advance?**

A61: Yes, the CEC will provide this template or guidance once the agreement has been executed. Additional information related to AB 841 requirements can be found in Section II.B.5.

**Q62:** **Is a hydrogen “position” the same as a “fueling hose”? Is it possible for a hydrogen dispenser to have two positions?**

A62: “Position,” “hose,” and “nozzle,” all refer to a singular pathway to refuel one MDHD vehicle at a time. A hydrogen dispenser may have one or more positions, hoses, or nozzles.

**Q63: The solicitation requires that hardware must conform to International Organization for Standardization (ISO) 15118-3 and be capable of implementing ISO 15118-2 & ISO 15118-20 with conformance testing following ISO 151184/ 5 respectively. Will certification be required to demonstrate this?**

A63: At the time of this writing, a certification test tool is not yet available. The charger manufacturer must self-attest that the charger conforms to ISO 15118-3 and is capable of implementing ISO 15118-2 and ISO 15118-20.

**Q64: The solicitation requires that chargers must accept open standard price or load control signals (via Open Charge Point Protocol (OCPP) 2.0.1 or other network communication) and automatically adjust load. Who will be setting price and load-control from OCPP in this case?**

A64: The charger must be capable of receiving prices and other grid signals to inform automated load adjustment and management when appropriate. The charging station operator may utilize OCPP or similar protocols for such communication.

**Q65: The solicitation requires that the charging port must conform to OCPP 2.0.1 or later, and the charging port’s networking software must connect to a central management system using OCPP 2.0.1 for the purposes of charger management and data reporting, including for reliability data reporting requirements. Our preferred charging equipment is certified for OCPP 2.0.1 but utilizes internal software for its charging network. Does this requirement mean that we would need to hire a third party charging station management system?**

A65: OCPP must be used to communicate with the charger for reliability related messages. Other communications (proprietary or otherwise) may be used in parallel with OCPP, but the reliability related messages must be communicated as specified in OCPP 2.0.1 to be able to compare performance of all funding Recipients in a standard way.

**Q66: Can the CEC clarify the definition of “Charging Port” as having a “wired or wireless” connector? We believe this was clarified during the pre-application workshop, however the written definition included in the GFO does not specify.**

A66: Yes, wireless connectors are allowed.

**Q67: Regarding Section II.C. of the Application Manual, “Minimum Technical Requirements for Open Retail Electric Vehicle Charging Stations,” what is the CEC’s definition of open retail? For non-publicly accessible charging stations, i.e., projects that are behind-the-fence, within a port complex, and solely for private fleet use, is it required that Applicants certify that their selected electric vehicle supply equipment (EVSE) meet each of the Minimum Technical Requirements listed in Section II.C? Are applicants required to submit the Open Retail Station Checklist (Attachment 20) for non-public charging stations?**

**Are charging stations required to meet and adhere to each of the Minimum Technical Requirements for Open Retail Electric Vehicle Charging Stations at the time of proposal submission? Or may applicants certify that their charging stations meet these requirements at a later date such as the date of station energization or prior to submitting an invoice for CEC reimbursement?**

A67: “Open retail’ stations are “publicly available fueling stations.” Sections II.C. and II.D. do not apply for non-publicly accessible charging stations or hydrogen refueling stations. For those stations that will be accessible to the public as open retail, certification will take place at the time the station is energized and prior to “opening” the chargers up to the public.

**Q68: Regarding Section II.B. 5. of the Application Manual “Compliance with California EVSE Commercial Device Requirements**

**“Commercial” is defined as applying to “operations in which the amount dispensed affects customer charges or compensation.” Are the requirements listed in Section II.B.5. applicable to charging stations that are behind-the-fence, within a port complex, and for private-use only? For example, projects where a port terminal operator owns and operates the EV chargers for their fleet alone and is therefore not subject to a Charging-as-a-Service (or similar Charge Point Operator-based) billing model? If this is required for private-use charging stations, when are Applicants required to certify that their selected EVSE meets the criteria?**

A68: “Compliance with California EVSE Commercial Device Requirements” would not apply to private fleets operating private equipment.

