

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Establish Policies, Processes, and Rules to Ensure Safe and Reliable Gas Systems in California and Perform Long-Term Gas System Planning.

Rulemaking 24-09-012
(filed September 26, 2024)

**CALIFORNIA HYDROGEN BUSINESS COUNCIL COMMENTS ON THE
ORDER INSTITUTING RULEMAKING TO ESTABLISH POLICIES, PROCESSES,
AND RULES TO ENSURE SAFE AND RELIABLE GAS SYSTEMS IN
CALIFORNIA AND LONG-TERM GAS SYSTEM PLANNING**

DATED: December 16, 2024

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The California Hydrogen Business Council (CHBC) submits these Comments in accordance with the Order Instituting Rulemaking and wishes to be a party to the proceeding in so doing in accordance with Rule 1.4(a)(2)(ii) of the Commission's Rules of Practice and Procedure. CHBC appreciates the opportunity to comment on the scope of this new Rulemaking and urges the Commission to focus the Rulemaking on decarbonization strategies that are cost-effective and promote reliability across California's energy sectors. Specifically, CHBC urges the Commission to base the scope of this Rulemaking on the following principles:

- The purpose of the Rulemaking is decarbonization broadly, which is not limited to electrification.

- The Rulemaking should recognize that not all decarbonization strategies are equally beneficial and should prioritize transition strategies that advance the most cost-effective decarbonization measures.
- The Rulemaking should consider the role of decarbonized gas in ensuring energy reliability across sectors, including for hard-to-electrify end uses and dispatchable electricity, as well as the value of resource diversity to avoid price spikes and market disruptions.

CHBC is the longest established and largest hydrogen trade association in the United States, comprised of over 110 companies, agencies, and individuals involved in the business of hydrogen. Our mission is to inform policymakers and stakeholders on the substantial benefits of hydrogen and support the commercialization of hydrogen and fuel cells in the energy and transportation sectors to achieve California’s climate, air quality, and decarbonization goals.

CHBC’s comments on the OIR are below.

I. THE PURPOSE OF THE GAS SECTOR TRANSITION IS DECARBONIZATION, WHICH IS BROADER THAN JUST ELECTRIFICATION.

The Order Instituting Rulemaking (OIR) states that “the primary purpose of gas transition planning is to facilitate decarbonization . . .”¹ and that this “rulemaking seeks to advance this much needed long-term planning work in the gas sector while also examining and acting on opportunities for interim actions that can advance decarbonization and mitigate risks in the nearer term, while long-term planning is underway.”²

CHBC agrees that decarbonization is the primary purpose of long-term gas sector planning and that interim actions can help to decarbonize the gas sector while mitigating near-term risks. There will be parties who argue that the goal of the gas transition is

¹ Order Instituting Rulemaking in R.24-09-012, at page 2.

² OIR at pages 2-3.

electrification, which is one strategy for decarbonization but not the only one. Strategies for decarbonized gas, including use of hydrogen, should be considered as well. The Commission should maintain focus on decarbonization broadly in this Rulemaking and not just electrification, to ensure that this Rulemaking considers all decarbonization options and prioritizes those options that provide the most beneficial and cost-effective decarbonization measures.

II. THIS RULEMAKING SHOULD PRIORITIZE THE DECARBONIZATION STRATEGIES THAT ARE MOST COST-EFFECTIVE AND MOST BENEFICIAL.

As the primary goal of the Rulemaking is to facilitate decarbonization of the gas sector, it is essential to consider the relative decarbonization benefits of different strategies. Not all decarbonization approaches provide equally beneficial or equally cost-effective carbon reductions. Not all decarbonization strategies, therefore, should be weighted equally.

A. This Rulemaking Should Weigh Strategies that Maximize Use of Existing Infrastructure When Considering Cost-Effectiveness

Hydrogen gas can be used in existing natural gas pipelines, including as a full replacement with minimal cost to upgrade.³ Repurposing the existing fossil gas infrastructure to transport hydrogen gas is a strategy that requires significantly less investment than extending the electric grid to cover all applications currently served by fossil gas. As such, using decarbonized gas is a *much* more cost-effective strategy than electrification, and should take precedence over it.

