VOLKSWAGEN

GROUP OF AMERICA

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

STUART JOHNSON NAME
MANAGER TITLE
EEO DEPARTMENT
248-754-4208 PHONE
248-754-4207 FAX
stuart.johnson@vw.com E-MAIL

Attention:

January 24, 2012 DATE

Comments considering the "LEV III" amendments

Comments considering the advanced clean cars 2012 proposed amendments to the California Zero Emission Vehicle Program

Subject:
Comments regarding the following notices:

Notice of Public Hearing to Consider the "LEV III" Amendments to the California Greenhouse Gas and Criteria Pollutant Exhaust and the Evaporative Emissions Standards and Test Procedures and to the On-Board Diagnostic System Requirements for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles, and to the Evaporative Emissions Requirements of Heavy-Duty Vehicles

Notice of Public Hearing to Consider Adoption of the 2012 Amendments to the Zero Emission Vehicle Regulation

Dear Sir or Madam,

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

On behalf of Volkswagen Group of America, Inc., ("Volkswagen") I hereby submit written comments regarding the Notice of Public Hearing to Consider the LEV III Amendments and the Notice of Public Hearing to Consider Adoption of the 2012 Amendments to the California Zero Emission Vehicle Regulation. These comments are submitted by Volkswagen Group of America for Volkswagen AG, Audi AG, Bentley Motor Car, Ltd., Automobili LAMBORGHINI, S.p.a. and Bugatti Automobiles S.A.S..

The LEV III notice seeks comments regarding new tailpipe regulations, new evaporative emission regulations and test procedures, new greenhouse gas regulations for passenger cars, light-duty trucks and medium duty vehicles and a new certification gasoline. The LEV III notice also proposes revisions to the OBD regulations and harmonization of vehicle labeling requirements.

The Zero Emission Vehicle Regulation notice proposes many changes to the Zero Emission Vehicle regulation and seeks comments regarding new types of vehicles, new stringency, a revised credit scheme, and a focus on vehicles exhibiting true zero tailpipe emissions.

Introduction:

Volkswagen is a member of the Alliance of Automotive Manufacturers (Alliance) and participated in preparing the Alliance comments. Volkswagen supports the Alliance comments but also would like to file additional comments unique to the Volkswagen Group situation. Volkswagen comments will address the following topics within the LEV III Proposal: the LEV III criteria tailpipe emission standard package, the evaporative emission standard package, the GHG program, OBD and vehicle labeling. Volkswagen comments will also address some aspects of the Zero Emission Regulation Proposal related to PZEV vehicles, MY overlap, lead time and vehicle classifications.

LEV III Proposal:

First, as a general comment Volkswagen supports the framework of this proposed regulation and strongly supports a criteria pollutant regulatory package, evaporative emission package and a GHG/CAFÉ regulation under a National structure or program. Both the Federal agencies and CARB are working towards establishing a National program for criteria and evaporative emission regulations as well as a National greenhouse gas program and Volkswagen supports the concept of harmonized standards for all regulations.

LEV III Tailpipe Standards:

The California proposal for "LEV III" regulations spells out a new NMOG + NOX tailpipe fleet average standard, new emission categories, new SFTP standards, new PM standards, new evaporative emissions standards, and new certification fuel for light-duty passenger vehicles and light-duty trucks, a comprehensive revision to the LEV emission program. CARB staff worked with the Volkswagen Group and the industry over the past few years to arrive at the staff proposal. While stringent, Volkswagen commends CARB staff for proposing a set of standards with appropriate flexibility for all technologies through reasonable lead time, additional emissions categories, fleet average options and combining the NMOG and NOX pollutants.

LEV III Evaporative Standards:

Similarly, Volkswagen also commends CARB staff for offering flexibility in the proposed zero evaporative emission standards proposed under the LEV III regulation. While also stringent, CARB offered pathways that allow a manufacturer to continue with the existing rig test procedure and stand alone standards or adopt a fleet average approach with family emission limits. This flexibility is appreciated.

