CALIFORNIA HYDROGEN BUSINESS COUNCIL

Hydrogen Means Business in California!

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The Honorable Senator Nancy Skinner
State Capitol, Room 5094
Sacramento, CA 95814

RE: SB 1122 – Green Electrolytic Hydrogen – CHBC Support

Dear Senator Skinner:

The California Hydrogen Business Council[1] (CHBC) writes in strong support of SB 1122, which would provide welcome clarification that green electrolytic hydrogen ought to be eligible as a zero carbon-emitting supply-side resource in any plans developed to help California develop a cost effective, reliable and balanced power portfolio. We believe this will be a critical step to ensuring California both successfully implements its policies to transition to clean electricity and to reduce carbon and short lived climate pollutants.

Hydrogen can ensure that California transitions to 100% clean electricity while also maintaining electricity service reliability. Hydrogen gas is unusual among gaseous fuels in that it is completely free of greenhouse gases, and if produced renewably, emits zero carbon or short lived climate pollutants over its lifecycle.

It can be used as a drop-in replacement for fossil natural gas in thermal generation, which will continue to be required to ensure reliable power in a mostly or all renewable and zero carbon electricity future. It can also be used in fuel cells, providing 24/7 power generation for back-up power, microgrids and other applications, without any emissions.

[1] 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 are listed here: www.californiahydrogen.org/aboutus/chbc-members/

Furthermore, Hydrogen can be blended in limited quantities with natural gas in existing power plant equipment to reduce greenhouse gas emissions in thermal gas plant generation, be synthesized into renewable methane to eliminate carbon emissions without power plant equipment upgrades, or be used in large quantities – within the next few years up to 100% - in existing gas plants retrofitted with hydrogen turbines to reduce or eliminate greenhouse gases altogether.

100% low NOx hydrogen generation is already being demonstrated in a small gas unit in Japan,[2] while a utility power plant in the Netherlands is planning to convert a 440 MW gas turbine to 100% hydrogen by 2023.[3] Los Angeles Department of Water and Power is also seeking to convert their Intermountain Power Project from fossil fuels to 100% renewable hydrogen by 2045. Meanwhile another 1 GW storage project using the same salt caverns in Utah is also aiming to deploy hydrogen electricity generation among its suite of solutions.[4]

We greatly appreciate you introducing SB 1122, which is an important complement to SB 1369's provisions to advance green electrolytic hydrogen. We look forward to supporting your efforts to pass this legislation, in order to help make sure California prevails in transitioning to a reliable zero carbon electricity future.

Best regards,

Emanuel Wagner
Deputy Director
California Hydrogen Business Council

[2] https://global.kawasaki.com/en/stories/articles/vol74/
[3] https://www.nsenergybusiness.com/projects/nuon-magnum-power-plant/
[4] https://amer.mhps.com/world%E2%80%99s-largest-renewable-energy-storage-project-announced-in-utah.html