B. This Rulemaking Should Consider Lifecycle Emissions and Opportunities for Carbon Negative Emissions.

In addition to prioritizing cost-effective reductions, the Commission should also consider decarbonization measures that can provide carbon negative emissions, which will be a prerequisite for meeting the state's goal of carbon neutrality by mid-century. Per

³ See Great Plains Institute, "Hydrogen Pipeline Transport Issue Brief," June 2024, page 5.

CARB's 2022 *Climate Change Scoping Plan*, California will need to generate significant carbon negative emissions to offset emissions that cannot be eliminated to reach carbon neutrality as required by state law.⁴ Many analyses, including CARBs' own, point to biogenic hydrogen as one of the biggest near-term opportunities to generate carbon negative emissions.

This Rulemaking should consider carbon reductions – based on a lifecycle analysis – and opportunities to generate carbon negative emissions as part of the gas sector decarbonization process. If the gas transition focuses exclusively or mostly on electrification, it will be far less effective overall at decarbonizing the gas sector without generating carbon negative emissions. This strategy will not result in carbon neutrality since California's electricity sector will likely not achieve its emission free goals until 2045 at the earliest.

The Rulemaking should focus on the most cost-effective and beneficial decarbonization measures, which are use of decarbonized gas and the generation of carbon negative emissions.

III. THIS RULEMAKING SHOULD CONSIDER THE NEED FOR DECARBONIZED GAS TO DIVERSIFY THE MARKET, ENSURE ELECTRICITY RELIABILITY, AND DECARBONIZE HARD-TO-ELECTRIFY END USES.

In addition to the climate benefits of decarbonized gas, this Rulemaking should also consider hydrogen gas as part of a diverse portfolio of gas decarbonization strategies. As the OIR notes repeatedly, the goal of the gas transition is to transition away from fossil gas. That does not mean moving away from all gas, however, especially when hydrogen gas can provide excellent climate benefits while increasing reliability and resilience. An important goal of California's RPS law is resource diversity,⁵ which advances reliability and resilience. Resource diversity is also increasingly important in a changing climate where wildfires, floods, droughts, increased temperatures and sea level rise all threaten generation resources and the electricity grid.

⁴ 2022 *Climate Change Scoping Plan* and AB 1279 (Muratsuchi, 2022).

⁵ Public Utilities Code section 399.11(b) lists diversity among the goals of the RPS legislation.

The OIR correctly points out that the gas transition strategy is intended to decarbonize the gas sector while mitigating reliability challenges, price spikes, and other adverse outcomes.⁶ Including decarbonized gas achieves all these goals by diversifying the portfolio of strategies and increasing the number of market participants. Given the growing reliability challenges in the electricity sector, decarbonized gas also increases reliability more generally. When the grid is at peak demand, hydrogen can be a dispatchable energy source that will help the state avoid blackouts while keeping its environmental goals.⁷

Decarbonized gas will also be essential for hard-to-electrify end uses, including industrial and manufacturing processes, and to increase electricity reliability by providing dispatchable power and long-duration storage. Electrification has limits, and advancing solutions like pyrolysis, which removes carbon pre-combustion to create a solid black carbon product that can be used for applications like concrete, can be a win-win solution that is left on the table if the state goes one hundred percent in on electrification to the exclusion of decarbonized gas.

Thank you for your consideration of these comments.

DATED: December 16, 2024

Respectfully submitted,

/s/ Tim McRae

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⁶ OIR at page 2.

⁷ See Rocky Mountain Institute, "Blackouts and California's Clean Energy Transition," August 18, 2020 at <https://rmi.org/blackouts-and-californias-clean-energy-transition/>

VERIFICATION

I am a representative of the non-profit organization herein, and am authorized to make this verification on its behalf. The statements in the foregoing document are true of my own knowledge, except as to matters which are therein stated on information or belief, and, as to those matters, I believe them to be true.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed this 16th day of December, 2024 in San Jose, California.

/s/ Tim McRae

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