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I. INTRODUCTION

The California Hydrogen Business Council (CHBC) welcomes the opportunity to provide the reply comments below on the Order Instituting Rulemaking (OIR) Regarding Microgrids Pursuant to Senate Bill 1339.¹ We agree with multiple parties on the following points:

- Microgrids are urgently needed to help address the growing concerns regarding wildfires and power shut offs in the state, and that decisions relevant to this concern ought to be expedited.
- The CPUC ought to take a technology neutral approach to implementing SB 1339.
- Hydrogen solutions ought to be among the supported technologies for microgrids, in order to ensure availability in all weather conditions of long duration power, as well as to integrate renewables and provide seasonal shifting, while also lowering criteria pollutant and greenhouse gas emissions, including short lived climate pollutants.

II. COMMENTS

a. Microgrids are urgently needed to help address the growing concerns regarding wildfires and power shut offs in the state, and that decisions relevant to this concern ought to be expedited.

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 of the CHBC are listed here: https://www.californiahydrogen.org/aboutus/chbc-members/
Multiple parties highlighted the urgency of addressing wildfire related issues, including power shutoffs that are regularly impacting millions of ratepayers in California. California Choice Energy Authority, the City of San Jose (San Jose Clean Energy), Clean Power Alliance, East Bay Community Energy, Lancaster Choice Energy, Marin Clean Energy, Monterey Bay Community Power Authority, Peninsula Clean Energy Authority, Pioneer Community Energy, Silicon Valley Clean Energy, and Sonoma Clean Power Authority, for example, stated in their comments, “In the face of power system shut offs, utility customers need the ability to deploy microgrids to protect their health, safety and lives as well as to maintain their business operations. Microgrids are also likely to prove critical to facilitating successful satisfaction of numerous state policy goals, particularly improving the resiliency of California’s power systems in the face of the increasingly destructive impacts of climate change.”

We agree with parties who urged the CPUC to accelerate rulemaking to address this concern – for example, NFCRC, which called for accelerating the “development of microgrids under current incentive structures in the proceeding, to facilitate the rapid deployment of microgrids prior to the next fire season in 2020, consistent with legislative intent.” Similarly, Bloom called for expediting portions of the proceeding “(i)n recognition of the immense public health and safety risks from PSPS, wildfires and other outages.”

b. The CPUC ought to take a technology neutral approach to implementing SB 1339.

We also concur with NFCRC and Bloom Energy that the proceeding ought to take a technology neutral approach, in order to, as NFCRC states, “ensure a diverse suite of solutions to maintain critical energy services through extended grid outages.”

c. Hydrogen solutions ought to be among the supported technologies for microgrids, in order to ensure availability in all weather conditions of long

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2 See p.2 of California Choice Energy Authority et al. Comments on this OIR
3 See p. 2, NFCRC Comments on this OIR
4 See p. 2, Bloom Comments on this OIR
5 Ibid.
6 p. 4, NFCRC Comments on this OIR
duration power, as well as to integrate renewables and provide seasonal shifting, while also lowering criteria pollutant and greenhouse gas emissions, including short lived climate pollutants.

Several parties, in addition to the CHBC, recommended inclusion of hydrogen technologies in microgrid programs to help advance California’s climate and clean energy policies. The DG Coalition, for instance, pointed out that CHP running on hydrogen, among other fuels, can play an important role as one of the most efficient forms of energy that can help “maintain reliability, minimize costs, and limit emissions” as “California moves to a carbon neutral future.”

BAC asserted that this “proceeding should address the need for gas to maintain microgrid reliability and what the potential is for local generation of renewable gas, including the role of local biogas generation, Power to Gas generated from excess solar and wind power, and other forms of renewable gas that can help maintain reliability while meeting the requirements of SB 100 and other state policies. Renewable gas will also be needed to provide renewable hydrogen for fuel cells, which will be an important technology for microgrids.” We agree with BAC that among the other state policies that merit specific focus in this proceeding is SB 1383, which mandates reduction of short lived climate pollutants, and that the CPUC ought to examine how deploying microgrids that utilize renewable gas, such as renewable hydrogen, can support the targets of this law.

We furthermore agree with the Public Advocates Office that California ought to aim to reduce fossil fuels for backup generation and microgrids, in order to protect the air and climate, and reiterate that fuel cell systems are uniquely ideal for producing reliable criteria pollution free power on microgrids over long durations in any weather conditions, as will be needed during multi-day planned shutoffs to mitigate wildfire risk (unplanned power shutoffs during and after wildfires).

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7 p. 3, DG Coalition Comments on this OIR
8 p. 6, Bioenergy Association of California (BAC) Comments on this OIR
9 Ibid.
10 p. 2, Public Advocates Office Comments on this OIR
wildfires), as well as for customers with critical 24-7-365 seamless power service needs like hospitals. Fuel cell systems currently run on hydrogen produced from low or zero carbon sources and are capable of reducing or eliminating both greenhouse gas and criteria pollutant emissions. We also reiterate that electrolyzers can help optimize renewable generation, allowing for greater percentages of renewables to run reliably on microgrids. The hydrogen produced can either be returned as power in fuel cells or turbines, whenever needed, or can be used for other useful purposes like transportation, building energy, or industrial applications.

III. CONCLUSION
The CHBC appreciates the CPUC’s consideration of these reply comments and looks forward to working with you further on issues raised in this proceeding regarding technically and cost effective microgrids to help address California’s policy priorities.

Respectfully,

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