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July 30, 2019

Mr. Jason Crow
 Air Pollution Specialist
 California Air Resources Board
 1001 I Street
 Sacramento, CA 95814

Comments on CARB’s Work Group Meeting for Heavy Duty Projects in the 2019-2020 Funding Plan

Dear Mr. Crow,

The California Hydrogen Business Council¹ (CHBC) appreciates the opportunity to offer written comments on *Heavy Duty Projects in the Fiscal Year 2019-20 Funding Plan*.

We propose that the Air Resources Board (ARB) consider funding large interconnected projects of zero emission heavy duty fuel cell electric vehicles and applications through a competitive solicitation process. These projects would combine new and existing zero emission fuel cell projects in order to validate operational feasibility with regards to endurance, operational range and cost-effectiveness.

We recommend ARB prioritize funding projects that (1) build on existing project developments and (2) integrate vehicle deployments into large-scale beachhead projects that leverage infrastructure and consolidate hydrogen demand. This would enable vehicle OEMs to scale production and reduce production cost, while reducing fuel costs for customers through higher production and utilization. Investment in hydrogen fuel cell electric vehicles, especially in the heavy duty sector, would address carbon and criteria pollutant reduction goals in a difficult-to-decarbonize sector. These investments would allow reducing diesel emissions from long haul, heavy duty freight and agriculture applications, which would support the Governor’s vision to eliminate diesel pollution in the state by 2030. For many heavy duty applications, fuel cells provide the only commercially viable zero-emission technology option.

One example of a large-scale project is to connect agricultural production centers in the Central Valley with freight corridors and goods movement at ports, all using hydrogen fuel cells.

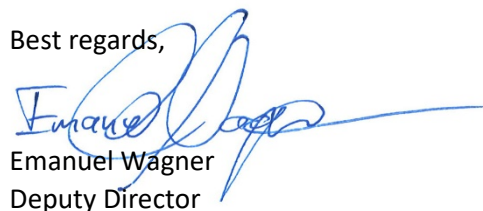
This concept is to transform the agricultural waste and abundant solar and wind resources in the Central Valley into renewable hydrogen for motive power, helping to reduce both tailpipe and greenhouse gas emissions. The hydrogen could be used by a new heavy duty hydrogen station in the Central Valley, serving tractors, harvesters, forklifts and farm equipment powered by fuel cells, but also be accessible to California’s commercial FCEVs. Newly developed Class 8 trucks would move agricultural products like export crops from the middle of the state to the San Pedro Bay ports. Once in the port, off-road hydrogen fuel cell container handling equipment, already funded for demonstration, would be used to move the goods through the port facility.

This type of project would demonstrate a beachhead commercialization approach, growing heavy duty on- and off-road hydrogen fuel cell demonstration projects into interconnected pilot operations. This is one example of a large-scale statewide project that CHBC would endorse.

We urge ARB to consider concepts like this in its evaluation and allocation of appropriate funding. We look forward to working with ARB on developing this and other concepts, and urge the Board to consider an allocation of funding to help build a network of hydrogen and fuel cell clusters to allow vehicle manufacturers, station developers and hydrogen producers to scale and commercialize their respective technologies.

We appreciate your consideration of our comments and look forward to a continued dialogue on this program.

Best regards,



Emanuel Wagner
Deputy Director
California Hydrogen Business Council

ⁱ 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. CHBC Members are listed here: <https://www.californiahydrogen.org/aboutus/chbc-members/>