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Additional submitted attachment is included below.

STATE OF CALIFORNIA ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION

In the Matter of:	Docket No. 23-IEPR-06
2023 Integrated Energy Policy Report (2023 IEPR)	

COMMENTS OF THE CALIFORNIA MUNICIPAL UTILITIES ASSOCIATION ON THE IEPR COMMISSIONER WORKSHOP ON THE POTENTIAL GROWTH OF HYDROGEN

I. INTRODUCTION

The California Municipal Utilities Association ("CMUA") respectfully provides the following comments to the California Energy Commission ("CEC" or "Commission") regarding the IEPR Commissioner Workshop on the Potential Growth of Hydrogen.

CMUA is a statewide organization of local public agencies in California that provide essential public services including electricity, water, and wastewater service throughout California. CMUA's membership includes publicly owned electric utilities ("POUs") that operate electric distribution and transmission systems that serve approximately 25 percent of the electric load in California, and public water and wastewater agencies that serve approximately 75 percent of California's water customers.

California is looking to hydrogen as a key resource to help the state reliably achieve its clean energy and carbon neutrality goals. Senate Bill ("SB") 1075 created the California Clean Hydrogen Hub Fund as a vehicle to support grants for clean hydrogen projects. The bill further requires the Commission, working in collaboration with the California Air Resources Board ("CARB") and the California Public Utilities Commission ("CPUC") to develop an evaluation of the potential development and use of hydrogen.[1] In addition, CARB's 2022 Scoping Plan Update ("SPU") calls for a 1,700 fold increase in the supply of hydrogen as a feedstock for hard-to-electrify end uses, including applications within the power sector, transportation, and

[1] Senate Bill ("SB") 1075 (Skinner, Chapter 363, Statutes of 2022).

industry.[2] The SPU has also recognized hydrogen's potential to serve a dual role as a low-carbon fuel for existing electricity-generating turbines or fuel cells, and energy storage for later use.[3] Furthermore, the SPU highlights several electricity sector recommendations including providing demonstration funding for hydrogen production.[4] Moreover, last October, California launched the Alliance for Renewable Clean Hydrogen Systems ("ARCHES"), a public-private partnership to accelerate hydrogen's contribution to decarbonizing the economy, including establishing a federally-funded renewable hydrogen hub in California and creating an economically sustainable renewable hydrogen market. While the state is planning for a hydrogen future, CMUA members are already investing in hydrogen in various capacities, including grid-scale generation, hydrogen-fueled microgrid projects and transportation fueling facilities.

CMUA encourages California to continue to look for opportunities to invest in hydrogen projects to support the state's clean energy and clean transportation goals.

II. COMMENTS

1. CMUA members are investing in hydrogen projects to support a reliable electric grid and clean transportation goals.

One of ARCHES goals is to address "hard to decarbonize" sectors. Renewably produced hydrogen has the potential to play an important role in sectors that are hard to fully decarbonize, including the power sector, where it may serve as a firm, low- or zero-carbon resource that contributes to reliability. As presented in the workshop, it is the Northern California Power Agency's ("NCPA") goal for the project cost to be approximately $225 million to convert the Lodi Energy Center to a hydrogen powered facility.[5]

The project will also include an onsite electrolyzer to produce hydrogen onsite to support the power needs of the Port of Oakland. The electrolytic production will utilize renewable energy as the feedstock, creating a greenhouse gas ("GHG") emissions-free fuel source. The project is being developed in partnership with the Bay Area Rapid Transit Authority, California Department of Water Resources, and NCPA member utilities. In addition to providing hydrogen

[2] 2022 Scoping Plan for Achieving Carbon Neutrality, Cal. Air Resources Board (Dec. 2022), https://ww2.arb.ca.gov/sites/default/files/2023-04/2022-sp.pdf.
[3] *Id.* at 204.
[4] *Id.* at 205.
[5] Randy Howard, *Lodi Hydrogen Center The Hydrogen Transition*, Northern Cal. Power Agency (Sept. 8, 2023), https://efiling.energy.ca.gov/GetDocument.aspx?tn=252176&DocumentContentId=87175.

powered electricity for the Port of Oakland, the facility will include a hydrogen fueling depot to support the fueling needs of Class 8 trucks, as well as light-duty vehicles, in recognition of hydrogen's other potential application. The project will also include 60 megawatts of energy storage.

As Operating Agent for, and largest offtaker of Intermountain Power Agency's facility, the Los Angeles Department of Water and Power ("LADWP") is converting the Intermountain Power Project from coal to an 840 MW blended hydrogen/natural gas facility by 2025, with plans to transition to full hydrogen by 2045.[6] LADWP is part of the Western Green Hydrogen Initiative, along with the State of California.

SMUD is partnering with Air Products and Chemicals, Inc. ("APCI"), Sacramento Metropolitan Air Quality Management District ("SMAQMD"), and others to demonstrate and deploy electrolytic hydrogen production and utilization for power at the Consumnes Power Plant located in Herald, California, currently capable of 15% hydrogen blend with a goal of reaching 100%. In addition, the project will support transportation and industrial applications in the greater Sacramento Region.

2. California should continue to support hydrogen fueling options for medium- and heavy-duty trucks.

CMUA supports the actions to develop hydrogen transportation fueling options as a complement to electric vehicle charging infrastructure. Medium- and heavy-duty trucks fueled by renewably produced hydrogen may have advantages relative to electric vehicles in certain applications. For example, hydrogen-powered heavy-duty vehicles can be refueled in a comparable time as diesel powered vehicles, and do not impose the weight of batteries that reduce the actual load carrying capacity of the vehicles. Because hydrogen fueled vehicles can be refueled in a comparable time as current diesel fueled vehicles, hydrogen provides an important option for applications whose use-case requires fast refueling, often in remote areas. This is particularly promising for utility vehicles which are frequently deployed in remote areas to re-establish utility service following storms, wildfires, or other emergency events. This may be beneficial to both water and energy members of CMUA who are responsible for continuity of

[6] *About IPP Renewed*, INTERMOUNTAIN POWER AGENCY, https://www.ipautah.com/ipp-renewed/ (last visited October 2, 2023).

utility service. Actions to develop hydrogen transportation fueling can also support the application of hydrogen in the power sector, with respect to helping increase scale and driving down production costs.

California should continue to encourage and support the development of hydrogen fueling options as a complement to electricity for medium- and heavy-duty transportation applications.

III. CONCLUSION

CMUA appreciates the opportunity to offer these comments on the potential growth of hydrogen.

Dated: September 29, 2023

Respectfully submitted,

/s/ Jen-Ann Lee

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