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April 18, 2014



Mary Nichols, Chairman  
 California Air Resources Board  
 1001 I Street  
 Sacramento, CA 95814



RE: AB 32 Climate Change Scoping Plan Update



Dear Chairman Nichols:



On behalf of the Center for Transportation and the Environment (CTE) I am writing to express our support for the First Update to the Climate Change Scoping Plan. The proposed update provides ambitious, but necessary, goals for reducing carbon emissions in California. In particular, CTE urges the Air Resources Board to prioritize the implementation of zero-emission transit buses in strategically located Transit Centers of Excellence. Pushing this technology to commercial readiness will require establishing Centers with a fleet of at least 40 buses each. This scale of deployment will increase production volumes to drive costs down, and fully demonstrate technology readiness levels of both vehicles and infrastructure for fleet applications.



CTE is a non-profit member-based organization that promotes the development of clean, sustainable transportation technologies. Our members include technology companies, fuel cell manufacturers, energy suppliers, research centers, public agencies, universities, and non-profit organizations. A priority of CTE is to take the final step toward commercialization of zero emission public transit buses.



California is a world leader in the development and demonstration of zero emission bus technology. Over the past several years demonstration programs throughout California have proven their value across a diverse set of operating environments, and have shown significant technology advances in performance, reliability and durability to a point where they have achieved, or are approaching, end-user expectations.



Appendix C of the Transportation Working Paper includes a 5-year policy priority calling for the development of Transit Centers of Excellence. The establishment of the Centers of Excellence is the next step in introducing zero emission bus technology, and will provide a means for reducing costs and overcoming remaining commercial barriers. However, in order to achieve this goal it is critical for Air Resources Board staff to work closely with interested parties to coordinate federal and state funding cycles to make these Centers a success. It is equally important that the program be



administered with maximum flexibility to encourage team proposals with the best chance of deploying proven technologies as quickly as possible.

The Air Resources Board's Zero-Emission Bus (ZEB) program currently calls for the introduction of zero emission buses. While the existing zero-emission demonstration programs have proven successful and the technology is nearing commercial readiness, the establishment of the Centers of Excellence is the necessary next step for ZEB program, which will provide a means for reducing costs and overcoming remaining commercial barriers.

The development of the Centers of Excellence provides "triple bottom line" benefits by driving down the technology costs, providing zero emission public transit service, and significantly reducing well-to-wheel carbon emissions. The use of zero-emission electric-drive technologies eliminates local criteria emissions and ambient noise impacts, and are a particular benefit to economically disadvantaged communities.

CTE extends its support for the Update and urges you to take the next step toward making zero-emission bus technology an everyday reality by developing the Centers of Excellence. CTE looks forward to working with the Air Resources Board on the implementation of the updated Scoping Plan

On behalf of the supporting organizations listed below,



Dan Raudebaugh  
Executive Director, CTE



Jaimie Levin  
Director of West Coast Operations, CTE

Attachment

Endorsing organizations:

Bob Oesterrich, Director of Hydrogen Energy, Air Liquide  
Robert Devine, Director, BAE Systems USA  
Jeff Grant, Business Development Manager, Ballard  
Brendan Riley, Vice President Fleet Sales, BYD Motors  
Dick Boothe, President, Embedded Power Control  
John Cornish, President, Engineering, Procurement & Construction  
Shane Stephens, President, FirstElement Fuel, Inc.

Rob Del Core, Business Development Director, Hydrogenics  
Geoff Budd, US Agent, ITM-Power  
Michael Beckman, Head of H2 Fueling & Industrial Applications, Linde  
Chris Stoddard, Vice President Engineering Services, New Flyer  
Dale Hill, Founder, Proterra  
Thomas Orberger, Business Manager, Siemens  
Stuart Thompson, Principal, Transworld Associates  
Zachary Kahn, Director of Business Development, WAVE