

DOCKETED

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CHBC Comments on 2018 IEPR Scoping Memo

Additional submitted attachment is included below.

February 26, 2018

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Commissioner David Hochschild
California Energy Commission Dockets Office, MS-4
Re: Docket No. 18-IEPR-01
1516 Ninth Street
Sacramento, CA 95814

Re: Comments of California Hydrogen Business Council Regarding the Draft Scoping Order for the 2018 Integrated Energy Policy Report Update

The California Hydrogen Business Council (CHBC) appreciates the opportunity to provide input to the California Energy Commission’s Draft Scoping Order for the 2018 IEPR Update. The CHBC is a California industry trade association with a mission to advance the commercialization of hydrogen in the energy sector, including transportation, goods movement, and stationary power systems to reduce emissions and dependence on oil.ⁱ

The CHBC provided an array of comments for the 2017 IEPR, and we encourage the CEC to review these comments in light of the 2018 Update. Specific recommendations include:

1. Assessment of the opportunity of sector couplingⁱⁱ to help decarbonize energy sectors and increase the ability of integrating higher amounts of renewable energy and reduce curtailment.
2. Discussion of the long-term perspective of natural gas accompanied by assessing the ability to displace natural gas and decarbonize the natural gas sector with electrolytic hydrogen and other zero and low carbon gas alternatives as replacement fuels. This will allow using existing assets like the natural gas system in a decarbonized energy future. This assessment should include pathways for zero carbon conversion of existing critical resources (e.g. essential peaker plants). In our view, a resilient California grid requires a combination of renewable electricity sources and gas produced with renewable energy sources to create a secure energy portfolio.
3. Assessment of the needs of seasonal storage needs that includes consideration of hydrogen as a zero carbon storage resource.
4. Consideration of hydrogen fuel cell technology options in the discussion of transportation energy/electrification, in terms of fuel and vehicles. We seek a greater discussion of hydrogen transportation, including projections for hydrogen fueling cost, FCEV purchase price, hydrogen fuel cell electric medium and heavy duty truck sales, and pathways to increase the volume of hydrogen—especially renewable hydrogen—production and distribution to meet demand.

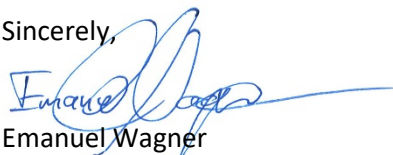
The CHBC especially recommends including in this consideration industry projections that infrastructure costs are lower for FCEVs than BEVs at high volume.ⁱⁱⁱ

5. Inclusion of current cost data and of realistic use assumptions for electrolytic hydrogen in assessing the economic use case for this technology as a pathway to helping California reach its greenhouse gas emissions reduction targets. CHBC members provided data to the Commission and its consultant (E3) in 2017, which was not considered, and we welcome the opportunity to further educate the Commission with current and accurate information.

We look forward to working with the Energy Commission staff to address these items in 2018. Links to our 2017 comments can be found in the footnotes of this document.^{iv, v, vi, vii, viii, ix, x, xi, xii, xiii, xiv, xv, xvi}

Thank you for your consideration!

Sincerely,



Emanuel Wagner

Assistant Director

California Hydrogen Business Council

ⁱ The views expressed in these comments are those of the CHBC, and do not necessarily reflect the views of all of the individual CHBC member companies. Members of the CHBC include Advanced Emission Control Solutions, Air Liquide Advanced Technologies U.S., Airthium, Alameda-Contra Costa Transit District (AC Transit), American Honda Motor Company, Anaerobe Systems, Arriba Energy, Ballard Power Systems, Bay Area Air Quality Management District, Beijing SinoHytec, Black & Veatch, BMW of North America, California Performance Engineering, Cambridge LCF Group, Center for Transportation and the Environment (CTE), CNG Cylinders International, Community Environmental Services, CP Industries, DasH2energy, Eco Energy International, ElDorado National – California, Energy Independence Now (EIN), EPC - Engineering, Procurement & Construction, Ergostech Renewal Energy Solution, EWII Fuel Cells, First Element Fuel, FuelCell Energy, GenCell, General Motors, Geoffrey Budd G&SB Consulting Ltd, Giner ELX, Gladstein, Neandross & Associates, Greenlight Innovation, GTA, H2B2, H2Safe, H2SG Energy Pte, H2Tech Systems, Hitachi Zosen Inova ETOGAS GmbH, HODPros, Hydrogenics, Hydrogenious Technologies, Hydrogen Law, HydrogenXT, HyET - Hydrogen Efficiency Technologies, Hyundai Motor Company, ITM Power, Ivys, Johnson Matthey Fuel Cells, Kontak, KORE Infrastructure, Life Cycle Associates, Linde North America, Longitude 122 West, Loop Energy, Luxfer/GTM Technologies, McPhy Energy, Millennium Reign Energy, Montreux Energy, National Renewable Energy Laboratory (NREL), Natural Gas Fueling Solutions – NGFS, Natural Hydrogen Energy, Nel Hydrogen, New Flyer of America, Next Hydrogen, Noyes Law Corporation, Nuvera Fuel Cells, Pacific Gas and Electric Company - PG&E, PDC Machines, Planet Hydrogen, Plug Power, Port of Long Beach, PowerHouse Energy, Powertech Labs, Primidea Building Solutions, Proton OnSite, RG Associates, Rio Hondo College, Rix Industries, Sacramento Municipal Utility District (SMUD), SAFCell, Schatz Energy Research Center (SERC), Sheldon Research and Consulting, Solar Wind Storage, South Coast Air Quality Management District, Southern California Gas Company, Sumitomo Corporation of Americas, Sunline Transit Agency, T2M Global, Tatsuno North America, The Leighty Foundation, TLM Petro Labor Force, Toyota Motor Sales, True Zero, United Hydrogen Group, US Hybrid, Verde, Vinjamuri Innovations, Volute, WireTough Cylinders, Zero Carbon Energy Solutions.

