**Questions and Answers #2**

**Light Duty Vehicle Hydrogen Refueling Infrastructure**

**GFO-15-605**

These answers are based on the Energy Commission’s interpretation of the questions received. It is the applicant’s responsibility to determine whether or not their particular proposed project is eligible for funding, by reviewing the Eligibility Requirements within the solicitation. The Energy Commission cannot give advice as to whether or not your particular project is eligible for funding, because all proposal details are not known.

There are two Addendums to this solicitation as of the release date of this document.

There is also a separate Questions and Answers document that was published on June 2, 2016, which contains the first set of questions and answers.

***Administrative/Miscellaneous***

**Q.1: Will this solicitation be released again next year?**

A.1: Likely not. The maximum available funding amount of $33.0 million represents the funding allocations for FY 2015/2016 and FY 2016/2017.

**Q.2: Can I obtain copies of applications from the previous solicitation?**

A.2: Yes. Please contact Kevyn Piper at 916-654-4845 or Kevyn.Piper@energy.ca.gov. However, it is important to know that the requirements and the Evaluation Criteria for this solicitation are different from previous solicitations and the success of an application under a previous solicitation may not mean that it would be successful under this current solicitation.

**Q.3: Table 7: Application Organization in the GFO (pages 53 of 80) references Tab 4 as the Executive Summary. However, the Application Content listed on Page 54 of 80 does not reference inclusion of an Executive Summary. Please clarify whether an application should include an executive summary.**

A.3: Table 7 should not have contained “Executive Summary.” An Executive Summary is not required in the application. Please follow the IX. F. Application Content for what to include in the application.

**Q.4: If an Applicant intends to deploy a certain number of stations upon successful award, but plans to include potential locations in their application that exceeds this number (which could result in more awards than the applicant is prepared to accept), would the Energy Commission prefer the applicant to state the number of stations they are willing to deploy in their application or address excess awards during contracting?**

A.4: It is up to an Applicant to decide how many stations to propose. Upon release of a Notice of Proposed Awards, Applicants may withdraw from one or more recommended awards. If this occurs, the Energy Commission reserves the right to recommend funding to the next highest ranked station following the rules and procedures contained within GFO-15-605.

**Q.5: Section II.G, on page 20: the Energy Commission will not release the 15% retention until after the Final Report has been approved by the CAM. The final report requires a minimum of 12 months of station operational data. If the grant recipient receives an O&M grant can they submit the Final Report after 12 months of station operational data has been collected?**

A.5: If a Recipient receives an O&M grant, then the Recipient is no longer required to conduct data reporting under its capital expense (Cap-X) grant agreement on a station by station basis (Attachment 14, Special Terms & Conditions). The 15% retention will be released, on a station by station basis, when the Recipient submits a satisfactory Final Report under the Cap-X grant agreement upon the station becoming operational (Section II. G.). See the Questions and Answers document posted on June 2, 2016 (numbers 9 and 10) and Addendum 2, Section II.G. of the solicitation Application Manual.

**Q.6: Open-retail stations are required to remain functioning for a minimum of five years. What is the expected term of the grant agreement, with and without an O&M agreement?**

A.6: The term of a Cap-X agreement should provide sufficient time for a Recipient to complete all tasks in the Scope of Work (including making a station “operational” in accordance with the definition contained in GFO-15-605 and completion of a final report). Open-retail stations must remain functioning for a minimum of five years after the end term of the agreement.

**Q.7: I would like to obtain information for gas station locations in California and its numbers.**

A.7: Retail fuel outlet information can be found at: <http://www.energyalmanac.ca.gov/gasoline/piira_retail_survey.html>. The Energy Commission does not release actual address information for retail sites as this information was filed under the Petroleum Industry Information Reporting Act and is confidential.

***Capital Expense Grants***

**Q.8: In the solicitation Application Manual (Table 3), there is a “Monthly Incentive” column along with Cap-X funding. Is this Monthly Incentive funding in addition to the Cap-X and O&M?**

A.8: No. The “Monthly Incentive” column simply shows the difference in maximum Cap-X funding amount depending on when the station becomes operational. The “Monthly Incentive” amounts are already included in the “Maximum Cap-X Funding Amount” column and are ***not*** in addition to the “Maximum Cap-X Funding Amount.”

