

August 15, 2008

**BY ELECTRONIC SUBMITTAL**

**Ms. Mary Nichols  
Chairman  
California Air Resources Board  
P.O Box 2815  
Sacramento, CA 95812**

**Mr. Tom Cackette  
Deputy Executive Officer  
California Air Resources Board  
P.O Box 2815  
Sacramento, CA 95812**

**Re: Comments to Proposed Modified Text to 2008 Amendments to the California  
ZEV Program**

**Dear Chairman Nichols and Mr. Cackette:**

Thank you for the opportunity to provide comments on the ARB's Notice of Public Availability of Modified Text (the "15-Day Notice") for the 2008 ZEV Amendments. Toyota notes that it has participated in the preparation of and supports the comments submitted by the Large Vehicle Manufacturers. We would, however, like to highlight here a few issues of particular concern to Toyota.

**A. Implementation Timing of Proportional Travel Provision**

As a threshold matter, we believe the Board and the staff were aligned in the view that the primary focus of the 2008 ZEV Amendments was to modify the regulation for Phase III and beyond (that is, from 2012 and later). On the other hand, we believe there was a clear sentiment at the March 2008 Board hearing that compliance obligations for the 2009-2011 period were not to be substantively changed. As reflected in the Initial Statement of Reasons and as noted by Sustainable Transportation Chief Analisa Bevan at the hearing: "The changes proposed for the 2009 through 2011 primarily add flexibility rather than changing vehicle volumes." (see Hearing Transcript, page 25)

Rather, we understood the Board's direction -- and the staff's preference -- was to look for additional ways to incentivize the accelerated introduction of plug-in hybrid vehicles during this period and create more parity in credits between fuel cell vehicles and battery electric vehicles. In other words, while staff was to look for ways to greater incentivize vehicles in addition to fuel cell vehicles, the core volume requirements for fuel cell vehicles for the phase underway now, and as long understood and relied upon by industry, were not to change.

For all practical purposes, Toyota and other manufacturers are already within the 2009-2011 compliance period. While additional incentives might encourage us to do more than otherwise planned or expected, we have already made decisions and taken action to implement our ZEV compliance plans for this period. This is why we are very concerned by what we hope is an inadvertent and completely new requirement to begin so-called “proportional travel” starting from now, as opposed to what we thought was the common understanding of 2012. Such a significant change for a compliance period already underway would be contrary to well-established ARB considerations for adequate lead-time.

#### B. PZEV Allowance for Advanced Componentry

Despite our concerns regarding the proposed changes to core compliance obligations during the 2009-2011 period, Toyota continues to support the Board’s direction and the staff’s efforts to explore ways to incentivize plug-in hybrid vehicles and help accelerate their demonstration and development. We believe that the Enhanced Advanced Technology PZEV category, and the ability to use PHEVs as a nearer term alternative to fuel cell and battery electric vehicles, provides critical flexibility to the ZEV program and can provide an incentive for their introduction. In addition to the Type F (UDDS capable) category, CARB has added a Type G (US06 capable) category. Toyota supports this change and would like to comment that both Type F and Type G incentives will promote introduction of PHEV technologies. The Type F incentivizes manufacturer to maximize the EV operation of a blended PHEV, while Type G incentivizes AER-type PHEVs.

#### C. Transportation System Credits

We also wish to state our support for staff’s proposal to include Enhanced AT PZEVs along with ZEVs as eligible for advanced demonstration credit. Because of the technical and commercial challenges and uncertainties of these technologies, we believe these vehicles should be entitled to earn these credits.

Toyota disagrees, however, with the proposal to exclude the ability to use these credits towards the gold obligation. Although we understand that the rationale for this limitation is to help ensure that the “minimum gold floor is met,” we would submit that ZEVs linked to mass transit and in projects demonstrating shared use and “intelligent transportation systems” are perhaps worth more because they potentially *do* more.

Since 2001, Toyota has been a partner with the University of California at UC Irvine’s innovative “ZEVNet” program of car sharing at the Irvine Transportation Center. This program has pioneered the integration of ZEV program vehicles into the broader transportation picture. This has not only introduced the concept of car sharing to these individuals and companies like Canon that have adopted this program, but has also put many potential consumers of advanced technologies behind the wheel of these vehicles.

California and the ARB should continue to foster the smart transit linkage and shared use that these programs enable, and continue to incentivize manufacturers to actively participate in them.

In closing, since the successful market introduction of the current slate of ZEV technologies is subject to many factors, and additional new technologies will continue to be explored and introduced, Toyota believes it is essential to update regularly the technical assessments of all ZEV technologies, particularly battery technology. For this reason, we continue to encourage the ARB to consider another technical review prior to any proposed additional modifications to the program, including the proposed review planned for 2009. Additionally, Toyota would like to reiterate our request to complete the 2015 and later review by the end of 2010 calendar year to allow sufficient time for product and production planning.

If you have any questions regarding this matter, please don't hesitate to contact Michael Lord of my staff.

**Sincerely yours,**

Handwritten signature of Kevin Webber in cursive script.

**Kevin Webber**  
**General Manager**  
**Vehicle Regulation and Certification Engineering**