



Emanuel Wagner
18-7-6

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Shirin Barfjani
Mobile Source Control Division
California Air Resources Board
1001 I ST
Sacramento, CA,

September 28, 2018

Dear Shirin Barfjani,

The California Hydrogen Business Council would like to thank the staff at the Air Resources Board for their excellent work on developing a draft Innovative Clean Transit Regulation proposal that the CHBC can support. Moving transit in California in the direction of zero-emission will address several of California's clean energy, GHG emission and oil reduction, and PM reduction goals, many of which will directly benefit low income communities currently most affected by pollution from transit and transportation.

We believe that fuel cell electric bus and hydrogen as a fuel will enable successful execution of the ICT regulations and will reduce risks for Transit Agencies with two zero emissions options to choose from based on their routes and operational requirements.

In reviewing the proposal, the CHBC would like to recommend a few minor tweaks to enable transit agencies to make truly informed decisions about their zero-emission strategy.

The CHBC conducted a workshop on Fuel Cell Electric Buses on September 11, as part of CTE's Zero Emission Bus conference. CHBC is happy to make the presentations from that workshop available on our website www.californiahydrogen.org.

In doing so, we believe we can provide a context for our comments outlined below, as they address specific issues that were raised by transit agencies and industry in the course of the workshop.

Specifically, CHBC recommends the following changes to the draft ICT Rule:

2023.1(d)(1)

- Modify part (B) to read: Analysis and assessment of both FCEB and BEB alternatives, and justification for the proportions of each in the Rollout Plan

- Add to part (C): Infrastructure plans in the Rollout Plan must include estimates of time and costs that will be incurred by the transit agency for all charging and/or fueling infrastructure required, to insure these factors have been taken into account

Additionally, moving the deadline for the Rollout Plan to 2021 will allow important deployments of BEB's and FCEB's to generate data which will be invaluable to transit agency assessments. Both AC Transit and Orange County Transit Agency are taking delivery of multiple BEB's and FCEB's from a single manufacturer this year and into next year. Operational service of these buses will be in earnest in the beginning of 2019, meaning that performance reporting will not be available until well into 2020. Moving the rollout plan deadline ahead to 2021 will allow data to be collected across a full year of operation, for consideration by all California transit agencies for their Rollout Plans.

This recommended change to 2023.1(d)(2) (A) is as follows:

- A large transit agency must submit its board approved Rollout Plan along with its approval to the Executive Officer by July 1, 2021.

In essence, the CHBC believes that transit agencies should not make decisions based on the limited information for small projects when committing to a pathway to a 100 ZEV-based transportation strategy. Instead, additional data from projects showcasing fuel cell bus fleets and battery bus fleets, their capabilities, fuel and electricity cost and time, infrastructure cost, footprint, viability at scale, range, customer satisfaction, reliability etc. should become more known prior to mandating a decision on large scale investment.

The CHBC and its members would be happy to work with ARB on those details and provide follow-up recommendations.

We appreciate your time and look forward to the next steps in the development process of the ICT.

Best,



Emanuel Wagner
CHBC Deputy Director