# Questions and Answers

# Light-Duty Vehicle and Multi-Use Hydrogen Refueling Infrastructure

# GFO-22-607

# [~~December 20, 2022~~] January 24, 2023

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.

**Addendum 3 to GFO-22-607 adds answers to questions submitted after the question submission deadline. These additions are made at the end of this document.**

**Eligible Projects Costs**

**Q1. Would utilizing our property’s value or equipment owned count towards cash match share?**

A1. Any cost related to the purchase or rental of property for the project are unallowable as reimbursable and match costs, as stated in Solicitation Manual Section II.E. Unallowable Costs (Reimbursable or Match Share).

The differences between cash match and in-kind match share are explained in the Solicitation Manual, Section II.D. Match Funding Requirements. If an Applicant proposes to purchase equipment for the project and includes that expenditure in the project budget, to be paid with funding other than CEC grant funds, this expenditure is cash match. If existing or donated equipment is to be used in the project, the value of the equipment may be claimed as in-kind match. The value of in-kind match is based on the fair market value of the goods and services provided at the time it is claimed as match.

If equipment is manufactured or sold by the Applicant, costs should be budgeted as labor and materials rather than as a single line item for the good or service. That is, the costs budgeted should reflect the direct costs attributable to the production of the item.

**Q2. If an Applicant is participating in an investor-owned utility’s (IOU's) program approved by the California Public Utilities Commission (CPUC) that pays for a portion of the refueling equipment, does it preclude using the IOU’s contribution as match funding? The GFO indicates that only utility upgrades NOT covered by the utility would be eligible as match.**

A2. If the IOU is covering some of the cost of hydrogen refueling station equipment, that could be counted as match funding. It is utility upgrade costs paid for by the IOU that are not eligible as match.

**Q3. Is data collection and analysis required by the GFO an allowable reimbursable cost?**

A3. No, only the actual, allowable equipment costs as defined in the Solicitation Manual Section II.C. Eligible Project Costs are eligible reimbursable costs.

**Q4. If an item costs $4,500 per unit and lasts more than one year, is that item equipment or material & supplies?**

A4. Such an item would be considered as material. Equipment is defined as a purchase of a tangible item with a unit cost of $5,000 or more and a useful life of one year or more. Materials are any tangible items purchased that do not conform to the definition of Equipment. Materials have an acquisition UNIT cost of less than $5,000 or a useful life of less than one year.

**Q5. If a non-profit, municipal, or state agency attempts to take advantage of the Investment tax credit via the "Direct Payment" provision of Inflation Reduction Act (IRA), would this be considered "a discount or rebate" and thus ineligible as match funding? Would the receipt of a Direct Payment for equipment lower the "net cost" by the Applicant?**

A5. CEC staff understands the “Direct Payment” provision of IRA to enable entities to claim a refund for the excess taxes they paid for items eligible for clean energy incentives. Any tax that is refunded to the Applicant for equipment purchased for a project resulting from this solicitation would be like a refund on equipment costs, and that amount of refund is not an eligible cost per Solicitation Manual Section II.E. Unallowable Costs (Reimbursable or Match Share). However, the cost of equipment not refunded is an eligible expense assuming it falls under the description of eligible costs in Section II.C. Eligible Project Costs.

**Q6. Will funding support be provided to help obtain site control?**

A6. No, eligible reimbursable costs are limited to actual, allowable equipment expenditures only as listed in Solicitation Manual Section II.C. Eligible Project Costs. The Applicant must submit in its application adequate documentation of site control and possession.

**Project Requirements**

**Q7. Does the minimum 24-hour fueling capacity of 225 kilograms support a storage system to meet this requirement? The Hydrogen Station Capacity Evaluation (HySCapE) model supports storage as part of the formula.**

A7. Yes, the Applicant’s proposed hydrogen storage system is a factor in the fueling capacity calculation. The 24-hour fueling capacity per fueling position is calculated by the Hydrogen Station Capacity Evaluation (HySCapE) tool based on the station specifications related to onsite production (if applicable), storage, compressor, dispenser, and deliveries that the Applicant inputs into the tool. The output will be a HySCapE calculated value of total hydrogen dispensed per day counting only H70-T40 fills that achieve a 95 percent state of charge (SOC) or higher.

**Q8. Do the multiple refueling stations required under the Light-Duty Vehicle Hydrogen Refueling Infrastructure Competition all have to be on the same site, or can they be at two different physical locations?**

A8. Solicitation Manual Section I.H. Minimum and Maximum Award Amounts describes how the Light-Duty Vehicle Hydrogen Refueling Infrastructure Competition has a minimum award of $4 million and a maximum award of $10 million with a per station maximum award of $1 million. Therefore, proposed projects in this competition must include a minimum of 4 light duty hydrogen refueling stations to achieve the minimum award. Each proposed light duty hydrogen refueling station shall be at a different physical location that is an eligible location per Solicitation Manual Section II.B.2.a. or II.B.2.b.