Greenhouse Gas Regulations:

Volkswagen supports California's intention to accept compliance with the Federal GHG program for light duty vehicles. This is a clear move towards harmonized emissions programs and will result in improved industrial and regulatory efficiencies while delivering real CO2 reductions. Volkswagen will be submitting detailed technical comments to the joint EPA/NHTSA docket for 2017-2025 GHG and Fuel Economy fleet standards.
We do however wish to state that the existing proposal from EPA and NHTSA contains elements for which Volkswagen will be offering suggested improvements and modifications. Volkswagen has stated our concern with both the annual stringency levels

for passenger cars and the market inequity resulting from less aggressive truck standards and targeted credits.

It is the opinion of the Volkswagen Group that the 5% average annual stringency for passenger cars places an excessive burden on the segment of the market which already delivers some of the lowest fleetwide emissions. As illustrated in EPA's NPRM, the regulations are expected to place the highest cost burden on PC's the result of which may impact market acceptance for mainstream passenger cars. VW has also expressed our concern with the lower stringency being offered for the larger light trucks, the very segment of the fleet with some of the highest CO2 emissions. VW recognizes that these vehicles may feature duty cycles which demand a certain level of design potentially impacting their capacity to employ fuel saving technology. Nevertheless, the lower stringency combined with additional targeted truck-specific credits may create unintended consequences in the marketplace, resulting in an inequitable playing field.
Volkswagen will propose various measures aimed at improving the regulatory program. Should they be subsequently adopted, VW will work with California to explain the issues and incorporate like changes into the LEV-III GHG program.

GHG Backsliding:

During the development of EISA, a policy decision was made to alter US Federal fuel economy regulations to base a manufacturer's standard on vehicle footprint attribute instead of having to comply with a fixed fleet standard. During the 2012-2016 rulemaking, EPA incorporated footprint based standards into their hallmark light duty GHG program. It was decided that the benefits provided by moving to footprint based standards offered various improvements relative to fixed fleetwide standards. Accordingly EPA noted that an individual OEM's GHG targets would be based solely on the composition of their fleet (cars and trucks) and the average footprints of the models being marketed. There would no longer be a fixed fleetwide target against which all manufacturers would have to comply.

During the 2012-2016 and again in the current rulemaking, the agencies predict future CO2 reductions based on assumptions regarding future trends for fleet mix and average footprints. The agencies have conducted thorough and detailed analysis, but it must be noted that these are predictions and not guaranteed reductions. An implication stemming from the decision to adopt attribute based standards, rather than retain fixed fleetwide standards, is that the actual reductions will be determined by market pathways incorporated by the various OEMs. These pathways will be determined in part by both evolving consumer demand and regulatory compliance pressure for the various segments and vehicle sizes.

Volkswagen has incorporated footprint based CO2 target calculations into our future product planning tools. As marketing staff propose vehicle concepts predicted to meet market demand, VW technical staff can report the impact that these decisions may have on fleet compliance. As dictated by the regulations these tools are based on vehicle classification and footprint.

ARB noted their concern that fleet trends negative to CO2 emissions (increasing emissions) may impact the anticipated overall CO2 reductions. ARB raised concern that OEMs may shift vehicles from the passenger car fleet to light truck, or that OEMs may increase the footprint of vehicles in order to reduce their calculated stringency. As a result, ARB stated that they intend to monitor vehicle classification and footprint averages over time through certification reports. If they feel that manufacturers are straying from historic car/truck composition or average footprint sizes, they may propose an additional stringency linking a manufacturer's compliance requirement to previous year fleets rather than to targets calculated from current year product mix and footprint size.

Volkswagen has several concerns with this discussion. Enforcing additional stringency on a manufacturer who strays from their historic fleet composition or average footprint is counter to the very policy decision to adopt attribute based standards. Deviating away from an attribute standard by enforcing an "anti-backsliding" standard challenges the very benefits that were fundamental to the decision to adopt attribute standards versus retaining the previous fixed fleet standards. In addition this policy has the potential to create regulatory barriers inhibiting the free movement of investment by an OEM into new segments not previously marketed by that manufacturer. It is in a sense limiting the choice of an OEM based on past performance rather than future potential.

