

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Regarding
Policies, Procedures and Rules for the
Self-Generation Incentive Program and Related
Issues.

R. 20-05-012
(Filed May 28, 2020)

**COMMENTS OF THE CALIFORNIA HYDROGEN BUSINESS COUNCIL ON THE
ASSIGNED COMMISSIONER’S RULING SEEKING PARTY COMMENT ON
RENEWABLE GENERATION FUELS AND TECHNOLOGIES**

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March 22, 2021

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I. Introduction

The California Hydrogen Business Council (CHBC)¹ appreciates the opportunity to provide opening comments on the *ASSIGNED COMMISSIONER’S RULING REQUESTING COMMENT*, filed on March 2, 2021, according to Rule 6.2 of the California Public Utilities Commission (Commission) Rules of Practice and Procedure.

Our comments are focused on the six questions related to renewable generation technology requirements for the SGIP. CHBC is adding further context to its previously submitted answers in the section below.

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. CHBC Members are listed here: <https://www.californiahydrogen.org/aboutus/chbc-members/>

II. Comments on Questions 1-6 for Party Comment:

1. Remove directed biofuels as an eligible fuel?

CHBC believes that biogenic renewable fuels are an essential potential resource in support of decarbonization strategies. The use of the existing pipeline to deliver such fuels is a crucial tool to maintain. The CHBC also believes that such a restriction is incompatible with state policy embodied in transportation fuel and other programs and inconsistent with the intent of SB 1383.

2. Remove internal combustion engines from the list of eligible technologies?

CHBC supports a focus on zero-emission technology but would not endorse the removal of new technologies that could utilize renewable feedstocks like renewable or green hydrogen to replace natural gas-fired internal combustion engines and turbines. ICEs fueled by renewable hydrogen would reduce GHG emissions compared to incumbent technology. While there are air emissions generated, air emissions from combustion systems have to meet stringent emission requirements and are already regulated.

3. Exclude crops grown solely for energy production (commonly referred to as “purpose-grown crops”) as eligible feedstocks for renewable fuels?

CHBC does not have a comment on this question.

4. Limit eligible sources of renewable hydrogen to “green electrolytic hydrogen”?

The CHBC opposes any limitation by the Commission of eligible resources of renewable hydrogen, as expressed in our comments and reply comments from November 12 and November 20, 2020, “the CHBC supports a broad definition of green hydrogen that includes all zero carbon

production pathways, including electrolysis powered by zero carbon electricity, SMR or gasification of biogas, and emerging technologies, such as direct conversion of sunlight.”

“We support the position expressed by several parties, including SDG&E², the Center for Efficiency and Renewable Technologies (CEERT), UC Irvine’s National Fuel Cell Research Center (NFCRC), the Green Hydrogen Coalition (GHC), Fuel Cell Energy (FCE), and Southern California Gas Company (SoCal Gas) that hydrogen ought to be included as an eligible fuel in the SGIP program. We also agree with those parties, such as NFCRC, GHC, SoCal Gas, and FCE, who specifically call for a broad range of renewable and zero carbon pathways to produce the hydrogen (or methane derived from the hydrogen), including but not necessarily limited to electrolysis and bioenergy.

We agree with FCE, who opines that “given the nascent nature of hydrogen producing technologies,” the Commission ought “to allow hydrogen to be produced under the SGIP from any fuel pathway that is consistent with SB 100 and state decarbonization goals. This approach takes an attribute-centric perspective on how the end product is produced, not an approach that is particular about the technology used to make the hydrogen.”³ We also agree with GHC’s reasoning that “it is critical at this early stage in the market development to encourage multiple pathways to produce green hydrogen.”⁴ We furthermore support their opinion that “(t)he definition used by the SGIP should afford the widest access to and use of all zero-carbon energy resources and should encourage green hydrogen production from all renewable sources including non RPS eligible zero carbon sources as well as from biogas and organic matter sources.”⁵

² SDG&E Comments, p. 6 (Please see below for references pertaining to specific pertinent comments by other parties mentioned.)

³ FCE Comments, p. 9

⁴ GHC Comments, p. 7

⁵ Ibid.

We believe NFCRC encapsulates this approach well in their recommendation that “the SGIP Handbook should explicitly identify ‘green’ or ‘renewable’ fuel including hydrogen as eligible SGIP renewable fuel. The definition should be broad enough to include the full range of renewable hydrogen (and methane) pathways including electrolytic, biomass, hybrid and potential future pathways such as direct solar water splitting.”⁶

Excluding biogenic pathways would also impede other California state goals like wildfire reduction, PSPS management, and resiliency. New technologies like biomass gasification to produce hydrogen could help create value chains for excess forest debris that serves as readily available fuel for forest and catastrophic wildfires. Therefore, a broad array of renewable technologies that can serve several of the state’s goals should be eligible.

- 5. Define green electrolytic hydrogen as hydrogen produced at the project site, or delivered to the project site by vehicle or dedicated pipeline, that was produced through electrolysis using:**
 - a. 100 percent renewable electricity, as defined by the Renewable Portfolio Standard (RPS), with the addition of large hydro;**
 - b. 100 percent renewable electricity from a RPS purchase program that provides bundled renewable energy credits to the electricity purchaser; and**
 - c. excluding hydrogen gas manufactured by any other method?**

CHBC urges the Commission to broadly support green and renewable hydrogen without excluding pathways that help achieve California’s climate goals. CHBC supports equal treatment of green electrolytic hydrogen to green electricity without creating additional limitations on

⁶ NFCRC Comments, p. 9

technologies that utilize green hydrogen, like fuel cells, when those limitations do not apply to other technologies using green electricity, like batteries. The Commission should consider the LCFS pathways as a comparison, which include biogenic and electrolytic pathways for hydrogen production.

- 6. Direct SGIP Program Administrators to issue a single 30-day warning when renewable fuel use documentation is not provided as required, followed by issuance of an infraction and initiation of procedures as outlined in Section 9 of the SGIP handbook if the required information is not provided within 30 days of issuance of the warning?**

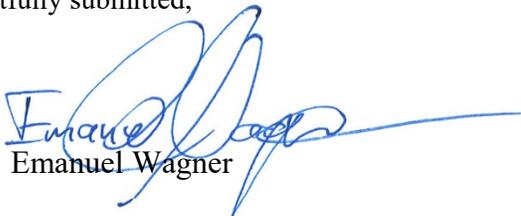
CHBC has no comments in response to this question.

III. Conclusion

The CHBC thanks the Commission for their consideration and looks forward to working together to facilitate the advancement of hydrogen solutions in the SGIP to increase resiliency, decrease reliance on fossil fuels, and accelerate greenhouse gas reduction.

Respectfully submitted,

Dated: March 22, 2021



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