**Q9. Can a hydrogen refueling station be located at a port?**

A9. A proposed hydrogen refueling station may be located at a port as long as the port location is an eligible location per Solicitation Manual Section II.B.2.a. or II.B.2.b. The station must also meet the other requirements under Section II.B. Project Requirements, including the Minimum Technical Requirements for Open Retail Hydrogen Refueling Stations listed in Section II.F.

**Q10. Does GFO-22-607 include a definition of “open retail”?**

A10. To be considered “open retail,” all hydrogen refueling stations funded under this solicitation shall, at a minimum, meet and adhere to the Minimum Technical Requirements for Open Retail Hydrogen Refueling Stations defined in Section II.F of the Solicitation Manual.

**Q11. What project stage is the CEC looking for? Do projects need to be shovel ready or can they be concept proposals? Would concept proposals be competitive?**

A11. This solicitation seeks projects that are ready to develop hydrogen refueling stations to serve in real-world operation. Concept proposals are unlikely to be eligible or competitive. Please review the Solicitation Manual Section II.B. Project Requirements and Solicitation Manual Section IV.E. Evaluation Criteria to consider for yourself if your proposal would be eligible or competitive.

**Q12. We have a few sites already with precision construction plans and a half dozen without, currently in "entitlement" stage through one of our partners. Should we submit each site as an individual opportunity/competition or submit one main funding request for 10 sites at $1 million each. Also, half are light-duty stations, and the other half are both light-duty/heavy-duty and several qualify for "other" funding resources. Are there conflicts here?**

A12. Each Applicant may submit up to one application for the Light Duty Vehicle Hydrogen Refueling Infrastructure Competition and one application for the Multi-Use Hydrogen Refueling Infrastructure Competition, as stated in the Solicitation Manual Section I.I. Maximum Number of Applications. Therefore, all the light-duty stations a potential Applicant wants to propose should be included in a single application to the Light Duty Vehicle Hydrogen Refueling Infrastructure Competition, and the requested grant award amount must be between $4 million and $10 million as described in Solicitation Manual Section I.H. Minimum and Maximum Award Amounts. A potential Applicant should also include all of the multi-use (light-duty/heavy-duty) stations into a single application to the Multi-Use Hydrogen Refueling Infrastructure Competition, requesting up to the maximum grant award of $3 million.

 Regarding “other” funding resources, generally funds from other sources can be applied as matching funds to a proposed project so long as the funds meet the requirements under Solicitation Manual Section II.D. Match Funding Requirements. Note that CEC funding may not be claimed as match share.

**Q13. Is biomass-derived hydrogen characterized as renewable?**

A13. Yes. The Solicitation Manual Section II.M. Renewable Hydrogen Requirements refers to the renewable hydrogen definition in the Low Carbon Fuel Standard regulation, which is “hydrogen derived from (1) electrolysis of water or aqueous solutions using renewable electricity; (2) catalytic cracking or steam methane reforming of biomethane; or (3) thermochemical conversion of biomass, including the organic portion of municipal solid waste (MSW). Renewable electricity, for the purpose of renewable hydrogen production by electrolysis, means electricity derived from sources that qualify as eligible renewable energy resources as defined in California Public Utilities Code sections 399.11-399.36.”

**Project Schedule**

**Q14. What are the data reporting requirements after March 2026, which will be before the 5-year obligation to operate would have expire?**

A14. All project work must be scheduled for completion by no later than March 31, 2026, as stated in the Solicitation Manual Section III.D.6. Schedule of Products and Due Dates. Applicants or a key project partner must agree to operate each proposed station and maintain its open retail status for a minimum of five years, as stated in Solicitation Manual Section II.B. Project Requirements. However, the data collection and analysis task of the Scope of Work (Attachment 2) only requires data reporting requirement for the first year (12-months) of operation, and it is only this first year of operation that must be scheduled for completion by March 31, 2026.