Should the future prove that actions to alter fleet mix or footprint sizes have indeed eroded expected CO2 reductions, then perhaps the policy decision to move towards attribute based standards will be proven to have been misguided. Should ARB wish to adopt a regulatory program more inclined to deliver fixed results, the agency may wish to reconsider adopting fixed fleetwide standards. Of course this would represent a major departure from the direction of the Federal agencies and the decision by Congress to incorporate attributes. In lieu of a decision to scrap attributes, perhaps there could be potential with moving towards a flatter and more commonized car/truck footprint curve.

"Segment Protectionism"

Volkswagen offers the opinion that ARB should consider changing fleet mix and footprints in context of overall industry trends. It is more equitable to compare the trends of an individual OEM relative to industry benchmarks rather than against the history of the OEM. There are a large number of manufacturers marketing vehicles within the US, some feature a broad portfolio covering many segments, while others have a more narrowed focus. This can be a result of traditional product development strengths, or driven by common platforms being sold in global markets. What is important to consider is the impact that "backsliding prevention" may have on the free movement of investment by an OEM into segments in which they have not previously competed.

A very real example of this is the case in which a passenger car dominant company chooses to enter into a truck segment secured by incumbent competitors. Even if the new entrant could offer innovative technology with best-in-class CO2 emissions, the reality is that the OEM may backslide on their total fleetwide emissions compared to previous years even though the new product could actually reduce total industry wide emissions within the segment. As stated by ARB in the ISOR, the shift in product mix for this OEM (or increasing footprint size) could trigger enforcement of a more stringent standard based on the historic product mix rather than the standard calculated via footprint. This has the effect of creating a regulatory burden not shared by the incumbent segment competitors. The existing competitors would face no such "backsliding" penalty due to their previous years emissions having already included the segment vehicles. The result is that the new entrant may elect not to move into and compete in this segment due to this artificial inequity with the existing manufacturers. This decision would not be made based on a technical non-compliance with a footprint target, but would rather be motivated by an artificial non-compliance based on a historic average.

This is impractical and threatens free movement within the market. In essence, the result may be that existing competitors in higher emitting segments such as large trucks or even luxury vehicles may benefit from regulatory "Segment Protectionism". New entrants coming from lower emitting segments such as economy cars or smaller trucks would in effect be inhibited or blocked from competing in these traditionally more profitable market segments.

VW expects that this is not the intention of ARB. This would be inconsistent with modern business practices which value organizations with flexible product development processes which are able to nimbly respond to changing customer needs and wants. It is a simple reality that businesses can no longer remain entrenched with static product offerings, or ignore growth in new or expanding market segments. Apple illustrates this point exactly. Once a manufacturer of home/business personal computers, the once struggling Apple was able to revive and then expand its market share by anticipating the meteoric rise in consumer demand for integrated media and connected telecom equipment. Hardly a decade ago, few could have predicted that Apple, a niche "computer company", could revive their fortune with the likes of the iPod, or iPhone. Even RIM, whose once ubiquitous Blackberry technology was the market leader in smartphones, is now struggling to keep pace with the popularity of the iPhone. Parallels with the auto industry are obvious.

Vehicle Labeling Requirements:

Volkswagen supports and commends CARB staff and the Federal agencies for harmonizing the vehicle fuel economy label and eliminating the need for separate California Environmental Performance label.

Amendments to the Zero Emission Vehicle Regulation:

CARB staff has proposed very comprehensive changes to the Zero Emission Regulation, including major revisions starting in the 2018 MY. At that point PZEV and ATPZEV vehicles are no longer part of the regulation and the focus is shifted to TZEVs and ZEVs. As part of the proposed changes in 2018 there are also major changes being proposed for manufacturer size classifications. It is expected that due to these amendments many IVMs will become fully subjected to LVM requirements starting in MY2018. Volkswagen accepts these changes and is preparing for the 2018 MY as a LVM..

