

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking Regarding
Microgrids Pursuant to Senate Bill 1339
and Resiliency Strategies.

Rulemaking 19-09-009
(Filed September 12, 2019)

**REPLY COMMENTS OF THE CALIFORNIA HYDROGEN BUSINESS
COUNCIL ON THE PROPOSED DECISION ADOPTING SHORT-TERM
ACTIONS TO ACCELERATE MICROGRID DEPLOYMENT AND
RELATED RESILIENCY SOLUTIONS**

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I. Introduction

In accordance with Rule 6.2 of the Rules of Practice and Procedure of the California Public Utilities Commission (“Commission”), the California Hydrogen Business Council (CHBC)¹ welcomes the opportunity to provide the following reply comments on the Administrative Law Judge’s Proposed Decision Adopting Short-Term Actions to Accelerate Microgrid Deployment and Related Resiliency Solutions, issued April 29, 2020. Our reply comments support comments of several parties calling for the Track 1 microgrid proposed decision to be expanded to include fuel cells (and hydrogen-based fuel cells), to ensure more resilient, reliable, pollution-free energy service 24/7 in all weather conditions - which currently proposed solutions cannot supply on their own.

II. Reply Comments: We urge the CPUC to heed comments by several parties asking that Track I be broadened to include fuel cells to enable the necessary resilient, long-

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/>

duration generation to communities facing wildfire risk this season, while also protecting them from air pollution that has become all the more perilous to public health with COVID-19.

Bloom emphasizes in their comments, “Although the Proposed Decision provides key changes for solar and storage tariffs, it inexplicably perpetuates the exclusion of fuel cells from the benefits of tariff reforms. This should be modified immediately to provide customers all available resiliency options.”² NFCRC adds that the “Commission should additionally consider the use of hydrogen-powered fuel cell systems to address PSPS and other shutdowns for critical infrastructure such as telecommunication towers, traffic signals and railroad crossings, as detailed by the NFCRC in R.18-03-011³ as well as the potential to function as part of a multi-technology microgrid that would be supported by a single microgrid tariff.”⁴ They additionally explain that such zero emission fuel cell systems are modular to adapt to different capacity requirements and “instantly provide backup power when the grid goes down and can serve as a critical part of a microgrid storage and generation system.”⁵ We fully support these comments. With Californians increasingly challenged by multi-day power planned and unplanned shutoffs and outages related to wildfires, communities must have microgrid solutions that allow them to maintain essential energy services under all conditions. Solar and battery storage are important options, but are uneconomical, or in some cases technically unable, to provide 24/7 long-duration generation in all weather and fire conditions, such as smoky air, extreme heat from fire, rain or snow, and long nights when high levels of electric heating or air conditioning are required.

We similarly support BAC’s comment that the “The Decision should be expanded to include a more diverse portfolio of renewable technologies and fuels that includes:

- Bioenergy, which can provide flexible generation and baseload power, fuel for backup generators, combined heat and power, renewable hydrogen, and longer duration energy storage;

² Bloom Opening Comments, p. 2

³ Reply Comments of the National Fuel Cell Research Center on the Assigned Commissioner’s Ruling and Proposal, filed April 17, 2020, available at: <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M333/K877/333877359.PDF>

⁴ NFCRC Opening Comments, p. 8

⁵ *ibid*

- Fuel cells that run on biogas or renewable hydrogen to provide baseload or flexible generation power, or combined heat and power.”⁶

We likewise agree with Doosan, who echoes these points in stating that “Due to technical limitations of energy storage during long-duration grid outages, fuel cells and other distributed generation systems should be included as eligible system types, due to their instantaneous long-duration backup power.”⁷ Underscoring that such solutions are readily available and can be free not only of criteria pollutants but also greenhouse gas emissions over their lifecycle by using renewable hydrogen as a fuel source, they add that they have “systems that operate directly on hydrogen which can be produced by renewables such as wind and solar and stored for base load generation when needed.”⁸

IV. Conclusion

The CHBC thanks the Commission for the opportunity to share these reply comments and looks forward to working with you on accelerating deployment of hydrogen fuel cell technologies in California microgrids to improve resiliency, while protecting the air and the climate.

Dated: May 26, 2020

Respectfully submitted,



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Deputy Director

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⁶ BAC Opening Comments, p. 4

⁷ Doosan Opening Comments, p. 4

⁸ Ibid, p. 2