**Q15. The Solicitation Manual doesn’t disclose a timeline that shows what the CEC considers adequate progress towards completion of the project. The only date we are given is that projects must be completed no later than March 31, 2026. If granted the funds, would the CEC provide phases and recommended activities, or would the CEC look to our agency's schedule of products and due dates (Attachment 4)?**

A15. Unless the CEC has pre-filled a date in the Schedule of Products and Due Dates (Attachment 4) for an activity, the CEC is looking to the Applicant to provide the schedule for its project. An Applicant should explain its proposed schedule in relation to relevant evaluation criteria, such as Project Readiness (Solicitation Manual Section IV.E.), and an expedited schedule may make the project more competitive in those relevant criteria. If proposed for award, there will be opportunity for the Applicant to work with CEC staff to further refine the project schedule, if necessary.

**Applicant Requirements**

**Q16. Can a port be an Applicant to GFO-22-607?**

A16. Yes, GFO-22-607 is open to all public and private entities. Applicant teams must meet the requirements listed in the Solicitation Manual Section II.A. Applicant Requirements.

**Q17. Besides quarterly and final reports, are there audit requirements? If so, how long does the CEC recommend that Applicant house documentation?**

A17. The Terms and Conditions (Attachment 9) cover these requirements in Section 18 (b) Retention of Records and (c) Audits. Applicants should fully review all terms and conditions and ensure they can comply with these requirements if awarded.

**Miscellaneous**

**Q18. Is GFO-22-607 a new or recurring solicitation?**

A18. GFO-22-607 is a new solicitation. However, it is similar to and has some of the same requirements as GFO-19-602, Hydrogen Refueling Infrastructure. The materials for that solicitation are available at the [GFO-19-602 webpage](https://www.energy.ca.gov/solicitations/2019-12/gfo-19-602-hydrogen-refueling-infrastructure) at https://www.energy.ca.gov/solicitations/2019-12/gfo-19-602-hydrogen-refueling-infrastructure. However, use caution in comparing these solicitations as they do have differences.

**Q19. What is the Hydrogen Safety Panel? Is that a separate organization at the authority having jurisdiction (AHJ) or a state-wide panel?**

A19. The Hydrogen Safety Panel is a separate, multidisciplinary team that is not part of an AHJ or state agency. Further information can be found on the [Hydrogen Safety Panel website](https://h2tools.org/hsp) at https://h2tools.org/hsp and the panel can be contacted at hsp@h2tools.org.

**Q20. How did the CEC decide on the amount of funding to offer per station under this solicitation?**

A20. CEC staff reviewed the grant funding per station requested under the last hydrogen refueling infrastructure solicitation, GFO-19-602, and selected $1 million as the per station maximum award considering that GFO-19-602 is funding 111 new stations for $115.7 million in grant funds, or $1.04 million per station. Staff is requesting Light-Duty Vehicle Hydrogen Refueling Infrastructure Competition projects include a minimum of four (4) stations with the intention of enabling some level of economies of scale, continuing the effort to enable cost reduction begun with GFO-19-602.

For the $3 million maximum per multi-use station, CEC staff acknowledges this is not likely to fund a large heavy-duty station of the type needed to support many fuel cell electric trucks or buses, but it should be sufficient to build a separate fueling area with space for large vehicles and additional storage to enable more demonstrations of fuel cell electric trucks or buses to occur. Given the ongoing evolution of station equipment and standards to conduct fast fueling for large hydrogen tanks, CEC staff anticipates heavy-duty station upgrades will be necessary for most heavy-duty stations planned today.

**Q21. Does this solicitation envision incorporation of new technologies that are being developed at startups or universities to reduce costs?**

A21. The solicitation does not prefer one technology over any other. Any station equipment or technology that meets the Project Requirements (Solicitation Manual Section II.B.) is eligible and will be scored per the evaluation criteria in Solicitation Manual Section IV.E.

**Q22. Can an Applicant apply to both GFO-22-607 and GFO-22-502, Innovative Hydrogen Refueling Solutions for Heavy Transport, for the same project?**

A22. Yes, an Applicant may apply to both GFOs if it believes its project is eligible under both solicitations. If the same project costs are included under both project proposals, and if the Applicant were proposed for award under both GFOs, the CEC and the Applicant would need to determine under which GFO to award the project.

If a project is large enough such that the proposed project submitted to one GFO is mutually exclusive to the proposed project submitted to the other GFO, and both could proceed independent of one another and would not use CEC funds as match under either agreement, then there may be sufficient rationale to consider them separate projects that could receive funding under both solicitations. Staff is unable to say with certainty if there could be a potential for award under both solicitations without knowing the project details. However, Applicants are encouraged to apply to any CEC opportunity for which they believe their project to be eligible.