While major changes to the regulation are coming and expected, there are some concerns Volkswagen has related to planning certainty and unintended consequences concerning the treatment of PZEV vehicles, overlapping model years and lead time related to company ownership.

PZEV Vehicles:

Staff proposes to require SULEV 20 and/or SULEV 30 vehicles starting in the 2015 Model Year for manufacturers to continue to earn ZEV credit for PZEV type vehicles. This change is intended to match the new vehicle classifications under the LEV III program that will start in 2015. Volkswagen is concerned that this requirement may lead to the unintended consequence of forcing all manufacturers marketing PZEVs to recertify their PZEV vehicles to the new SULEV 20 and SULEV 30 categories for the 2015 MY. We believe staff intended that existing LEV II PZEV vehicles can be carried over into the new LEV III regulation as an initial compliance option for LEV III and that recertification to final LEV III standards (including new SFTP requirements and new certification fuel) could occur later. We request that CARB evaluate this proposal and ensure that a complete changeover of a manufacturer's PZEV fleet in 2015 Model Year is not required due to this proposed language.

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Overlapping Model Years:

Staff has proposed new language in the Zero Emission Vehicle Regulation Proposal that states whenever an overlap in Model Years exist the earlier Model Year takes precedent. This language is specifically applied to situations where a change of ownership for a company occurs. Since Model Years now span a wide range of time with both early introductions and extended Model Years, Volkswagen is concerned that the proposed language may result in additional unintended consequences and a Model Year determination could be made when the bulk of a manufacturers MY has changed to the newer year while a small fraction of vehicles are still being produced under the previous MY. We request that CARB strike this language and allow each manufacturer to be handled on a case by case basis. This gives flexibility to both CARB and each individual manufacturer to discuss MY strategy.

Lead Time:

Staff has proposed that IVM's are subject to the new definitions for ownership and volume requirements in 2018, making many current IVMs subject to the LVM requirements of the revised ZEV regulation in 2018. Volkswagen supports this lead time. Coincidentally, Volkswagen expects to exceed the threshold for LVM volume under the existing definitions for the 2010-2012 Model Years, so we are therefore planning for a LVM requirement in 2018 regardless of the existing regulation or the new set of proposals. We believe this is an appropriate level of lead time given the comprehensive level of change coming not only to the ZEV regulation but also the LEV III criteria and greenhouse gas regulations.

Within the limited time remaining where a four year versus six year lead time could apply to company mergers before the 2018 changes are enforced, it is possible an IVM may acquire a small volume manufacturer that has no ZEV development program. In this situation the smaller company would not accelerate the development of the larger company's ZEV compliance plan. Volkswagen fails to see the technical arguments that support why two smaller companies by California definition who do not currently have a ZEV program should be able to bring ZEV vehicles to market faster once they are combined. Given the backstop of the 2018 start of new definitions and the fact that this regulation will not be finalized before the start of the 2013 Model Year, Volkswagen does not see the need for continued application of the four year clause.

BEVx:

CARB staff has proposed a new vehicle classification that is essentially an extended range BEV. This type of vehicle will add flexibility to the regulation and possibly create a type of vehicle with heightened market appeal for customers. As such we support CARB's efforts to create additional flexibility.

Conclusion:

Overall Volkswagen supports many aspects of the comprehensive changes to the California's LEV and ZEV regulation. With the exception of the points noted, Volkswagen appreciates the flexibilities and the lead times incorporated into the regulation. Staff and industry worked diligently to arrive at a set of regulations that is both challenging and feasible.

Volkswagen remains committed to working with CARB staff to establish the best regulation possible to achieve the goals of California. If you have any questions or comments regarding Volkswagen's position please do not hesitate to contact me.

Sincerely yours,

Stuart J. Johnson

Stuart Johnson
Manager
Engineering and Environmental Office
Volkswagen Group of America, Inc.
3800 Hamlin Road
Auburn Hills, MI 48326
Phone: 248-754-4208