

**PLUG IN AMERICA**



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Ms. Mary Nichols  
Chair, California Air Resources Board  
1001 "I" Street  
P.O. Box 2815  
Sacramento, CA 95812

Response - 15 Day Notice of Public Availability of Modified Text  
Zero Emission Vehicle Program

Dear Ms. Nichols,

Plug In America has reviewed the "15 Day Notice of Public Availability of Modified Text" and offer the following points that we believe adequately reflect our rapidly growing constituency. While the Response contains some improvements to the ZEV Program, the Board's actions do not go nearly far enough to reach our mutual goals for cleaner air and greenhouse gas reduction. The program was conceived to improve air quality by promoting the deployment of non-polluting vehicles. While the Program has been expanded in recent years to include more compliance flexibility, its spirit remains the same. This requires prioritizing commercialization over R&D, while also increasing the efficiency floor of vehicles allowed to comply over time.

First and foremost, the board action continues to create an "either/or" scenario between ZEVs and backfilled Enhanced AT-PZEVs that we find very disconcerting because it creates the appearance of "selling out" one technology for the other. While the near-term market potential may be different, there is certainly adequate room for both, and only the market should determine to what extent each is successful. We therefore propose specific treatment for each category, as well as general suggestions for the program. We believe that there are still compelling opportunities to make the regulation simpler and more results-oriented, and propose that the following points be revisited:

1) HOLD FIRM ON PURE "GOLD" ZEV NUMBERS - Reducing the number of ZEVs required yet again will not accomplish any CARB goal. The current proposal would require fewer than an average of 500 ZEVs per year from any individual automaker until 2015 - few enough that several automakers can use banked credits for most of the next decade to meet this requirement. Those with fewer banked credits can easily accomplish these numbers through credit trading with small automakers, like Tesla. Worse, the lower numbers ensure that ZEVs will never leave handbuilt production volumes, and that costs will remain too high for commercial viability.

We therefore must ask that CARB reconsider and hold firm on the current 25,000 ZEVs required in Phase III, and 50,000 ZEVs required in Phase IV. These are the numbers previously committed to by automakers, and are appropriate to bridge the gap between R&D and commercialization.

2) TECHNOLOGICAL NEUTRALITY- we appreciated the initial attempts at technological neutrality at the beginning of this revision process. However, the establishment of “Type IV” and “Type V” ZEVs are thinly veiled attempts to continue to promote hydrogen fuel cell vehicles as the ultimate solution. We again call for neutrality among technologies within the Gold category. It is the place of this regulatory body to dictate air quality results, not winning technologies; that choice needs to be left to consumers.

Further, to the extent that solutions are to be prioritized, emphasis should be placed on near-term implementation, not technologies that are still in R&D stages or otherwise have significant barriers to adoption (such as inadequate infrastructure). This suggests that technologies with existing infrastructure and/or home refueling capability receive extra credit for their potential to deliver measurable air quality benefits sooner.

Finally, CARB must begin to treat all ZEV vehicles equally with respect to funding and personnel, establishing battery electric and plug in hybrid vehicle and infrastructure programs, with funding and incentives equal to those of Hydrogen Fuel Cell infrastructure or vehicle programs.

3) ENHANCED AT-PZEVs - these enhanced vehicles are incredibly promising, both for their ZEV-enabling properties, and for the near-term air quality benefits. Several automakers have expressed their enthusiasm for these vehicles, with at least two models committed for production during Phase II. However, these vehicles should not come at the expense of ZEVs, and merit requirements of their own to support their commercialization.

a) PHEV DEFINITION METRICS- We support the Board’s action to allow additional credits for more capable Plug-in Hybrid Vehicles (PHEV) especially using more real word metrics such as the US06 driving cycle.

4) BACKFILLING- Plug In America opposes the use of Enhanced AT-PZEVs to backfill for any portion of the ZEV requirement and prefers to see separate, appropriate requirements created for ZEVs and Enhanced AT-PZEVs.

5) PUBLIC FLEET REQUIREMENTS - while there is certainly retail demand for ZEV and near-ZEV cars, fleets can play a significant role in assuring a market for automakers compelled to build them, as well as in producing air quality results for the areas in which they’re deployed. We therefore encourage CARB to consider requiring public fleets to purchase ZEVs and Enhanced AT- PZEVs when available

and where practical for their intended use. However, because these vehicles are purchased with public funds, we propose that fleets must choose the most economical vehicle technology (lifetime cost) for a given air quality benefit.

6) CREATIVE ZEV ECONOMICS - It makes sense for staff to consider the economic impact of the regulation on the automaker, however, comparing 2003 battery cost estimates and projected 2012-2014 fuel cell costs to determine the incremental cost of each technology (ISOR, pg. 33) paints an inaccurate economic scenario that biases the reader against plug-in vehicles. We are watching this trend with increasing alarm since these flawed assumptions are appearing in a variety of documents relating to various ARB regulations. The two technologies need to be evaluated on an even economic playing field.

7) TRAVEL PROVISION – Plug In America continues to oppose any travel provision in combination with decreasing the number of ZEVs required in any phase. We are very aware of how this issue has been “gamed” in the past, with vehicles being removed from service after a few years and placed in another state for credit. However, sanctioning the idea of building fewer ZEVs not only for one state, but eleven, will not lead to the market-building volume that we need.

8) CREDIT TRANSPARENCY – Plug In America fully supports the Board’s action to make the ZEV credit bank fully transparent including trades beginning in 2010.

9) EFFICIENCY MATTERS – Vehicles in the ZEV Program should be defined and credited based on their overall energy efficiencies using a wells-to-wheels or lifecycle analysis. We encourage the Board to look toward the future by considering overall efficiency today.

There are certainly positive changes in the Board’s final decision vs. the ISOR but you are missing a truly unique and timely opportunity. If we act now, we can really make a difference. Waiting until 2015 and requiring few vehicles on the road will not accomplish what we need and that will only serve to reduce the long-term effectiveness of CARB and hurt the State of California. We encourage the Board to reconsider the above changes to make the regulation even simpler and more results-oriented. Only when ZEVs are available in showrooms will this Program truly be a success.

Thank you for your time,

A handwritten signature in black ink, appearing to read "Jay Friedland". The signature is fluid and cursive, with a large initial "J" and "F".

Jay Friedland  
Legislative Director  
Plug In America