

DOCKETED

Docket Number:	18-HYD-04
Project Title:	Draft Solicitation Concepts for Light-Duty Hydrogen Refueling Infrastructure
TN #:	227156
Document Title:	CAFCP Stakeholder Response to 18-HYD-04
Description:	N/A
Filer:	System
Organization:	California Fuel Cell Partnership
Submitter Role:	Public
Submission Date:	2/22/2019 5:25:06 PM
Docketed Date:	2/25/2019

*Comment Received From: California Fuel Cell Partnership
Submitted On: 2/22/2019
Docket Number: 18-HYD-04*

CAFCP Stakeholder Response to 18-HYD-04

Additional submitted attachment is included below.

February 22, 2019

California Energy Commission
Docket Unit, MS-4
1516 Ninth Street
Sacramento, CA 95814-5512

Re: Docket No. 18-HYD-04, Draft Solicitation Concepts for Light-Duty Hydrogen Refueling Infrastructure

Dear CEC Administrator –

The California Fuel Cell Partnership (CaFCP) respectfully submits this letter of comment to the California Energy Commission (CEC) in response to 18-HYD-04 on behalf of those members participating and commenting. CaFCP, working within its charter, provided the membership a platform for open discussion and input. Although CaFCP acted as the facilitator to develop the content of this letter, the views expressed are a consensus solely of the stakeholders listed.

Industry applauds the CEC's approach to the Draft Solicitation Concepts for the next round of light-duty Fuel Cell Electric Vehicle (FCEV) hydrogen station grant funding. The CEC has responded positively to industry comments from 2017 and this latest proposed draft Grant Funding Opportunity (GFO) structure is innovative, potentially transformative, and could result in a large number of hydrogen refueling stations to be built over a multi-year period in Tranches and Batches through the remaining duration of the AB8 authorization. We believe that many of the new CEC draft GFO approaches can help further advance FCEV market adoption. At this early stage of FCEV and station deployment, many lessons have been learned and each year offers an opportunity to improve the GFO to better serve FCEV customers. Our broad spectrum of FCEV stakeholders have consolidated many of these valuable lessons and therefore, respectfully provide the following input and feedback in the spirit of continued cooperation and partnership with the state of California.

Structure Batches to enable efficient, cost-effective, and timely delivery of station development: In support of the proposed multi-year program of development for the entire Tranche awarded, we recommend that the Notice of Proposed Award (NOPA) specifies (a) Tranche awarded (total number of stations), (b) Initial Batch with specific site addresses and (c) any subsequent Batches if the applicant provides specific addresses with documentation of site control. All sites identified with specific address and site control, regardless of Batch, should be fixed in Area Classification and Minimum Technical Requirements. This would provide greater certainty to the market for the planned refueling network development in support of FCEV adoption, should provide greater certainty to the station developer (e.g., technical requirements, area classifications) and should be considered in scoring Project Readiness as to the credibility of the application for delivery of the entire Tranche as being relatively more secured.

While only the Initial Batch would have funds encumbered, we further suggest that Match Share expenditure on all sites identified with specific address and site control be allowed to commence at NOPA, regardless of Batch, at the Applicant's own risk to future Batch authorization by CEC and funds appropriation. This would enable efficient implementation of a program of development for as much of the awarded Tranche as the Applicant is willing and able to prepare.

Structure Area Classifications and Scoring to ensure the intended results and the most progress possible to reach 200 refueling stations while enabling a range of potential effective approaches: Capacity may be accomplished through station site and/or station density; coverage is related to the total number and placement of stations. The “Capacity Growth” Area Classification is not needed to ensure the outcome – there is sufficient motivation in the scoring criteria for applicants to propose cost-effective capacity – and could have unintended consequences in being overly prescriptive. For example, in dense urban areas with relatively small sites, the requirement for three fueling positions may preclude otherwise ideal locations and prevent an approach of accomplishing capacity through increased density (e.g., more two-position stations). To get the best outcome from a range of approaches, we therefore suggest eliminating the “Capacity Growth” Area Classification or the associated minimum number of three fueling positions. The consideration to increase dispensing capacity in a target market area is estimated to follow a range of approaches that may include the addition new fueling positions, and/or the addition of multiple new stations with at least two fueling positions.

Decrease match share requirement on equipment CapEx from 50% to 25%: Limiting eligible expenditure to equipment while also increasing the Match Share requirement is a significant step from prior solicitations with potential risk for an under-subscribed outcome. While the LCFS HRI credits provide new support to hydrogen station development, this support may be applied to both partially offsetting initial CapEx and procuring higher-cost lower-carbon supply, both of which are also objectives in this Draft Solicitation Concepts. Decreasing the Match Share requirement would encourage applications and decrease the potential risk of an under-subscribed solicitation, while not diminishing the incentives in the solicitation structure for applicants to propose a larger Match Share than required. This would allow the market to speak while helping to ensure a successful process for the CEC with an innovative solicitation at an important time in hydrogen infrastructure development. The Draft Solicitation Concepts place significant emphasis in scoring on cost-efficient delivery and achieve simplification by limiting grant funding to equipment CapEx; over-reaching on the Match Share requirement may inhibit the submittal of competitive and comprehensive bids that fully utilize the proposed funding. CEC’s expectation that the implementation of the new HRI provisions of the ARB’s LCFS program will replace/offset such grant reductions is appreciated, but the full benefits of the HRI element of the LCFS are yet uncertain.

