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#### Automotive Fuel Cell Cooperation

Cal/EPA Air Resources Board  
California Energy Commission  
South Coast AQMD  
U.S. Department of Energy  
U.S. Department of Transportation  
U.S. Environmental Protection Agency

AC Transit  
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Air Products

Balford Power Systems  
Bay Area Air Quality Management District

CalState LA  
CA Dept of Food and Agriculture  
CEERT

Energy Independence Now  
Hydrogenics  
ITS-UC Davis

Linde North America, Inc.  
NFCRC-UC Irvine  
NREL

Powertech Labs  
Proton OnSite

Sandia National Laboratories  
Southern California Gas Company  
SunLine Transit Agency  
US Hybrid

October 16, 2013

California Energy Commission  
Dockets Office, MS-4  
Re: Hydrogen Fuel Infrastructure (draft 2013 PON)  
1516 Ninth Street  
Sacramento, CA 95814-5512

California Energy Commission

**DOCKETED**  
**12-HYD-01**

TN 72109

OCT. 16 2013

## Input on the DRAFT Solicitation for Hydrogen Fuel Infrastructure

Comments of the California Fuel Cell Partnership

Dear Commissioner Scott and CEC staff,

Thank you for the opportunity to provide comments on the *Draft Solicitation Concepts for Alternative and Renewable Fuel and Vehicle Technology Program: Subject Area – Hydrogen Fuel Infrastructure*. The California Energy Commission (CEC) staff did an excellent job creating this draft PON based on the workshops, meetings and stakeholder interviews conducted over the past months. The members and staff of CaFCP appreciate your focus and dedication to meeting the goals of establishing the hydrogen station network in California to support commercial launch of fuel cell electric vehicles (FCEVs) beginning in 2015.

The final PON would benefit from an opening description of how this opportunity fits within the overall strategy of establishing a network of publicly accessible hydrogen stations in California. The PON should reference Governor Brown's ZEV Action Plan, specifically that the PON is one in a series of funding opportunities that supports the goal to "ensure a minimum network of hydrogen stations for the commercial launch of fuel cell vehicles between 2015 and 2017." Specifically the PON addresses several ZEV Action Plan goals:

- Ensure funding for 68 stations to support market launch
- Require stations to be open to the public and adhere to SAE standards
- Encourage jobs and investment in the private sector in California

The PON should mention other recent accomplishments, including publishing the ZEV Guidebook for local communities and establishing a ZEV Ombudsman in the Governor's Office of Business and Economic Development (GO-Biz) to assist with permitting hydrogen stations. Providing this context will assure potential applicants that the PON is one part of broader program to prepare California for market launch of FCEVs, instilling confidence that the State of California is fully engaged and committed, and that successful proponents will become part of a team of professionals working to achieve this goal.

CaFCP staff's specific comments on the draft solicitation are as follows:

1. Available Funding

Making all \$29.9M available is a good move to open up opportunities for many bidders and station opportunities, as well as make significant progress towards the establishment of the 68 station initial network.

3. Early Completion Bonus & 4. Late Project Penalty

These are positive refinements from previous PONs, holding bidders accountable to timely station development with both positive and negative reinforcements. The measures also further highlight the urgency to develop the initial network.

5. Agreement Execution Deadline

The 120-day deadline provides greater transparency and accountability for project developers.

6. Limit of One Station per Proposal

While this may make it easier on CEC to review proposals, it may also limit a bidder's ability to propose additional cost reductions or new and creative methods of providing fueling for the initial network. By making each station proposal individually bidders will not be able to lower costs by using economies of scale in equipment procurement, resource allocation, etc. CEC could allow for multiple stations within one proposal yet still require bidders to remain under the proposed applicant cap as well as decide to only partially fund a block station proposal (as CEC has used previously in other funding awards). This would increase bidder flexibility, potentially further lower station costs, and possibly open bidders to new creative models not presented to date.

7. Back-up Sites

This may decrease a bidder's focus on securing the primary site location as well as lock other bidders out of a region. CEC may want to omit this section to focus on succeeding with the proposed bids, recognizing that while site changes may occasionally occur they should be the exception.

9. Operational Date

This is a positive move that clearly states timeline for bringing stations online.

11. Minimum Technical Requirements

*Fueling Protocols* – Fueling protocols for FCEVs are advancing rapidly and we strongly suggest CEC work directly with SAE to ensure the most up to date and accurate performance measures are listed within the final PON. If timing of the PON and SAE activities is out of sync, we suggest CEC use the most currently available specification in the PON with forward leaning language that enables updated specifications to be considered and used when CEC goes into contracting with awarded bidders. This would help ensure the stations that are funded in this PON are using the latest commercially-focused performance requirements.

*Minimum Peak Fueling Capacity* – We recommend CEC be careful not to arbitrarily dilute or weaken any station performance requirements as it will negatively impact customer satisfaction and limit the full capabilities of FCEVs (e.g. range and refueling time). We again suggest CEC work directly with SAE to ensure the proper and full references to J2601 are contained in the final PON.

