

Comment Letter #95



Hydrogen Means Business in California!

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South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

October 18, 2022

RE: Revised Draft 2022 AQMP

Platinum Members
Avantus
Ballard Power Systems
BayoTech
Cummins
Mitsubishi Power Americas
Pacific Gas & Electric
Plug Power
San Diego Gas & Electric
Southern California Gas Company
Gold Members
AC Transit
Air Water America
Bay Area AQMD
Black & Veatch
Bloom Energy
BMW
Chart Industries
City of Lancaster
Clean Energy Fuels
Element Markets
Environmental Resources Management
GHD
Greenberg Traurig
Howden
Hyundai Motor Company
Innervex Renewable Development USA
IRD Fuel Cells
Iwatani
Linde Group
Loop Energy
Mainspring Energy
Nel Hydrogen
Nikola Motor
Orsted
Parsons Corporation
PowerTap
Ricardo
Robert Bosch LLC
Sacramento Municipality Utility District
Sumitomo Electric
Sunline Transit
Toyota
Trillium
US Gain

I. INTRODUCTION

The California Hydrogen Business Council (CHBC), a trade association representing over 135 member organizations, working to commercialize hydrogen and supporting hydrogen technologies across the economy, appreciates the opportunity to submit comments to the Revised Draft 2022 Air Quality Management Plan. Summarily, our comments address how fuel cell systems and fuel cell electric vehicles (FCEVs) should be the preferred resources for electric generation and air pollutant reduction in the stationary and mobile source categories.

These comments will address the following control measures:

- L-CMB-03: NOx Reductions from permitted Non-Emergency Internal Combustion Engines
- L-CMB-04: Emission Reductions from Emergency Standby Engines
- MOB-05: Accelerated Retirement of Older Light-Duty and Medium-Duty Vehicles
- MOB-06: Accelerated Retirement of Older On-Road Heavy-Duty Vehicles
- MOB-15: Zero Emission Infrastructure for Mobile Sources

II. COMMENTS

A. L-CMB-03: NOx Reductions from permitted Non-Emergency Internal Combustion Engines

The CHBC respectfully recommends the inclusion of fuel cells as a part of the proposed method of control to transition older and higher-emitting engines in the RECLAIM program. Fuel cell systems that run on hydrogen are zero-emission and have been successfully commercially deployed for the last twenty years.



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CHBC members, Plug Power¹ and Bloom Energy², for example, have been providing backup and firm power for material handling, data centers and telecommunications, in lieu of internal combustion engines.

B. L-CMB-04: Emission Reductions from Emergency Standby Engines

The CHBC supports the inclusion of zero and near-zero emission fuel cell systems in the proposed method of control as a replacement for emergency standby engines and an immediate reduction in NO_x and VOCs. We agree that fuel cell systems have been successful as backup power resources for small-scale uses like powering stoplights during power outages. However, we would like to note that fuel cell systems can provide large-scale, multi-MW backup power and have done so commercially outside of California.³ We encourage the addition of fuel cell systems as part of the scalable power sources that would replace diesel-fueled emergency standby engines.

C. MOB-05: Accelerated Retirement of Older Light-Duty and Medium-Duty Vehicles

The CHBC supports the continuation of the Clean Cars 4 All program, which assists eligible low and moderate-income residents living in disadvantaged communities (DAC) with purchasing a like-new or new clean vehicle. Clean Cars 4 All includes FCEVs as a part of its program. Providing residents in DACs access to FCEVs will have an immediate impact on the air quality of that community and serve as an education tool for others in the community to become familiar with the growing technology.

In response to the proposed methods of control, the CHBC is supportive of retiring up to 2,000 light-and medium-duty vehicles per year through the Replace Your Ride Program, as well as including a \$2,000 voucher for hydrogen fueling, to reflect the \$2,000 voucher proposed for the installation of charging equipment.

¹ Plug Power. April 19, 2022. Available at: <https://www.ir.plugpower.com/press-releases/news-details/2022/Plug-Supplies-Walmart-with-Green-Hydrogen-to-Fuel-Retailers-Fleet-of-Material-Handling-Lift-Trucks/default.aspx>. Accessed October 6, 2022.

² Bloom Energy. Available at: <https://www.bloomenergy.com/technology/>. Accessed October 6, 2022.

³ H2 View, George Heynes, "New 78.96 MW hydrogen fuel cell power plant opens in South Korea," November 3, 2021. Available at: [New 78.96MW hydrogen fuel cell power plant opens in South Korea \(h2-view.com\)](https://www.h2view.com/news/new-78-96-mw-hydrogen-fuel-cell-power-plant-opens-in-south-korea). Accessed October 6, 2022.



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D. MOB-06: Accelerated Retirement of Older On-Road Heavy-Duty Vehicles

Although fuel cell trucks are considered a viable option upon the successful deployment of the proposed Trade Up Program for On-Road Heavy-Duty Vehicles, the CHBC proposes the inclusion of fuel cell trucks in the pilot from the start. Fuel cell trucks are currently being piloted at the Port of Oakland through CHBC member, Hyundai⁴, and are being offered in a bundled lease program by CHBC member, Nikola⁵, that includes hydrogen fueling and maintenance. The fuel cell truck market is ready for deployment and the CHBC encourages the addition of fuel cells in the rollout of the Trade Up Program.

E. MOB-15: Zero Emission Infrastructure for Mobile Sources

The Strategies in the Proposed South Coast AQMD Workplan for Zero Emissions Fueling/Charging Infrastructure is correct in stating the need to understand the FCEV fueling demand, funding needs, stakeholder collaboration, public education, and statewide alignment across state entities. The CHBC supports incorporating FCEV manufacturers, hydrogen fuel producers, distributors, and station developers in the zero-emission infrastructure section of the Workplan. There are currently over 50 publicly accessible hydrogen fueling stations and the state has the funds to meet the 200-station⁶ target. However, as of 2020, there were over 6.5 million drivers in the greater Los Angeles region alone, meaning the South Coast Air Quality Management District (SCAQMD) will need far more than 200 hydrogen fueling stations shared throughout the state to meet the air quality targets set out in this Draft plan. The CHBC encourages this draft plan to advocate for the state to set higher hydrogen fueling station targets so the SCAQMD will receive sufficient funding and coordination from the state in deploying a sustainable zero-emission infrastructure network for the region.

⁴ Hyundai. "Hyundai Motor Details Plans to Expand into Market with Hydrogen-powered XCIENT Fuel Cells at ACT Expo," May 9, 2022. Available at: <https://www.hyundai.com/worldwide/en/company/newsroom/hyundai-motor-details-plans-to-expand-into-u.s.-market-with-hydrogen-powered-xcient-fuel-cells-at-act-expo-0000016825>. Accessed October 6, 2022.

⁵ Nikola. Available at: <https://nikolamotor.com/two-fcev>. Accessed October 6, 2022.

⁶ "Governor Brown Takes Action to Increase Zero-Emission Vehicles, Fund New Climate Investments. January 26, 2018. Available at: <https://www.ca.gov/archive/gov39/2018/01/26/governor-brown-takes-action-to-increase-zero-emission-vehicles-fund-new-climate-investments/index.html>. Accessed October 6, 2022.



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III. CONCLUSION

The CHBC supports the Revised Draft 2022 Air Quality Management Plan and respectfully requests consideration of the aforementioned recommendations. We look forward to collaborating further. Thank you for the opportunity to comment.

Respectfully Submitted,

Sara Fitzsimon, J.D.

A handwritten signature in black ink, appearing to read 'Sara Fitzsimon', with a long horizontal flourish extending to the right.

Policy Director
California Hydrogen Business Council