**Q69: Please define what is meant by or what the boundaries are for ‘in-ground infrastructure for battery electric or hydrogen fuel cell MDHD vehicles and/or port equipment and/or off-road equipment (e.g. gantries, cargo handling equipment, etc.).” Are fueling stations that are containerized but stationary (vs. mobile) considered “inground”?**

A69: Fueling stations that are containerized but stationary would be eligible for CEC reimbursement or match.

**Q70: Are Applicants allowed to distribute fleet RFID cards to contracted customers while keeping the station open to the public, where use of access cards or personal identification (PIN) codes is optional and not required to dispense fuel?**

A70: Yes.

**Q71: The Application Manual references “off-road” vehicles and equipment but does not provide a full definition, instead including examples followed by “etc.” Can the CEC clarify what qualifies as “off-road” for the purposes of this solicitation, and confirm whether harbor craft vessels are considered off-road equipment?**

A71: For the purposes of this solicitation, off-road applications include vehicles or equipment that do not perform their primary operations on a road or highway. “Off-road” may include, but is not limited to, cargo-handling equipment, yard tractors, as well as marine or rail.

**Q72: There's a green hydrogen requirement mentioned, however fuel procurement is considered an operating expense instead of a capital expenditure. Is it possible to use the CEC funds to install hydrogen stations and then select whatever hydrogen is available?**

A72: As stated in Section II.B.6, hydrogen refueling station(s) funded under this solicitation shall dispense renewable hydrogen to comply with the requirements specified in the CARB LCFS regulation found at https://ww2.arb.ca.gov/sites/default/files/2020-07/2020\_lcfs\_fro\_oal-approved\_unofficial\_06302020.pdf and shall report quarterly on hydrogen dispensed once the station becomes operational.

**Q73:** **Currently, many Cargo Handling Equipment (CHE) at the Ports of Los Angeles and Long Beach get refueled with diesel during the downtime from 3 AM to 7 AM, therefore, I see a challenge to be compliant with uptime requirement. If the infrastructure performs refueling within the downtime more than threshold, is it allowed?**

A73: For hydrogen refueling station projects, “uptime” is defined as (total hours the station is available over the quarter / the total possible hours of operation over the quarter) X 100. Applicants shall commit to achieving 95% uptime at each eligible hydrogen refueling station included in their application if awarded under this solicitation. For EV charging infrastructure projects, the charging port uptime for each charging port installed in the project must be at least 97% of each year for six years after the beginning of operation. See the Scope of Work template (Attachment 2) for more details on operations and reliability requirements.

**Q74: Does the CEC require or prioritize smart charging, load management, or vehicle-to-grid (V2G) capability for DCFC installations?**

A74: No, not for this specific solicitation.

**Q75: Is there a preference for modular or scalable infrastructure designs that allow for future expansion?**

A75: No, there is no preference or requirement.

**Q76: Some projects may be strong candidates for both this GFO-24-610 and GFO-24-612 (Depot MDHD charging/fueling), depending on project scope. Is it permissible to apply to both solicitations for the same project site? If so, how should Applicants address this in the application?**

A76: Yes, an Applicant may submit applications to both solicitations for the same project site if the project scope aligns with the requirements of each solicitation. However, in the event that the project is proposed for award under both solicitations, the CEC reserves the right to only fund the higher-scored passing project. The Applicant may not receive two awards for the same project site.

**Q77: Does 100% of dispensed hydrogen need to be renewable?**

A77: No. At this time, 40% or greater of dispensed hydrogen must be renewable. However, please review the requirements specified in the CARB LCFS regulation, found at <https://ww2.arb.ca.gov/sites/default/files/2020-07/2020_lcfs_fro_oal-approved_unofficial_06302020.pdf>. Once the hydrogen station becomes operational, project Recipients shall report on hydrogen dispensed on a quarterly basis using the Renewable Hydrogen Report (Attachment 19). Refer to Section II.B.6.