***Safety Plan***

**Q.9: Our safety plan will follow recommended inputs per "Safety Planning for Hydrogen and Fuel Cell Projects March 2016." However, we will not have specifics since a hydrogen equipment supplier/installer will likely not be identified before the submission. So we will follow accepted best practices and applicable safety codes (NFPA2). Therefore, most of our discussion in the Safety Plan will address future actions following award (i.e., Hazard Analysis/Risk Assessment, details on design, construction, operation, maintenance on specific equipment for the hydrogen infrastructure). Is this normal and will it be acceptable?**

A.9: If the hydrogen equipment suppliers or installers have been identified by the time of application, that information should be included in the Safety Plan. Regardless, the specifications of the equipment and materials which will be installed, and the safety precautions and procedures which will be observed during their installation, should be fully explained in the Safety Plan to assure the Hydrogen Safety Panel and the Energy Commission that stations built based on that design will follow established and acceptable safety protocols. The Applicant is invited to consult with the Hydrogen Safety Panel in a pre-application consultation. However, final responsibility for the safety of the proposed station design rests with the Applicant.

**Q.10: Please confirm that the Safety Plan and its Applicant’s name will not be divulged until post award.**

A.10: All application contents, except for the Confidential Business Plan information described in section IX.F.14 (a and b), will become public only after the Notice of Proposed Awards is published.

***Renewable Hydrogen Requirements***

**Q.11: In Section VII.A on page 45, the solicitation specifies that on a per kilogram basis at least 33% of the hydrogen dispensed must be renewable. Under Section VII.E on page 46, the solicitation requires that on an energy equivalent basis the proposal must demonstrate in a “well-to-wheel” evaluation that the required percent of the energy used to produce, deliver, dispense, and use hydrogen was from renewable feedstock. Please clarify this difference. Must at least 33% of the total energy consumed (from well-to-wheel) be sourced from renewable energy?**

A.11: No. The requirement is for the dispensed hydrogen to be 33% renewable. As stated in the solicitation, the content of renewable hydrogen which Applicants must dispense is specified in VII. A. Minimum Renewable Hydrogen Content: “Proposed projects must dispense a minimum renewable hydrogen content of at least 33% renewable hydrogen (on a per kilogram basis) …”. Section VII.E., Required Information of the solicitation requires Applicants to explain, to the best of their ability, the assumptions and calculations which determine the percentage of energy and feedstock usage due to hydrogen dispensed which was renewably generated or obtained.

**Q.12: Can RECs be used to make up the renewable requirement, even if the hydrogen feedstock is derived from methane reformation?**

A.12: RECs can be used to meet renewable requirements for process energy used in producing hydrogen. For methane reformation, an eligible renewable feedstock must be used to meet the renewable hydrogen requirement.

**Q.13: If a “well to wheel” evaluation is required to demonstrate renewable content, what lookup tables and/or published reference data should be used to account for energy use for:**

* **Production of hydrogen**
* **Liquefaction of hydrogen (if transported to the station as a liquid)**
* **Compression**
* **Delivery**
* **Regasification of hydrogen it (if stored at the station as a liquid)**
* **Further compression on site to 900 Bar**
* **Dispense it, and**
* **Consume it?**

A.13: A “well to wheel” evaluation is required (Section VII. E.). Lookup tables and published references used by Applicants to demonstrate the “well to wheel” renewable content of their hydrogen should be carefully and defensibly selected by Applicants.

**Q.14: Is it correctly understood that both the feedstock (e.g., gas or electricity for hydrogen production) and system power (e.g., electricity for compression and dispensing) both are to be included in the calculation of the Well-to-Wheels energy consumption? (Sections VII F and VII G)**

A.14: Yes.

**Q.15: Is it correctly understood that “greening” of both the feedstock (e.g., using biogas) and system power (e.g., using renewable electricity or RECs) both contributes towards reaching the minimum requirement of 33% renewable hydrogen content for a given station or network? (Sections VII F and VII G)**

A.15: Yes.

**Q.16: Is it correctly understood that RECs can be used to “green” both the feedstock (e.g., natural gas or electricity for hydrogen production) and system power (e.g., grid electricity for compression and dispensing), in the attempt to meet the minimum requirement of 33% renewable hydrogen content for a given station or network? (Sections VII C and VII D)**

A.16: RECs can be used to meet renewable requirements for process energy used in producing hydrogen. For methane reformation, an eligible renewable feedstock must be used to meet the renewable hydrogen requirement.

**Q.17: Is it correctly understood that the methodology in Attachment 13 is sufficient for calculating the CO2 emissions reductions for a certain station or network and associated pathway?**

A.17: Yes.

**Q.18: Is it correctly understood that the “Well to Wheels” energy consumption calculation as required in section VII G, should only include energy consumption for the feedstock (production) and system power (compression and dispensing), thus indirectly it is only a “Well to Pump” calculation?**

A.18: No. A “well to wheel” evaluation is required (Section VII. E.).

