BMW Group CHRYSLER Ford GM HONDA Mercedes-Benz NISSAN TOYOTA

**January 24, 2012**

**To: Mary D. Nichols, Chairman**
**John R. Balmes, M.D.**
**Sandra Berg**
**Dorene D'Adamo**
**Hector De La Torre**
**Ronald O. Loveridge**
**Barbara Riordan**
**Ron Roberts**
**Alexander Sherriffs, M.D.**
**Daniel Sperling**
**Ken Yeager**

**Re:Comments on ZEV 2.0 Revisions**

***Dear Chairman Nichols and Members of the Board:***

The Large Volume Manufacturers[1] (LVMs) would like to thank the staff for their diligence on working with stakeholders during the ZEV 2.0 rulemaking. It has been a long, arduous process that we believe resulted in an improved ZEV regulation. While we feel that the regulation goals are important, we are concerned that the ramp-up rate of the requirements in 2018 and later could outpace market demand for such large volumes of advanced technology vehicles and that additional flexibility is needed to better align with the goals of the program. The revisions requested below help address these concerns but the need for constant attention by the Board to the progress of technology and the market is essential. Please note that these comments are a consensus position of the LVMs and may not include all concerns of any sub group of manufacturers.

## LVM Requested Modifications to the Staff Proposal

1. **Phase-In Credit Changes**
   In 2018MY, the staff is proposing to reduce the credit value for ZEV and TZEV by half or more compared with the current regulation. The LVMs are concerned about how this causes a "step change" in the required number of vehicles and proposes that the new credit values be phased-in over five years beginning in the 2018MY. This is more in line with the expected gradual improvement in ZEV and TZEV technologies and their acceptance in the marketplace.

2. **Increase TZEV Credit Share**
   Staff is proposing to reduce the portion of the credit requirement that can be met with TZEVs from slightly over 50% in 2018MY to 28% in 2025. The LVMs are concerned about this proposed phase-down and believe that the TZEV credit share should remain at 50%. Retaining the 50% credit requirement share will give the market more latitude in choosing between ZEVs (BEVs and FCEVs) vs. TZEVs

[1] The Large Volume Manufacturers are BMW of North America, LLC (transitioning LVM), Chrysler Group LLC, Ford Motor Company, General Motors Company, Honda Motor Company, Inc., Mercedes Benz (transitioning LVM), Nissan North America, Inc., and Toyota Motor North America, Inc.

(PHEVs), thereby increasing the overall chances of success in the marketplace. It also provides OEMs more flexibility in meeting the ZEV mandate allowing them to better align their choices of ZEV program vehicles with their product plans.

3. **TZEV Definition**
   In order to be eligible for TZEV credits from 2018MY, staff is proposing to include a new requirement that a TZEV achieve a minimum 10 mile All Electric Range (i.e., a minimum 10 mile drive on the UDDS test cycle without the engine starting). This minimum requirement is independent of minimum 10 mile All Electric Range on the US06 test cycle which earns an additional 0.2 credits/vehicle. The LVMs are concerned that this new constraint may inhibit the expansion of plug in technology to larger vehicles and more cost sensitive vehicle segments thereby further limiting market expansion. We believe that this proposed minimum All Electric Range requirement should be replaced with the current requirement for a minimum Equivalent All Electric Range.

**<u>LVM Support for the Staff Proposal</u>**

1. **Section 177 State Implementation**
   The LVMs have been working closely with the Section 177 states to address both State and automakers concerns with the implementation of the ZEV regulation in those states. With the help of the CARB staff, we were able to reach a compromise agreement which addresses both the State's concerns for availability of BEVs during 2015 – 2017 model years and manufacturers' concerns about volumes and distribution issues in those States. As such, the LVMs support a proposed 15 day change to implement this agreement as an Optional Compliance Path, which LVMs and IVMs may choose instead of the ARB staff proposal (Standard Compliance Path).

2. **Technical and Market Review**
   The LVMs understand that the Board is committed to an official ZEV review at the same time as the GHG mid-term review for the 2022-2025 model years. However, the LVMs believe a review early enough to examine the 2018 and subsequent model year requirements is needed. Therefore, in addition to the formal mid-term review, the LVMs request that the Board direct staff, in the form of a resolution, to continually monitor the technological progress and market acceptance of ZEV technologies by conducting more frequent informal ZEV reviews.

3. **Need for Complementary Policies**
   While the ZEV regulation specifies the requirement for OEMs to produce ZEV vehicles, it does not address the consumers who will make the decision whether or not to purchase or lease those vehicles. The volumes specified by the ZEV regulation will require a tremendous transformation of the transportation market. In order to promote this process, incentives to customers will be essential. These will need to include monetary incentives to buy down the higher up-front costs of ZEV technology as well as non-monetary incentives which add value to the customer such as HOV lane access, parking policy, etc.

4. **Infrastructure**
   Infrastructure development for both Battery Electric Vehicles (BEV) and Fuel Cell Vehicles (FCV) are important aspects for the success of these technologies. Refueling infrastructure supports the ZEV market by ensuring that customers have access to ZEV fuels. For FCVs, infrastructure is a critical issue. OEMs are investing huge sums of resources in the development of FCVs. Without the availability of convenient and reasonably priced hydrogen, FCVs will not be able to develop into a market technology. LVMs are committed to work with government agencies including CARB and energy providers to support this goal. We support a California policy, such as intended by the Clean Fuels Outlet (CFO) program, which ensures the availability of hydrogen and enables market development of hydrogen infrastructure.

Thank you for your consideration of our concerns.

**Very Truly Yours,**

**The Large Volume Manufacturers:**
**Chrysler Group LLC**
**BMW of North America, LLC (transitioning LVM)**
**Ford Motor Company**
**General Motors Company**
**America Honda Motor Company, Inc.**
**Mercedes Benz (transitioning LVM)**
**Nissan North America, Inc.**
**Toyota Motor North America, Inc.**