**Questions and Answers added in Addendum 3 to GFO-22-607**

**Q23. Is property in escrow adequate documentation of site control for Critical Milestone #2?**

**A23.** **Yes. If an Applicant is proposing to purchase the property on which it proposes to build a station instead of leasing the property, then having the property in escrow to purchase the property is adequate documentation of site control for Critical Milestone #2.**

**Q24. Is submitting multiple sites for the Multi-Use Hydrogen Refueling Infrastructure Competition allowed?**

**A24.** **Yes. Solicitation Manual Section I.H.2. says “Projects may be composed of one or more multi-use hydrogen refueling stations that serve multiple uses … The per station maximum award amount for a multi-use hydrogen refueling station is $3 million.” As indicated in Solicitation Manual Section I.I., an Applicant may only submit one application to the Multi-Use Hydrogen Refueling Infrastructure Competition. Therefore, an Applicant’s one application (one project) to the Multi-Use Hydrogen Refueling Infrastructure Competition could include one or more multi-use hydrogen refueling stations and have a maximum award of $3 million. An entity can submit one application and also be a subrecipient or vendor to another Applicant’s application.**

**Q25. Solicitation Manual Section I.H.1. states that Light-Duty Vehicle Hydrogen Refueling Infrastructure Competition projects may be composed of four or more fueling stations, with the per station maximum award at $1 million. Does this mean we need 4 stations and 4 applications in order to achieve the minimum award of $4 million, or does this mean we are able to apply once for 4 stations to achieve the minimum award of $4 million under one project?**

**A25. The latter statement is correct, all of the stations to be included in an Applicant’s Light-Duty Vehicle Hydrogen Refueling Infrastructure Competition project should be submitted in a single application to that competition. See the answers to questions #8 and #12 in this document for related information. Reviewing Attachment 1a (GFO-22-607 Application Form for Light-Duty Vehicle Hydrogen Refueling Infrastructure Competition) and Attachment 1b (GFO-22-607 Application Form for Multi-Use Hydrogen Refueling Infrastructure Competition) should provide some clarity on how to organize stations within each competition.**

**Q26. Can we apply for one multi-use and one light-duty station at the same, or contiguous, sites?**

**A26.** **A multi-use hydrogen refueling station shall serve multiple uses, including light-duty fuel cell electric vehicles in one public fueling area and fuel cell electric trucks or buses in a separate fueling area (Solicitation Manual Section I.H.2). A multi-use station must have a public light-duty vehicle fueling component, but that light-duty vehicle fueling component is considered part of the multi-use station, not a separate light-duty vehicle station. Therefore, there is no need to count that light-duty fueling component as a separate station under the Light-Duty Vehicle Hydrogen Refueling Infrastructure Competition unless an Applicant wants the CEC to evaluate the same location for both competitions, with the intention of deciding to build the station as either a light-duty station or a multi-use station based on the results of the solicitation.**

**Q27.** **If we are proposing four light-duty stations, two of which would also be multi-use stations serving heavy-duty vehicles, is it possible to include within the four-station application the supplemental information and documentation for the heavy-duty equipment at two of the stations? In other words, do we have to prepare a separate application for the two multi-use stations, while also preparing an application for the four light-duty stations?**

**A27.** **Applicants should submit hydrogen refueling station projects to the competition under which they want to be considered for funding. From the information provided, and assuming all competition requirements are met, an Applicant could submit one application to the Multi-Use Hydrogen Refueling Infrastructure Competition that includes two multi-use stations for a maximum award of $3 million (Solicitation Manual Section I.H.2). If the Applicant had two other, light-duty vehicle hydrogen refueling stations planned, those two stations by themselves do not meet the minimum award requirements for the Light-Duty Vehicle Hydrogen Refueling Infrastructure Competition and would need to be combined with at least two other light-duty hydrogen refueling stations for a $4 million funding request to meet the minimum requirement (Solicitation Manual Section I.H.1).**

**Conversely, an Applicant could submit all four stations (two serving only light-duty vehicles and two serving light- and heavy-duty vehicles) to the Light-Duty Vehicle Hydrogen Refueling Infrastructure Competition to meet the minimum award requirement. The two stations with a heavy-duty fueling component would be subject to the $1 million maximum grant per station under the Light-Duty Vehicle Hydrogen Refueling Infrastructure Competition (Solicitation Manual Section I.H.1).**

**An Applicant can submit one application to each competition (Solicitation Manual Section I.I), but if any stations in the two applications overlap, those stations will not be funded twice. For example, one multi-use station cannot have the light-duty component of the station funded under the Light-Duty Vehicle Hydrogen Refueling Infrastructure Competition and the heavy-duty component of the station funded under the Multi-Use Hydrogen Refueling Infrastructure Competition. The Multi-Use Hydrogen Refueling Infrastructure Competition projects shall include both the light-duty and heavy-duty components of a station.**