

*Comment Received From: California Hydrogen Business Council
Submitted On: 7/23/2021
Docket Number: 21-IEPR-04*

Summer 2021 Electric and Natural Gas Reliability

Additional submitted attachment is included below.

DOCKETED

Docket Number:	20-EPIC-01
Project Title:	Development of the California Energy Commission Electric Program Investment Charge Investment Plans 2021-2025
TN #:	238981
Document Title:	California Hydrogen Business Council Comments - Summer 2021 Electric and Natural Gas Reliability
Description:	N/A
Filer:	System
Organization:	California Hydrogen Business Council
Submitter Role:	Public
Submission Date:	7/23/2021 1:42:53 PM
Docketed Date:	7/23/2021

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**21-IEPR-04 Summer 2021 Electric and Natural Gas
Reliability_CHBC**

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California Energy Commission
Docket Unit, MS-4
Docket No. 21-IEPR-04
1516 9th Street
Sacramento, CA 95814

July 23, 2021

RE: 21-IEPR-04 Summer 2021 Electric and Natural Gas Reliability

I. INTRODUCTION

The California Hydrogen Business Council (CHBC)¹ appreciates the opportunity to submit comments on IEPR Joint Agency Workshop on Summer 2021 Electric and Natural Gas Reliability (“IEPR Summer 2021 Workshop”). The CHBC respectfully submits the following comments in response to the workshop.

II. DISCUSSION

The IEPR Summer 2021 Workshop provided assurance to Californians that the state is leading the West in a safe and sustainable transition to a decarbonized electric and gas power system. Although western states are experiencing unprecedented heat, outages, wildfires, and drought, California has been able to step in as an energy provider to other western states during times of extreme weather, as well as keep the power on at home. However, as noted during the various presentations throughout the workshop, more work needs to be done to ensure outages are shorter and less frequent as our summers become longer, drier, and more susceptible to natural disaster. Now is the time for California to commit to a long-term, clean energy storage source that can dispatch renewable energy from California’s renewable sources like hydro, wind, solar, and biomass so the state can power homes, hospitals, schools, and industries during inevitable heat waves and various natural disasters. Hydrogen produced from renewable sources

¹ The CHBC is comprised of over 120 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 help the state meet its decarbonization goals. **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/>

must be utilized in long duration energy storage (LDES) to offer a clean energy source to Californians and our neighboring states.

Hydrogen is a diverse energy carrier that stands to bridge the gap between California's climate goals within the power and gas sectors and California's ability to provide reliable power and gas.

Hydrogen is a zero-emission, viable, and scalable solution that reduces reliance on fossil fuels, is a firm and dispatchable energy source, can be stored for long durations, and represents a tremendous economic engine, job creator, and export opportunity for California. The world's leading economies in Europe are accelerating the pace at which hydrogen is being integrated into their power and gas pipeline distribution markets.² California has the capacity to lead the nation on the integration of hydrogen into the state's economy due to an abundance of renewable resources—like hydro, wind, solar, and biomass—which can be converted to clean, renewable energy to help meet the state's climate goals. California must implement new LDES opportunities that will store this energy in large quantities and allow for the firm dispatch of these resources anytime and anywhere they are needed.

Because of climate change, California is facing an increasing need to deploy more renewable power and gas resources. There are a host of LDES options that present the potential to store large volumes of renewable hydrogen including rock formations, depleted oil fields, and pipelines. These options are not subject to drought conditions and could potentially store hydrogen in large volumes for long durations. Depleted oil fields, rock formations and pipelines show tremendous potential for the LDES of hydrogen based on previous studies.³ Depleted Oil fields are being utilized in Texas as viable options for LDES.⁴ And, in England, a pipeline storage project of 400 MW is under construction.⁵ California will have an increasing need for reliable LDES of firm dispatchable resources, such as renewable hydrogen, to achieve the state's decarbonization goals and keep the power on at home. It is

² <https://fuelcellsworks.com/news/european-commission-unveils-its-hydrogen-strategy/>.

³ [5030aece27ab4701808c08c0b8873e97.pdf \(dnvgl.com\)](https://www.power-technology.com/features/featurecould-depleted-oil-wells-be-the-next-step-in-energy-storage-5680002/); [Renewables can make hydrogen green | Insight | HSBC Holdings plc.](#)

⁴ <https://www.power-technology.com/features/featurecould-depleted-oil-wells-be-the-next-step-in-energy-storage-5680002/>.

⁵ <https://ieefa.org/highview-power-says-its-long-duration-energy-storage-pipeline-totals-400mw-4gwh/>.

imperative California maximize its renewable resources to create a reliable, long-term energy storage and distribution system with renewable hydrogen.

III. CONCLUSION

The CHBC appreciates the opportunity to submit comments on IEPR Summer 2021 Workshop and respectfully requests consideration of including renewable hydrogen as a firm, dispatchable resource for LDES within rock formations, depleted oil fields, and pipelines. The CHBC is encouraged by the progress made to power California through renewable resources and looks forward to being a resource for the state as California builds out a sustainable LDES system that reduces carbon as it powers the state.

Respectfully Submitted,

A handwritten signature in black ink, appearing to be "A. J. H.", written in a cursive style.

Policy Director
California Hydrogen Business Council