CALIFORNIA HYDROGEN BUSINESS COUNCIL

Hydrogen Means Business in California!

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May 15, 2019

The Honorable Assemblymember Blanca E. Rubio
State Capitol, Room 517 5
Sacramento CA 95814

RE: AB 491 (Rubio) - SUPPORT WITH AMENDMENTS

Dear Assemblymember Rubio:

The California Hydrogen Business Council[i] (CHBC) supports AB 491, which requests that the California Council on Science and Technology undertake a study on the impacts of injecting/blending hydrogen into the existing natural gas pipeline. However, we seek an amendment to direct the California Public Utilities Commission (CPUC) to adopt standards and regulations for hydrogen injection into the existing pipeline network based on the study. It is imperative that the findings guide the PUC to take action, so that the gas system and its operators have certainty on the use of renewable gas including hydrogen in their network.

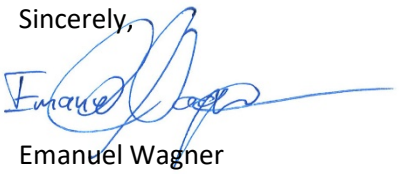
We support AB 491 because decarbonized hydrogen injected/blended into the pipeline network can significantly reduce greenhouse gas emissions from the gas system and provide flexible and scalable long duration energy storage. However, this is currently not possible in California, in part because the state lacks standards and protocols for hydrogen injection into gas pipelines.

Passage of AB 491 would be an important next step in California's tradition of supporting hydrogen as a key to advancing clean energy, clean air, and climate protection. SB 1369 specifically supports the development of green electrolytic hydrogen for storage and other uses. SB 1383 calls for using renewable gas like renewable hydrogen to help mitigate short-lived climate pollutants. AB 8 and Executive Order B-48-18 support advancement of hydrogen fuel cell vehicle technology and infrastructure development, and SB 1505 specifically encourages renewable hydrogen for transportation fueling. The Energy Commission also recently awarded grants to renewable hydrogen projects that risk not reaching completion without the pipeline injection standards called for by AB 491. It is essential to verify the maximum percentage of hydrogen that can be safely injected/blended into the system, as we seek to bring this clean energy to scale.

That this needs to be a priority is reflected in the CPUC's own Conclusion of Law, which asserts that lower action and upper action levels for hydrogen in the gas system ought to be specified.[ii] Such knowledge must be then applied to regulatory frameworks, in order for conducting business in California to not remain exceedingly and unfairly difficult for hydrogen stakeholders. To that end, we urge AB 491, in addition to studying the impacts of hydrogen on the gas system as is called for in current language, to be amended to also require the CPUC to use the study's conclusions as a basis for establishing safe pipeline injection and interconnection protocols for hydrogen.

With the proper research and regulatory oversight, hydrogen injection/blending can safely give California access to an additional clean energy resource that combats climate change while diversifying the state's energy portfolio. In view of this, the CHBC supports AB 491 with the propose amendment.

Sincerely,



Emanuel Wagner
Deputy Director
California Hydrogen Business Council

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[i] The CHBC is comprised of over 100 companies and agencies involved in the business of hydrogen. Our mission is 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. 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 Air Liquide Advanced Technologies U.S. LLC.; Alameda-Contra Costa Transit District (AC Transit); American Honda Motor Company; Anaerobe Systems; Arriba Energy; Ballard Power Systems, Inc.; Bay Area Air Quality Management District (BAAQMD); Beijing SinoHytec; Black & Veatch; BMW of North America LLC; Center for Transportation and the Environment (CTE); Charm Industrial; Chiyoda Corporation; Clean Energy Enterprises; Community Environmental Services; CP Industries; DasH2energy; Dominion Energy; Eco Energy International, LLC; EcoNavitas; ElDorado National – California; Energy Independence Now (EIN); EPC - Engineering, Procurement & Construction; Ergostech Renewal Energy Solution; EWII Fuel Cells LLC; FIBA Technologies, Inc.; First Element Fuel Inc; General Engineering & Research; General Motors, Infrastructure Planning; Geoffrey Budd G&SB Consulting Ltd; Giner ELX; Gladstein, Neandross & Associates; Greenlight Innovation; GTA; H2B2 USA; H2Safe, LLC; Hexagon Lincoln; Hitachi Zosen Inova ETOGAS GmbH; HODPros; Hydrogenics; Hydrogenious Technologies; Hydrogen Law; HyET - Hydrogen Efficiency Technologies; HyperSolar, Inc.; Hyundai Motor Company; IGX Group Inc; ITM Power Inc; Ivys Inc.; Iwatani Corporation of America; Johnson Matthey Fuel Cells; KORE Infrastructure, LLC; Kraft Powercon; Life Cycle Associates; Longitude 122 West, Inc.; Loop Energy; Magnum Energy; Manticore Advocacy LLC; Millennium Reign Energy; Mitsubishi Hitachi Power Systems Americas; Motive Energy Telecommunications; Natural Gas Fueling Solutions (NGFS); Natural Hydrogen Energy Ltd.; Nel Hydrogen (US); Neo-H2; Neuman & Esser USA, Inc; New Flyer of America Inc; Next Hydrogen; Noyes Law Corporation; Nuvera Fuel Cells; Pacific Gas and Electric Company - PG&E; Pacific Northwest National Laboratory (PNNL); PDC Machines; Planet Hydrogen Inc; Plug Power; Politecnico di Torino; Port of Long Beach; Powertech Labs, Inc.; Primidea Building Solutions; RealEnergy, LLC; RG Associates; Rio Hondo College; Rix Industries; Sacramento Municipal Utility District (SMUD); SAFCell Inc; Sheldon Research and Consulting; South Coast Air Quality Management District; Southern California Gas Company; Strategic Analysis Inc; Sumitomo Corporation of Americas; Sumitomo Electric; Sunline Transit Agency; T2M Global; Tatsuno North America Inc.; Terrella Energy Systems Ltd; The Leighty Foundation; TLM Petro Labor Force; Toyota Motor Sales; Trillium - A Love's Company; University of California, Irvine; US Hybrid; Valley Pacific Petroleum Services Inc; Vaughan Pratt [Individual]; Verde LLC; Vinjamuri Innovations LLC; Winkelmann Flowform Technology; WireTough Cylinders, LLC; Worthington Industries; YanliDesign; Zero Carbon Energy Solutions.

[ii] #13 in Conclusions of Law, D.1401034