Allow 3 to 4 months between solicitation and applications due date: The potential size of Tranche proposals and new requirements for preparing grant applications may take more time for applicants than in prior solicitations. Allowing three to four months between the solicitation and applications due date may be prudent to ensure the most competitive set of applications possible.

Minimize administrative burdens and associated obligations to promote more prudent stewardship of public funds: Limiting grant funding to equipment CapEx should reduce reporting requirements for invoicing and eliminate state procurement requirements on other categories of expenditure; quarterly rather than monthly reporting should suffice for effective oversight; industry appreciates CalTrans application of freeway exit signage, however, trailblazer signage on local roads should be eliminated as it is unnecessary in the age of GPS and can involve significant cost and delay; participation in government

research and development projects should be suggested rather than required; participation in station design reviews and safety evaluations with PNNL Hydrogen Safety Panel (HSP) after the first year should be suggested rather than required as both parties will have established a basis for determining the potential benefit for continuation; keeping NREL reporting at 3 years will still ensure robust data sharing over a multi-year development program. Decreasing public funding should be complemented by decreasing agency involvement and requirements, as part of an effective off-ramp to a commercially viable market.

Encourage Renewable Hydrogen Supply with low carbon intensity through scoring rather than

exclusion: A pathway that enables industry to provide the lowest cost, renewable hydrogen to the market is critical to meeting both customer expectations and the state's goals for zero emission vehicle adoption. Success along this renewable pathway requires a policy and market landscape that enables this transition, leveraging all mechanisms and resources available. Being overly restrictive of pathways and resources at this critical point in market development may restrict market growth, jeopardize the state's transportation goals and impede the hydrogen cost reduction objectives.

For the upcoming GFO, consistent with past GFOs and LCFS policies, we encourage CEC to continue to consider all reduced carbon pathways to meet the renewable requirements in this program and to remove the limitations on landfill gas as an eligible feedstock in hydrogen production. Furthermore, to enable the best possible outcomes across a range of approaches, we recommend scoring both the source and carbon intensity of the planned renewable hydrogen supply rather than excluding landfill-derived renewable natural gas from eligibility. The higher scoring for other renewable feedstock and/or lower carbon intensity may occur in the Tranche Budget (benefit-cost score) and Social and Environmental Benefits.

High-capacity stations. It is our position that the Draft GFO should encourage the development of several high-capacity stations that will provide an early demonstration of this type that will better meet customer demand and more adequately serve customers. Additionally, this can serve to validate the impending high-capacity station technologies that will be needed commensurate with vehicle demand. FCEV customers would benefit from 2 high-capacity stations, each with 4 or more fueling positions, one in Northern and another in Southern California.

New station selections and upgrade considerations. The upcoming GFO should consider strategic upgrades of existing oversubscribed stations where a demonstrated high-capacity need has been shown. In the case, where these stations are not possible for upgrade, then the upcoming GFO should consider new stations in the local market area.

Additional Comments. The Draft Solicitation Concepts include several important aspects for station technical requirements and performance, including the use of the HySCapE model. As a result, in order to provide comprehensive feedback, we respectfully request that CEC extend the comment period to March 8, 2019.

We kindly request the opportunity to clarify the contents of this letter and CEC's responses to our comments in a follow-up workshop.

We compliment CEC in its forethought and vision and appreciate the opportunity to provide this feedback. The door is open to providing any insights, guidance and support CEC finds necessary to turn this early commercial market into a fully mature and self-sufficient economic engine.

In partnership,

Gilbert Castillo

Sr. Group Manager Advanced Vehicle Strategy
Hyundai Motor America

Joseph S. Cappello

Executive Advisor
Iwatani Corporation of America

David P. Edwards, PhD

Director, Hydrogen Energy
Air Liquide

Stephen Ellis

Manager, Fuel Cell Vehicles
American Honda Motor Co, Inc.

Matthew Forrest

Senior Project Engineer
Mercedes-Benz Research & Development North
America, Inc.

Joe Gagliano

Business Development Manager
United Hydrogen Fuels

Wayne Leighty, MBA, PhD

Hydrogen Business Development Manager,
North America
Shell New Energies

Matt McClory

Senior Principal Engineer
Toyota Motor North America

Mikael Sloth

Vice President Business Development
Nel Hydrogen A/S