**To: California Energy Commission**
**From: Woody Hastings, Woodland Associates**
**Date: October 14, 2013**
**Via Email: docket@energy.ca.gov**
**Re: Docket 12-HYD-01**

Subject: Comments on draft solicitation concepts in the draft 12-606 PON.

Thank you for the opportunity to comment.

Note: The section of the PON being commented on is in *italics*, my comments are in normal font and recommendations are in **bold.**

***6. Limit of one station per proposal***
*Proposals shall be limited to one hydrogen fueling station per proposal. However, Applicants are encouraged to identify back-up station locations (see Concept #7).*

The original proposal concept that allowed multiple stations was the correct approach. In order to optimize cost-effectiveness, the best deployment scenario requires the construction of multiple fueling stations.

This also makes sense from the perspective of utility and practicality and ultimately, consumer acceptance. One station does not constitute a significant advancement in hydrogen fueling infrastructure. Multiple stations (15, 20, 30, etc.) located in the right market could mean the difference between continued stagnation of hydrogen fueling infrastructure development and a leap forward in renewable hydrogen technology adoption and the dramatic reduction in greenhouse gas emissions that would accompany it.

If the goal of the solicitation is to fund projects that significantly expand the network of publicly accessible hydrogen fueling stations and to accommodate the planned large-scale roll-out of hydrogen fuel cell vehicles beginning in 2015, then the solicitation shoots itself in the foot if it imposes a one station limit per proposal. It leaves it in the reviewers hands to cherry pick stations and discard the rest, where if presented in one integrated and optimized proposal for all of the stations, then the value of a large number of stations, e.g., 15 or 20, needs to be judged on its merits and if it advances more stations to deployment by the time the OEM's vehicle roll-out better than funding several proposers with lower quantities of stations, then it is in the best interests of the CEC, the OEMs and the AB 118 Program to fund the larger proposal and meet the goals that AB 118 intended. Especially since the original amount of $40M for hydrogen infrastructure has been reduced to much less over the years since the legislation was first signed. This is the main reason that response to the PONs for Hydrogen Infrastructure has been so poor for renewable hydrogen resulting in all the funds going to a few fossil fuel hydrogen producers.

**Recommendation: reinstate multiple station proposal eligibility, at least for 100% Renewable, carbon free hydrogen fueling.**

***8. Single applicant cap***
*To promote market diversity, a single Applicant is eligible for no more than 60% of the total funds awarded under this solicitation. This is referred to as the "Single Applicant Cap." The Energy Commission reserves the right to modify or eliminate this cap if necessary. Cap increased relative to PON-12-606.*

While I appreciate the sentiment about promoting market diversity, the reality is that there are better and worse ways of promoting hydrogen fueling infrastructure. One of the worst would be to advance systems that rely on hydrogen produced via fossil sources. One of the best, if not *the* best, would be systems that utilize renewable hydrogen. I am pleased that the CEC reserves the right to modify this cap and it is my opinion that you should, by eliminating it completely, only in the case of proposals that propose utilizing 100% renewably-produced hydrogen.

Arbitrarily imposing this cap for the stated reason ignores the fact that a single entity might well make the best and most efficient use of the funds in a renewable hydrogen context. Allowing a single applicant can optimize the effectiveness of the funding with respect to system integration, streamlined communications, and avoidance of duplication, as well as unit cost/station allowing for more stations to be deployed with the same budget. It should also be noted that multiple private sector participants stand to benefit even if a single applicant is awarded under the PON.

**Recommendation: Eliminate cap for projects that propose 100% renewable carbon-free hydrogen.**

***13. Renewable Hydrogen Set-Aside Competition***

*The Renewable Hydrogen Set-Aside Competition will occur before the Mobile Refueler Set-Aside Competition. Proposals submitted and eligible for the Renewable Hydrogen Set-Aside Competition will be scored and ranked according to score. Eligible proposals achieving a passing score will be recommended for funding in ranked order until funds in this set-aside have been exhausted.*

This set aside is only 10% and actually should be 100%. In other words, it should be the preference of the PON to first fund all 100% Renewable Non-Carbon Hydrogen station proposals that meet all minimum requirement scores. Fossil hydrogen projects afterward. As it stands there is no preference for 100% renewable non-carbon hydrogen. In fact the PON as written codifies a preference for fossil-derived hydrogen.

