VOLKSWAGEN

GROUP OF AMERICA

Date: March 20, 2008

To: Clerk of the Board Air Resources Board 1001 I Street Sacramento, CA 95814

VOLKSWAGEN GROUP OF AMERICA, INC. 3800 HAMLIN ROAD AUBURN HILLS, MI 48326 PHONE +1 248 754 5000

Subject:

Volkswagen comments for the California Air Resources Board public hearing scheduled for March 27, 2008 to consider adoption of the 2008 amendments to the California Zero Emission Vehicle Regulation

Dear Clerk of the Board,

On behalf of Volkswagen Group of America, Inc. ("Volkswagen"), I am submitting written comments regarding the CARB Staff Initial Statement of Reasons detailing the 2008 Proposed Amendments to the California Zero Emission Vehicle Program Regulations. These comments are submitted by Volkswagen on behalf of Volkswagen AG, Audi AG, Bentley Motor Car, Ltd., Automobili LAMBORGHINI, S.p.A., and Bugatti Automobiles, S.A.S..

Volkswagen supports California's goals for cleaner air, but we have a long standing position of opposing emission regulations based on sales mandates. Volkswagen continues to oppose the ZEV Program on this basis, and we continue to believe the best pathway to cleaner air is through performance based emission standards that allow auto manufacturers to choose the technologies that comply with California's clean air targets. Volkswagen also strongly believes the best pathway to cleaner air in California is through low cost, affordable clean technologies that can make a greater impact on the vehicle fleet in California. Volkswagen strongly urges the Board to consider the important impact of PZEV vehicles and mild hybrid concepts when considering changes to the ZEV Program. In general, Volkswagen supports changes to the ZEV program that allow greater flexibility. We supported CARB staff's concept paper published in November 2007 and we continue to support most aspects of CARB Staff's Initial Statement of Reasons based on the increased flexibility allowed in the regulation. Proposed changes that we view as positive developments are as follows: the proposed Silver Plus category, blended PHEVs, parity for BEV vehicles, the proposed 1.5 BEV category, the proposed Type F hybrid, and restoration of Silver Credit for Type C hybrids. These proposed changes do not compromise the clean air goals of California and should be adopted. Volkswagen believes these recommended changes offer more choices for compliance and encourage lower cost solutions that have higher volume potential in the California market. This eases some of the concern Volkswagen has with the current regulation.

Volkswagen also fully supports CARB's staff proposal to create a ramp up period that modifies the transition for Intermediate Volume Manufacturers as they change to Large Volume Manufacturers. Volkswagen recognizes there is resistance from some parties to this concept, particularly from some Large Volume Manufacturers. In response we offer the following comments:

The nature of the ZEV Program dramatically changes in later years as the overall ZEV requirement grows and the requirement for gold and silver vehicles expands. It is very challenging to meet these required volumes – more challenging than meeting current gold and silver requirements based on a 10 percent total ZEV requirement. It is Volkswagen's position that it is more difficult to enter the regulation in later years due to the increased percentage requirements.

To date the Large Volume Manufacturers have had the benefit of multiple credits for various technologies. This has become in effect a ramp up period for the large manufacturers. In fact this ramp up period has led to banked credit and to long stretches of time without new technologies in the California or with reduced volumes of gold, silver and bronze vehicles on the market from the Large Volume Manufacturers. It is not unreasonable to extend a similar ramp up period to manufacturers entering the Large Volume Manufacturer requirement for the first time.

Volkswagen has not banked excess gold and silver credit and has complied with the regulation as an Intermediate Volume Manufacturer by maintaining a 50% PZEV fleet in California since 2003 to comply with the current 10% overall ZEV program. In 2015, the 14% overall ZEV requirement will require than 70% of Volkswagen vehicles sold in California be PZEV vehicles. These requirements are not trivial. In fact, Volkswagen is far cleaner than the NMOG fleet average currently required in California's LEV regulations. As a large manufacturer, the required volume for PZEV vehicles drops to 30% of the California fleet, a significant reduction in clean and affordable vehicles. Volkswagen has lobbied with CARB staff for extra credit for this excess PZEV volume as we transition to a large manufacturer.

Looking forward, Volkswagen has a development pathway in place for fuel cell vehicles. We have shared our development plans with CARB staff. Unfortunately, our fuel cell development will not be ready in time to comply with the required volumes in the proposed ZEV amendments. With inadequate fuel cell volumes, the regulation will force development of BEVs or the purchase of FCEV technology from others, diverting resources. In addition, the introduction of Enhanced ATPZEVs requires another development pathway and additional resources. For these reasons Volkswagen believes a transition period as proposed by CARB staff is appropriate to allow companies with smaller California volumes to simultaneously develop the technologies mandated by the regulation.

Volkswagen recognizes the need for clean, sustainable transportation. As an Intermediate Volume Manufacturer, we have been an active member in the California Fuel Cell Partnership and we expect to continue to develop and demonstrate gold technologies in California. During the transition period Volkswagen would support a small gold requirement to assure CARB that we are continuing to develop these technologies.

The basic reason for the strong support from Volkswagen for the transition period is that we believe that the gold requirements in the regulation, especially through the 2012-2017 periods, remain too high. Our overall recommendation is to consider a lower percentage multiplier than the percentages currently proposed in the CARB staff paper.

Regarding the travel provision, Volkswagen supports the extension of the travel provision but strongly recommends that the travel provision for BEVs be extended through the 2017 model year to match the travel provision extension recommended by CARB staff for fuel cell vehicles. While Volkswagen believes there is promising battery technology being developed, we have concern that the 2014 model year is too early to force widespread BEV production and sales across the entire mix of Section 177 states due to concerns over readiness of appropriate battery technology. We believe the ZEV program and the future of zero emission technology would be better served by limiting BEVs as well as FCEVs to the California market through the 2017 model year as these technologies are introduced to the market in greater numbers. This allows greater assurance that battery technology is viable, while Section 177 states will still benefit from large volumes of PZEV, ATPZEV and, if adopted, Enhanced ATPZEV vehicles while the zero emission or gold technologies continue to be fully demonstrated in the California market.

Volkswagen also suggests a six year lead time for companies that become Large Volume Manufacturers through aggregation as opposed to increased sales, instead of the four year lead time currently required in the regulation for companies that aggregate. Volkswagen finds it curious that CARB chooses to punish companies that become large through aggregation by reducing the lead time, especially when the two companies involved are not currently Large Volume Manufacturers. This is especially curious when CARB responded to other industry aggregations involving large manufacturers in an earlier hearing by allowing for a ten year lead time for companies that aggregated before the 2001 model year.

Please contact me if you have questions or require clarification on any of the comments submitted by Volkswagen.

Best Regards,

Stuart 4. Johnson

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