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Workforce Development and Hydrogen Infrastructure at Academic Institutions, Cal State LA Comments

Summary of comments provided, full statements are in the file attached
--Develop H2 Workforce via Hydrogen Infrastructure at Academic Institutions
--Fund smaller H2 stations at Academic Institutions
--Focus on adding diversity into H2 infrastructure through electrolysis based stations.

Additional submitted attachment is included below.

CALIFORNIA STATE UNIVERSITY, LOS ANGELES

COLLEGE OF ENGINEERING, COMPUTER SCIENCE AND TECHNOLOGY

Department of Technology

Title: Cal State LA Comments – Workforce Development and Hydrogen Infrastructure at Academic Institutions

Docket #: 21-IEPR-05 **July 7, 2022**

California Energy Commission Dockets Office
MS-4 1516 Ninth Street
Sacramento, CA 95814-5512

Subject: Comments on the June 21, 2022, IEPR Commissioner Workshop on Role of Hydrogen in California's Clean Energy Future

Cal State LA Hydrogen Research and Fueling Facility (HRFF) appreciates the opportunity to comment on the June 21, 2022, IEPR Commissioner Workshop on Role of Hydrogen in California's Clean Energy Future. We would like to thank Vice Chair Siva Gunda for initiating this important dialogue.

The Cal State LA HRFF would like to offer the following comments to direct CEC attention in the context of "Hydrogen in California's Clean Energy Future" toward options that would sprout workforce development through alternatives to large business market domination in hydrogen technologies.

--Encourage integration of hydrogen fueling network at college/university campuses so that research and workforce training for the hydrogen industry can be accelerated. Thus, exclusions should be made from larger stations to smaller size capacity suitable to campus operations. We have been observing very sharp demand for hydrogen engineering workforce. **Include this approach into the California Hydrogen HUB application for the DOE $8B funding through the GoBiz office undertaking.**

--In case of the Cal State LA HRFF, the facility is more than 10 years old and needs to be upgraded to new standards from older T20 fueling protocols (chillers and dispenser). It will also benefit from stanchion, increased storage, gas panel, electrolyzer refurbishments, etc. This could be $2-2.5 M project including most costs. Funding equipment and engineering costs by CEC would be truly appreciated.

--Provide alternatives to the delivery model. The current hydrogen network has faults due to the reliance on delivery of compressed and liquid hydrogen, the future system wide resilience will benefit from introducing alternatives like **electrolysis** or **on-site reformation** so that some hydrogen can be provided during system faults.

Thank you very much for your consideration of these comments. We look forward to corresponding outcomes of this feedback and seeing the hydrogen infrastructure growth that would be supported by future funding. Please don't hesitate to reach out with any questions or clarifications at (323) 343-4569 or blekhman@calstatela.edu.

Sincerely,

David Blekhman

David Blekhman, Professor of Technology
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2019-2020 Fulbright Distinguished Chair