Previous PONs required stations use CaFCP's Station Online Status System (SOSS) or similar systems to improve consumer confidence in network availability and usage at local stations. This is not present in the current draft and CaFCP requests CEC reinsert this into the final PON.

14. Mobile Fueler Set-aside

This set-aside is a creative approach to enable fueling opportunities in new areas or as a back-up supply if a station or stations are temporarily unavailable in a given region. We suggest CEC provide bidders more guidance on when and how the equipment would be deployed and directed once complete, to support common expectations among bidders, CEC and future users. Due to the temporary nature outlined for these fuelers, CEC may want to ease full commercial technical requirements (e.g. number of back to back fills or total daily capacity) for the mobile fuelers. While fully commercial performance criteria would be preferred, it would be worth reviewing both CEC's implementation expectations vs. various bidder submissions to compare value to costs for the final version of the PON.

15. Station Location Area

This section represents a very positive PON refinement, enabling bidders more flexibility to propose stations anywhere within the state, yet recognizing the placement of the initial locations is critical to the success of the initial market development. To further support the development of the full initial network identified in the *Road Map* we suggest CEC develop similar bonus SLAs for each of the remaining identified 68 locations (minus existing and previously funded). This will strongly reinforce the goal and need to establish the initial 68 station network for commercial launch.

In the *Road Map* the ability to drive between northern and southern California was represented by a single dot (site) located along the I-5 interstate. Recognizing that linking north and south by a single station puts drivers at risk should the station be temporarily unavailable, and that placement along I-5 vs CA-99 provides fewer opportunities to support local hydrogen users, we suggest CEC consider greater flexibility in responding to this specific market area need. This might be represented by allowing multiple station bids along either freeway (perhaps separated by minimum ~75 mile distance) and located between the northern (Manteca) and southern (Bakersfield) split of the two freeways. This would allow bidders to propose new and creative means to satisfy customer desires to travel throughout the state and expand on the single site represented in the *Road Map*.

CEC should provide greater clarity in the *Assignment to SLA* and *Determining Locations* sections, especially regarding the 6 and 20 minute station location requirements. With the extreme diversity of the various market areas, specifically in the very dense and congested areas, and the proximity of some of the stations, these rules could disallow a station that may make perfect market sense as a necessary and complimentary station to a nearby site. While we understand the CECs need and desire to transparently outline how proposals will be reviewed, sometimes the play between the bidder responses and market needs cannot be predetermined in this fashion. We suggest CEC review these requirements and consider softening or providing flexibility if bidders provide tremendous options that CEC had not anticipated.

#### 18. Operation and Maintenance Support Costs

Providing greater O&M support, and making existing stations eligible, significantly reinforces the state's commitment to keeping stations open until the initial network is established and a growing number of FCEVs yields increased demand for hydrogen (and reduces the need for O&M support).

CEC should review allowable O&M costs, as it appears some items not allowed may be both appropriate and necessary to include in the final PON. We recommend CEC allow rent, annual permit fees, business property taxes and liability insurance to count toward O&M costs. Based on our experience operating the West Sacramento hydrogen station through HFS these costs are a significant portion of O&M costs. Local CUPA and fire permit fees, for example, can be thousands of dollars per year (approximately \$7000 for West Sacramento). Property taxes are generally 1% of assessed value annually. Installing a hydrogen station increases the assessed value of a fuel station, and the station owner/operator incurs this cost whether they sell hydrogen or not. Furthermore, CEC should clarify if liability insurance is allowed under O&M costs. Liability insurance should be allowed as it is a significant expense and this support would help stations transition towards normal retail operations without fueling agreements. As more stations apply for and obtain liability insurance the cost of this insurance will decrease because insurance companies will become more familiar with the risks and claims associated with hydrogen stations.

With the industry still developing rapidly, it is important to maximize learnings, and we have the opportunity to do this for stations receiving public funds. The draft PON appropriately includes a requirement to collect data for minimum three years from all funded stations and from those receiving O&M grants. We recommend CEC clearly define the data that will be requested from bidders. We also urge CEC to work with NREL to use and expand upon the data collection and evaluation process used for previous publicly funded stations. This will result in consistent learnings to advance the industry.

#### 20. Scoring Criteria and Points

The draft rightly emphasizes a bidder's Market Viability and Station Performance capabilities. These are two of the most important criteria for establishing a real consumer-driven, and accepted, market. We support the CEC increasing the

bidder flexibility within the PON but similarly placing the burden upon the bidder to demonstrate their competence and capacity to partner with the state and help develop this market.

21. CEQA (and 22. Permitting)

Providing further state support for these necessary, but often time consuming, measures is a positive inclusion to the draft PON and should help expedite station development.

Thank you again for the opportunity to comment, and for CEC staff's thoughtful consideration and continuous improvement with each subsequent PON. As always, we are available to support CEC staff with further information and feedback as needed.

Sincerely,

A handwritten signature in blue ink, appearing to read "C Dunwoody", is positioned above the typed name.

Catherine Dunwoody  
CaFCP Executive Director