

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

Order Instituting Rulemaking to Develop an  
Electricity Integrated Resource Planning  
Framework and to Coordinate and Refine  
Long-Term Procurement Planning  
Requirements.

Rulemaking 16-02-007  
(Filed February 11, 2016)

**OPENING COMMENTS OF THE CALIFORNIA HYDROGEN BUSINESS COUNCIL  
ON THE PROPOSED DECISION ON THE 2019-2020 RESOURCE PORTFOLIOS TO  
INFORM INTEGRATED RESOURCE PLANS AND TRANSMISSION PLANNING**

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Dated: March 12, 2020

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**I. INTRODUCTION**

The California Hydrogen Business Council (CHBC)<sup>1</sup> welcomes the opportunity to submit the following comments to the *Proposed Decision on the 2019-2020 Resource Portfolios to Inform Integrated Resource Plans and Transmission Planning* (PD). We particularly agree with the PD including ~1 GW of long duration storage in the 2030 portfolio, continuing to include a high hydrogen scenario in long term planning, and tracking lessons in other proceedings on microgrids and distributed generation to inform integrated resource planning.

**II. COMMENTS**

- A. We agree with the inclusion of roughly 1 GW of long duration storage by 2026 as part of the portfolio in the 2030 resource plan in the PD and hope**

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<sup>1</sup> 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/](http://www.californiahydrogen.org/aboutus/chbc-members/).

**that moving forward, green electrolytic hydrogen storage will be part of program planning.**

The PD states that the resources identified for new buildout in 2030 planning will be roughly 1 GW of pumped storage, or other long-duration storage with similar attributes, by 2026.<sup>2</sup> We strongly support this and hope that as planning develops, green electrolytic hydrogen will be included as an eligible resource. Green electrolytic hydrogen is the most scalable long duration storage option, as it is not subject to drought conditions or as many geographical constraints as pumped hydro. It is particularly suitable for seasonal storage, which is reflected in new report by DNV GL that identifies compressed hydrogen using subsurface storage (salt caverns and depleted hydrocarbon fields) as the most cost effective solution for seasonal storage in a zero carbon electricity system that relies largely on variable solar and wind.<sup>3</sup> Advancing green electrolytic hydrogen storage is also called for by SB 1369, which requires the CPUC to consider green electrolytic hydrogen as an eligible option for storage and other uses.

**B. We support the continued consideration of hydrogen, including a high hydrogen scenario, in long term planning.**

CHBC fully agrees with including hydrogen as an important resource in long term system planning and in continuing to examine a high hydrogen scenario as part of that effort.

**C. We appreciate that lessons from other Commission proceedings on microgrids and distributed generation will be considered for incorporation into this proceeding.**

We agree with the direction to track lessons from microgrid and distributed energy resources proceedings and to integrate them into resource planning.

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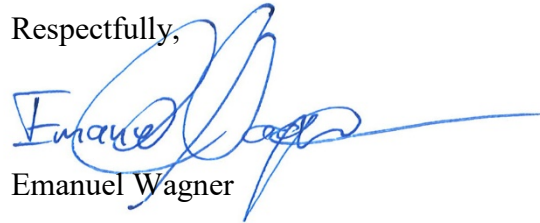
<sup>2</sup> PD states this several times, e.g. on pp. 3, 35

<sup>3</sup> *The Promise of Seasonal Storage*, DNV GL, March 2020 [https://www.dnvgl.com/publications/the-promise-of-seasonal-storage-168761?utm\\_campaign=EN\\_ADV\\_GLOB\\_20Q1\\_PROM\\_STOR\\_Seasonal%20Storage%20Report%20Launch&utm\\_medium=email&utm\\_source=Eloqua](https://www.dnvgl.com/publications/the-promise-of-seasonal-storage-168761?utm_campaign=EN_ADV_GLOB_20Q1_PROM_STOR_Seasonal%20Storage%20Report%20Launch&utm_medium=email&utm_source=Eloqua)

### III. CONCLUSION

CHBC appreciates the Commission's consideration of these comments and looks forward to continuing to work together on developing understanding of the potential benefits of hydrogen solutions in the IRP.

Respectfully,

A handwritten signature in blue ink, appearing to read "Emanuel Wagner", with a long horizontal flourish extending to the right.

Emanuel Wagner

Deputy Director

California Hydrogen Business Council

March 12, 2020