ⁱⁱ <https://www.bmwi-energiwende.de/EWD/Redaktion/EN/Newsletter/2016/13/Meldung/direkt-answers.html>

ⁱⁱⁱ <http://h2-mobility.de/en/news-and-infos/battery-and-hydrogen-h2-juelich-research-center-and-h2-mobility-publish-comparative-analysis-of-infrastructure-costs/>

^{iv} http://docketpublic.energy.ca.gov/PublicDocuments/17-IEPR-01/TN222507_20180209T111628_Emanuel_Wagner_Comments_Revision_CHBC_Comments_on_Proposed_Fin.pdf

^v http://docketpublic.energy.ca.gov/PublicDocuments/17-IEPR-01/TN222503_20180209T090936_Jeff_Serfass_Comments_Cover_Letter_CHBC_Comments_on_Proposed_F.pdf

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- vi http://docketpublic.energy.ca.gov/PublicDocuments/17-IEPR-01/TN221779_20171115T071055_California_Hydrogen_Business_Council_Comments_Hydrogen_Scaling.pdf
- vii http://docketpublic.energy.ca.gov/PublicDocuments/17-IEPR-01/TN221729_20171113T152855_California_Hydrogen_Business_Council_CHBC_Comments_Comments_of.pdf
- viii http://docketpublic.energy.ca.gov/PublicDocuments/17-IEPR-10/TN220613_20170808T162152_Emanuel_Wagner_Comments_CHBC_Comments_Market_Development_Opport.pdf
- ix http://docketpublic.energy.ca.gov/PublicDocuments/17-IEPR-07/TN220309_20170721T164826_Emanuel_Wagner_Comments_CHBC_Comments_on_Docket_17IEPR07_Integ.pdf
- x http://docketpublic.energy.ca.gov/PublicDocuments/17-IEPR-12/TN220310_20170721T164027_Emanuel_Wagner_Comments_CHBC_Comments_on_the_June_29_2017_IEPR.pdf
- xi http://docketpublic.energy.ca.gov/PublicDocuments/17-IEPR-10/TN220235_20170714T174624_Emanuel_Wagner_Comments_Comments_by_the_California_Hydrogen_Bus.pdf
- xii http://docketpublic.energy.ca.gov/PublicDocuments/17-IEPR-10/TN220231_20170714T180105_Emanuel_Wagner_Comments_Study_on_Early_Business_Cases_for_H2_in.pdf
- xiii http://docketpublic.energy.ca.gov/PublicDocuments/17-IEPR-10/TN219923_20170626T180524_Emanuel_Wagner_Comments_Economics_of_Power_to_Gas.pdf
- xiv http://docketpublic.energy.ca.gov/PublicDocuments/17-IEPR-07/TN217733_20170525T152821_Emanuel_Wagner_Comments_California_Hydrogen_Business_Council_Co.pdf
- xv http://docketpublic.energy.ca.gov/PublicDocuments/17-IEPR-07/TN217734_20170525T153654_Emanuel_Wagner_Comments_California_Hydrogen_Business_Council_re.pdf
- xvi http://docketpublic.energy.ca.gov/PublicDocuments/17-IEPR-01/TN216254_20170227T133649_Emanuel_Wagner_Comments_Comments_of_the_CHBC_to_CEC's_Draft_Sco.pdf