BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Regarding Emergency Disaster Relief Program.	Rulemaking 18-03-011 (Filed March 22, 2018)

REPLY COMMENTS OF THE CALIFORNIA HYDROGEN BUSINESS COUNCIL ON THE ASSIGNED COMMISSIONER'S RULING AND PROPOSAL

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BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Regarding Emergency Disaster Relief Program.	Rulemaking 18-07-003 (Filed March 22, 2018)

REPLY COMMENTS OF THE CALIFORNIA HYDROGEN BUSINESS COUNCIL ON THE ASSIGNED COMMISSIONER'S RULING AND PROPOSAL

I. Introduction

Pursuant to the Assigned Commissioner's Ruling and Proposal issued in this proceeding dated March 6, 2020 ("ACR") as modified by the Email Ruling Extending Time of Opening Comments and Reply Comments dated March 25, 2020, the California Hydrogen Business Council (CHBC) [1] hereby submits reply comments to parties on the Assigned Commissioner's Proposal regarding Communications Service Provider Resiliency and Disaster Response Requirements. Hydrogen fuel cell backup generation to ensure that critical services, including telecommunication, remain resilient and reliable 24/7/365 without emitting criteria air pollutants

[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/.

or toxics and with reduced or zero fossil fuels is both necessary to protecting the health and safety of Californians, but also an important market for the hydrogen industry. The main point of our reply comments is that fuel cell systems, including those that run on hydrogen, are commercially available and being used broadly by telecommunication and cable companies for long duration backup power and should be continued to be deployed in order to help California meet clean air standards.

II. REPLY COMMENTS

The CHBC submits the following reply comments to statements made multiple parties in opening comments.

A. Fuel cell systems are commercially available and in operation.

Contrary to comments by AT&T, [2] Charter, [3] CTIA[4] and T-Mobile[5] that fuel cells do not present a viable option for backup power for telecommunications, fuel cell systems, including those fueled by hydrogen, are commercially available and have, in fact, been deployed for decades in California and beyond.

B. In reply to statements by Charter, Comcast, AT&T, and others, hydrogen fuel is safe for use, as is being proven in the field by telecommunication companies that deploy hydrogen in fuel cells for backup generation.

[2] AT&T Declaration of Daniel DeLeo at 4.
[3] Charter Declaration of Gregory Mott at 8.
[4] CTIA Opening Comments at 16.
[5] T-Mobile Opening Comments at 19.

Several telecommunications companies raise concerns about the safety of hydrogen for use in fuel cells to provide backup generation. The CHBC would like to correct the record on statements made by AT&T, Charter and Comcast about hydrogen properties and use with the following facts:

1. Although gasoline and diesel may be more familiar, they are more likely to ignite into a long-lasting fire than hydrogen. Between 2004 and 2008, 1 in every 13 conventional service stations experienced a fire, while the US Department of Energy only recorded one hydrogen fueling station ignition incident between 2007-2010, and no injuries or fatalities were recorded.[6]
2. Hydrogen leaks disperse much more quickly than gasoline or diesel, which tend to hazardously pool on the ground, and if the hydrogen does ignite, it burns at a lower temperature and quickly burns out.[7]
3. Hydrogen has been safely used, stored and transported for industrial and transportation applications for decades. Hydrogen fuel cells for use in commercial vehicles have passed rigorous safety testing by NHTSA.[8] In 2018, the Hyundai Nexo, Hyundai's newest fuel cell electric vehicle, received the highest occupant protection score of any zero-emission vehicle in the Euro NCAP safety testing.[9]

C. Hydrogen refueling and storage are available, storage has a small footprint, and fire and building codes are well established to ease siting.

[6] https://blog.ballard.com/hydrogen-fuel-safety
[7] Ibid.
[8] A partial list of NHTSA hydrogen safety testing efforts can be found on their website: https://www.nhtsa.gov/crashworthiness/alternative-fuel-safety
[9] https://www.telegraph.co.uk/cars/news/hyundai-nexo-hydrogen-fuel-cell-car-earns-five-stars-euro-ncap/

AT&T dismisses hydrogen as "difficult to store" and lacking in refueling providers,[10] while ComCast criticizes hydrogen fuel cells for being "limited by fire and building codes to industrial or commercial sites where special fire protection requirements may be implemented."[11] Sprint complains of similar barriers.[12] However, CHBC points out:

- Several companies in California are available to provide hydrogen fuel directly to stationary fuel cell systems in California.
- There have been building and fire safety codes that fuel cell systems abide by on any fuel for decades, and that are continually updated and readily available to look up. For example:
    - National Fire Protection Association (NFPA) 853 ("Standard for the installation of stationary fuel cells") was established in 2000, with the latest edition updated in 2020.
    - ANSI/CSA America FC 1-2012, Stationary Fuel Cell Power Systems (FC 1) standard.
    - NFPA 52 and NFPA 55 that define hydrogen setbacks.

III. Conclusion

The CHBC appreciates your consideration of these reply comments that correct the record on concerns portrayed by the telecommunication companies about hydrogen and fuel cells for backup power systems for telecommunications. We hope you will integrate these points into your decision making, as backup generation is an important market for CHBC members, and

[10] AT&T Declaration of Daniel DeLeo at 4.
[11] Comcast Opening Comments at 53-54. and Rhode Declaration at 3.
[12] Sprint Opening Comments at 15.

allowing public circulation of misconceptions, such as those cited above, can harm the hydrogen industry that is required to meet California's zero carbon objectives.. Hydrogen is free of greenhouse gases, and when made from zero carbon resources is greenhouse gas free over its lifecycle. Hydrogen used in fuel cells does not generate any criteria and toxic emissions. Hydrogen is therefore an essential option to utilize to ensure that California's energy resiliency and need for 24/7/365 telecommunications services align with eliminating greenhouse gas emissions, criteria pollutants and air toxics emissions that harm the environment and public health and require reduction by law.

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Respectfully submitted,

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