

DOCKETED
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CEC Alternative and Renewable Fuel and Vehicle Technology Program (SB8 - AB 118)
 Subject Area – Hydrogen Fuel Infrastructure Draft Solicitation \$29.9M

The South Coast Air Quality Management District (SCAQMD) staff appreciates this opportunity to comment on the draft PON for the next hydrogen fueling infrastructure solicitation issued by the California Energy Commission's Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP). We believe that in order to support the announced roll-out of FCVs within the 2015 timeframe that the upcoming PON must be successful with respect to “putting steel into the ground.” The PON must be designed to entice additional station owners, technology providers and station integrators that can and will perform in a timely manner. We commend CEC staff for being responsive to the stakeholders and the people of California by thinking “outside the box” and producing a much-improved solicitation over past Program Opportunity Notices. Our comments appear below. Please use these comments more as an initiation to engage in further dialogue particularly if they are not clear in substance or intent.

2. Maximum Award

Although the percentage and funding amounts did increase significantly when compared to PON-12-606 we believe that the level of funding is insufficient. It is well understood that providing hydrogen fuel for vehicles at a dispenser does not offer a business opportunity at present. Likewise, it is well understood that CEC funding of less than 100% would present a losing proposition to station owners, equipment providers and investors. Arguably, by raising the level of funding to 100% the CEC would interest more parties and foster greater competition resulting in lower equipment and installed costs. A higher rate of funding may very well stimulate an increased number of smaller – but nonetheless capable – contractor teams to bid lower cost, high quality stations.

3. Early Completion Bonus

Rewarding aggressive schedules and successful teams is a great concept; however in light of potentially providing 100% funding (above) additional O&M funding could be made available. Does Caltrans provide such incentives? Is there a model for such incentives already used by the State?

4. Late Project Penalty

Penalizing project teams that don't perform is an excellent idea if implemented correctly. Reasonableness issues would have to be defined within the contract Ts&Cs in addition to performance that is unsuccessful. Payment schedules for equipment and labor that are not consistent with project schedules would need to be thought through carefully by both parties; however it can be very fair, reasonable and even-handed when applied correctly. Again, does the State have

examples? In all cases careful attention by CEC must be paid to contractor performance at all levels and a full arsenal of performance penalties should be employed including cultivating through the PON contractors that can take over partial projects.

5. Agreement Execution Deadline

Excellent concept; however CEC staff would have to determine upfront and include within the PON the types of contract Ts&Cs that are and are not acceptable. We believe that 120 days is too long if the focus of the PON and Investment Plan is to get “steel into the ground” on an expedited basis and if the parties are intent on performing. If an agreement can’t be negotiated and executed within 90 days by both parties, it should be a clear signal regarding future performance and the CEC should give itself ultimate latitude with respect to pulling funding and providing funds to the next successful proposer.

6. Limit of One station per proposal

Agreed, each station location should stand on its own merit, but proposer can copy or cut & paste duplicative information to each project. Proposers that give a discount for increasing volume of hardware or modular installations should state cost for individual station/module and bulk discount rate(s) for equipment, labor, permitting, etc. Economies of scale should be clearly defined.

7. Back-up Sites for Hydrogen Fueling Station Proposals

Good concept as long as the back-up location(s) doesn’t affect scoring or the PON doesn’t promote monopolies.

8. Single Applicant cap

If the PON is properly designed and a full slate of station owners, technology providers and investors are enticed to submit proposals there may not be a need for a cap. However as a fall-back preventive measure this is a good idea.

9. Operational Date

The PON should carefully define “operational” as it could mean if the station has a fuel supply, that all components are installed, has an operational permit from AHJ, has completed a hydrogen quality test (#11A) or successfully fueled one car.

11. Minimum Technical Requirements

- A. **Hydrogen Quality:** It is well understood that the purity required under J2719 is not currently achievable. Bi-annual testing is nice but it only catches problems after the fact. The Torrance pipeline experience is an example. That said just testing for hydrogen purity currently costs \$1,500 each time it is conducted and \$4,000 if one tests to J2719. These costs must be included in the station O&M. Requiring low cost monitors such as for CO may be a convenient method for achieving reasonable purity.

- B. **Fueling Protocols:** A standardized fueling protocol is great but then the OEM's should not push their own protocols onto the fueling providers. It increases O&M costs and is unnecessary.
- D. **Minimum Peak Fueling Capacity:** Good. That said at this point in time no one is doing a -40 F very well.

12. Renewable Hydrogen Requirements

Ideally any requirement for renewable hydrogen should be shelved until this nascent industry becomes viable with well-defined performance parameters. While a *plan* is definitely more desirable than a requirement to execute in the near future – particularly in light of the State having to pay for the renewable aspects within the proposed O&M and subsequently having fewer funds to promote this industry – the requirement imposes a financial and resource burden on the station owners, equipment providers and investors. Typically they do not have the imbedded resources or expertise to fulfill this requirement and it dilutes their resources and focus on installing stations. Additionally, the renewable hydrogen will be significantly more expensive than traditional forms of hydrogen, penalizing the purveyor, the consumer and threatens to disrupt the roll-out.

15. Station Location

The proximity to airports, offices, and shopping (malls), universities (outside of the polygons) is very important and flexibility should be defined in the PON and employed during the selection process. Provide ultimate flexibility to the reviewers and in the selection process. In general the process for selecting the SLAs included public data sets on household income, number of cars per household, proximity to freeways, proximity to gas stations, drive paths, proximity to gas stations, and other factors. Unfortunately, it appears that the polygons may not coincide