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Additional submitted attachment is included below.



Attn.: California Energy Commission - Docket Number: 17-HYD-01

Longitude 122 West Inc. Comments on Renewable Hydrogen Transportation Fuel Production 17-HYD-01

The proposed production of 1000 kg/day of renewable hydrogen is a good start, given the anticipated number of FCEVs and requirement for 33% renewable hydrogen for those vehicles.

My comments on the *Draft Solicitation Concepts* are as follows:

Comment 1. Regarding hydrogen delivery

Section 5. Eligible Projects

"Projects must supply the produced hydrogen to in-state public hydrogen refueling stations for light-duty FCEVs."

Also

Section 9. Eligible Project Costs

"Costs incurred for the following activities (preferably for equipment and materials) are eligible for Energy Commission reimbursement:

- Facility pre-engineering and design.
- Engineering plans and specifications.
- Building and facility construction, modifications, and/or operations.
- Asset and/or equipment acquisition.

The Energy Commission will not reimburse for land acquisition, fuel distribution, fueling infrastructure, or permits..."

The draft solicitation implies that the awarded project will be responsible for supplying or making hydrogen delivery arrangements to stations, even though the award is only for the construction and 6 months operation of the production facility. Do the eligible project costs include the hydrogen storage and any interface to the delivery mechanism (e.g., pipeline or truck)? Who does the CEC assume will pay for delivery of the hydrogen?

Comment 2: Regarding Implementation

Section 17: FULL APPLICATION SCORING CRITERIA AND POINTS 17 C. Implementation

"The Applicant has a viable and reasonable plan to match supply and demand."



Please provide additional information on the anticipated demand, on a daily, weekly, monthly basis for the anticipated period of this project. This will help us plan for an efficient production, storage and delivery design and schedule that matches supply with demand.

17 C. Implementation

"The proposed project commits to continue or expand operations beyond the end term date of the Energy Commission agreement."

What is the term of the Energy Commission agreement, from contract signature date? What is the term of the Energy Commission agreement from facility commissioning date?

Comment 3: Regarding Cost effectiveness

17 E. Project Budget and Cost Effectiveness

"The total cost of production on a per kilogram basis is minimized."

"The renewable hydrogen produced is cost effectively distributed to the California hydrogen refueling station network at competitive prices in the timeframe that hydrogen is needed."

What is a "cost-effective, competitive delivered" price for hydrogen? How will the CEC compute this for the awarded project? This will be different from the production cost on a per kg basis because the costs for storage and delivery must be added, and a successful business model is implied for all associated parties.

Thank you for the opportunity to comment.

Susan M. Schoenung

Best regards,

Susan Schoenung, PhD, PE

President

Longitude 122 West, Inc.