**Recommendation: Make the PON a 100% Renewable Non-Carbon Hydrogen Preferred PON by funding all 100% Renewable Non-Carbon Hydrogen Fuel Stations first then all the rest.**

***15. Station Location Area Competition***

*The Station Location Area Competition will occur after the Mobile Refueler Set-Aside Competition. All proposals with stations that are within or assigned to a Station Location Area will be scored and ranked according to score.*

***C. Primary Priority Station Location Areas:*** *Proposed stations within the following Station Location Areas will receive 20 bonus points to their final score:*

*Beverly Hills/Westwood*
*Hollywood/West Hollywood/Melrose*
*Pasadena*
*San Diego #1*
*San Francisco*
*Torrance/Redondo Beach*
*Westminster/Huntington Beach*

**Recommendation: Need to add:**

Pacific Palisades, Sacramento, Laguna Beach, Los Altos/Los Altos Hills/Palo Alto, Manhattan Beach/El Segundo, Malibu, Santa Monica, and Berkeley/Oakland, and Sonoma County to the Primary

Priority Station Location Areas. These are all areas of significant demographics priority.

***D. Secondary Priority Station Location Areas:*** *Proposed stations within the following Station Location Areas will receive 15 bonus points to their final score:*

**Recommendation: Should add San Luis Obispo and Marin County to Secondary Priority Station Location Areas**

***F. Station Location Area Competition Guidelines:*** *The Energy Commission will evaluate and recommend for funding proposals utilizing the following guidelines:*

- *Only one hydrogen fueling station will be funded per Station Location Area. Once a station is awarded under a Station Location Area (whether within the boundaries or assigned), all remaining proposals competing for that Station Location Area will be disqualified and no longer eligible for funding.*

**Recommendation: Must give preference to 100% Renewable Hydrogen first.**

- *Once an Applicant exceeds the Single Applicant Cap (see Concept #8), remaining proposals from the Applicant will be disqualified and not eligible for funding. The Energy Commission reserves the right to modify or eliminate this cap if necessary.*

**Recommendation: Exempt 100% Renewable Hydrogen from the cap.**

***16. Unassigned Station Competition***

*If funding remains available, the Unassigned Station Competition will occur after the Station Location Area Competition. All proposals with stations that are not within the boundaries of, or assigned to, a Station Location Area will be will be scored and ranked according to score. Eligible proposals achieving a passing score will be recommended for funding in ranked order until funds in this solicitation have been exhausted.*

*The Energy Commission will evaluate and recommend for funding proposals utilizing the following guidelines:*

- *Proposals will be scored in accordance with the scoring criteria.*
- *Once an Applicant exceeds the Single Applicant Cap (see Concept #8), remaining proposals from the Applicant will be disqualified and not eligible for funding. The Energy Commission reserves the right to modify or eliminate this cap if necessary.*

**Recommendation: Cap should be eliminated for 100% renewable Non-Carbon Hydrogen.**

- *Hydrogen fueling stations must be separated by 6 minutes or more drive time (according to UCI's STREET model) from existing, planned or newly proposed stations.*

**Recommendation: Cannot penalize applicants for not knowing where proposed stations are to be located, encourages corruption and insider information trading. Eliminate this rule from proposed stations. Also, how far is six minutes? Indicate in the PON.**

*Proposed hydrogen fueling stations falling within the 6-minute drive time from existing or*

*planned stations will be disqualified and not eligible for funding.*

Again, cannot know where proposed stations are?

- *Proposed hydrogen fueling stations that fall within the 6 minute drive time from other newly proposed stations will be recommended for funding based on the highest overall final proposal score.*

***17. Match Share Funding Requirements***

*The balance of the project cost beyond the Energy Commission grant is the Applicant's required match share this is also referred to as "match funding." Proposals competing under the Renewable Hydrogen Set--Aside Competition and Mobile Refueler Set-Aside Competition must provide a minimum match share of 20% of the total project costs.*

*Applicants competing under the Station Location Area Competition and Unassigned Station Competition must provide a minimum match share ("match funding") of 30% of the total project costs.*

**Recommendation: Exempt 100% renewable Non-Carbon Hydrogen projects from this requirement.**

*Match share funding is calculated as follows: if a proposed project has a total project cost of $2,500,000, a 30% minimum match share funding requirement is $750,000 ($2,500,000 x 30%).*

**Recommendation: Exempt 100% renewable Non-Carbon Hydrogen projects from this requirement.**

*Proposals with a greater percentage of the total project costs in match share funding will be scored higher than those with lower match share funding. The following applies to match share funding:*

**Recommendation: Exempt 100% renewable Non-Carbon Hydrogen projects from this requirement.**

***20. Scoring Criteria and Points***

*Summary of the Scoring Criteria and Points:*

*9. Sustainability .....30 points*

**Recommendation: Sustainability should be higher, raise to same as Market Viability: 90 points**