**Q78:** **Is the 150kW per nozzle during simultaneous charging a hard requirement?**

A78: Yes.

**Q79: Is there a requirement for electric vehicle charging projects to have at least 50% of locations benefit disadvantaged communities, similar to the requirement for hydrogen refueling stations? If not, can you please explain the difference?**

A79: Yes. At least 50% of the funding must directly benefit or serve residents of low-income communities and disadvantaged communities with the map provided at Priority Populations — California Climate Investments https://www.caclimateinvestments.ca.gov/priority-populations. Refer to Section II.B.3.

**Q80: Do EVSE projects also have uptime requirements?**

A80: Yes. EVSE projects require 97% uptime for each installed charging port. Refer to the Scope of Work template (Attachment 2). The Recipient shall ensure that the charging port uptime for each charging port installed in the project is at least 97 percent of each year for six years after the beginning of operation.

**Q81: Can we stack this funding with CARB fund?**

A81: Yes. Please refer to the CARB funding program for additional requirements of the specific funding being stacked. Project costs reimbursed under one award cannot also be reimbursed by the other award.

**Q82: Some calculations show up to 40% waste during filling and normal operations of liquid hydrogen storage stations. Given that hydrogen is a greenhouse gas, and additionally hydrogen waste represents significant resource loss, should this solicitation mandate the use of a zero-waste or zero-boiloff technology to minimize hydrogen losses?**

A82: Applicants must comply with all applicable safety and quality standards, as well as uptime requirements. While zero-waste or zero-boiloff technologies are not mandated in this solicitation, Applicants may highlight any innovative measures addressing hydrogen loss or environmental benefits in their project narrative.

**Q83: Can you explain how you reached the 200 kW per charging port and 150 kW per port for simultaneous charging minimum power requirement? This greatly exceeds the power needed for many categories of port cargo handling equipment and could restrict the ability of terminal operators to utilize this funding.**

A83: The solicitation manual has been amended (Addendum 02) to allow for 150 kW per port charging. However, for Open Retail stations, each charging station port must be capable of providing at least 200 kW and if using Automated Load Management (ALM), each port would need to be capable of delivering at least 150 kW when all ports are in use. See Section II.B. for updated requirements.

**Q84: Regarding the 150 kW requirement per charging port, could you please clarify between charger and dispensers (“nozzle”). For example, if a single charger with two dispensers or “nozzles” has a total capacity of 200 kW but has smart charging capabilities to supply 150 kW to one dispenser at a time, but when two vehicles are plugged in simultaneously, the power per dispenser might drop below 150 kW per dispenser (e.g., 100 kW per port) during part of the charging cycle. Would this type of equipment be allowed under this solicitation?**

A84: No. A nozzle/port/dispenser output of less than 150 kW is not allowed. Section II.B.2. Charger Port/Hydrogen Refueling Dispenser Minimums, Addendum #2 states that each charging port must provide at least 150 kW, including duringsimultaneous charging. Additionally, if the electric vehicle charging station will be open retail, each charging station port must be capable of providing at least 200 kW (and if Automated Load Management (ALM) is being utilized, each charging station port must be capable of simultaneously providing at least 150 kW when all ports are in use).

**Q85: The Manual states Applicant is to “…submit a separate Past Performance Reference Form for each CEC agreement…” and yet the actual Attachment 12 instructions do not contain the word “each.” Can an Applicant target the most recent five CEC references that are similar in scope, size, and topic to GFO-24-610?**

A85: The Attachment 12 form is a template form used across CEC grant solicitations, which is why the word “each” is not included in the instructions on the form. As instructed in Section III.D.12, “Applicants must complete and submit a separate Past Performance Reference Form for each CEC agreement (e.g., contract, grant or loan) received by the Applicant in the last 10 years, including ongoing agreements, and the 5 most recent agreements with other public agencies within the past 10 years.” Applicants may not selectively choose which agreements to report, whether CEC agreements or agreements with other public agencies, and should submit a separate Past Performance Reference Form for each agreement.