***Confidential Business Plan***

**Q.19: Section IX.F.14. (a and b), page 63: If an applicant is a newly formed division of a Fortune 500 company but the size and complexity of that company makes it extremely difficult, if not impossible, to provide balance and cash flow statements, as well as highly confidential pro forma statements, would any or all of the following documentation serve as sufficient documentation of the applicant’s financial strength to build and operate the proposed station:**

* **Certification of the parent company’s credit rating**
* **If a publicly traded company, the SEC filing and annual report?**

A.19: Applicants should provide the specific documentation listed in Section IX.F.14(a) and (b). The financial data requested from Applicants in this section will be kept confidential by the Energy Commission, pursuant to California Government Code sections 6254(k) and 6254.15 for a period of 7 years, unless the Energy Commission is ordered to release it by a court or other entity with jurisdiction over the issue or the information otherwise becomes public. The information requested in Section IX.F.14. (a and b) will be used to evaluate the proposal under the “Financial Plan” Evaluation Criterion. Failure to provide the information may negatively impact the Applicant’s score.

**Q.20: Section IX.F.14.b., page 64: Is there an alternative to providing requested market supply and demand conditions of the industry, and market fluctuations, which the applicant considers confidential and competitive business information?**

A.20: All assumptions supporting the Applicant’s proforma statement should be listed. One example of an assumption is market supply and demand conditions of the industry. The financial data requested from Applicants in this section will be kept confidential by the Energy Commission, pursuant to California Government Code sections 6254(k) and 6254.15 for a period of 7 years, unless the Energy Commission is ordered to release it by a court or other entity with jurisdiction over the issue or the information otherwise becomes public. Applicants should keep in mind that confidential information is requested to demonstrate the economic viability of the proposed project. The information requested in Section IX.F.14. (a and b) will be used to evaluate the proposal under the “Financial Plan” Evaluation Criterion. Failure to provide the information and, for that in section (b), the assumptions on which it is based, may negatively impact the Applicant’s score.

**Q.21: Section IX.F.4.l, page 58: Is there any alternative available to an applicant to demonstrate the Applicant’s liability coverage, in lieu to providing a list of pending or filed litigation, which a corporation would consider highly sensitive and confidential, and may not necessarily provide any demonstration of applicant’s liability? Would either of the following options be acceptable to the Energy Commission:**

* **Certification of the parent company’s credit rating**
* **If a publicly traded company, the SEC filing and annual report?**

A.21: Applicants should provide a business plan which includes all items listed under Section IX.F.4.l. The information requested in this Section will be used to evaluate the proposal under the “Financial Plan” Evaluation Criterion. Failure to provide the information may negatively impact the applicant’s score.

***CHIT***

**Q.22: Please clarify the ranges of values shown for Location Value, Capacity Value, and Capacity Need on the CHIT online map. Also, please provide guidance for interpreting Location and Capacity Values provided both through the CHIT online map and through correspondence with the Air Resources Board.**

A.22: On the topic of ranges:

Location Value: Location Value measures the degree to which coverage provided by existing and funded stations meets ARB’s assessment of local potential for the FCEV early adopter market. A high value indicates that the strong potential for a local first adopter FCEV market that is not met with a correspondingly high degree of coverage. The coverage gap is therefore high, which means that the area has a higher priority for a new station. A lower value means that the market is well-served by the existing network coverage or that the strength of the local FCEV first adopter market potential is not very high. Location Values range from 0 to 1.

Capacity Value: Capacity Value measures the degree to which a proposed station’s nameplate daily capacity is appropriate for the projected FCEV first adopter market’s likely daily consumption. Capacity values are directly dependent on an assessment of the market potential in an area and the applicant’s indicated nameplate capacity; therefore, capacity values are provided in the online map for only two example cases: 180 kg/day and 350 kg/day nameplate capacities. Capacity values range from 0 to 1, with values closer to 1 indicating more appropriate match between the proposed station nameplate capacity and the calculated need.

Capacity Need: Capacity need is determined by ARB’s assessment of FCEV early adopter market potential. It is based on distributing ARB’s projected 34,300 vehicles in 2021 across the entire state according to market potential and population density. Local capacity need is determined by defining local market areas and calculating the difference between existing hydrogen fueling capacity and the demand from the assumed vehicles. Local capacity need ranges from 0 kg/day to 2168 kg/day.

On the topic of interpretation:

High CHIT Station Coverage Values and high CHIT Station Capacity Values demonstrate (in part) the coverage, capacity and market viability of the proposed station and will be evaluated as part of the “Coverage, Capacity and Market Viability” Evaluation Criterion.