

## TITLE 13. CALIFORNIA AIR RESOURCES BOARD

### NOTICE OF PUBLIC HEARING TO CONSIDER ADOPTION OF THE 2008 AMENDMENTS TO THE CALIFORNIA ZERO EMISSION VEHICLE REGULATION

The Air Resources Board (the Board or ARB) will conduct a public hearing at the time and place noted below to consider adoption of amendments to the California Zero Emission Vehicle (ZEV) regulation.

DATE: March 27, 2008

TIME: 9:00 a.m.

PLACE: California Environmental Protection Agency  
Air Resources Board  
Byron Sher Auditorium, Second Floor  
1001 "I" Street  
Sacramento, CA 95814

This item will be considered at a two-day meeting of ARB, which will commence at 9:00 a.m., March 27, 2008, and may continue at 8:30 a.m., March 28, 2008. This item may not be considered until March 28, 2008. Please consult the agenda for the meeting, which will be available at least 10 days before March 27, 2008, to determine the day on which this item will be considered.

If you have a disability-related accommodation need, please go to <http://www.arb.ca.gov/html/ada/ada.htm> for assistance or contact the ADA Coordinator at (916) 323-4916. If you are a person who needs assistance in a language other than English, please contact the Bilingual Coordinator at (916) 324-5049. TTY/TDD/Speech-to-Speech users may dial 7-1-1 for the California Relay Service.

### **INFORMATIVE DIGEST OF PROPOSED ACTION AND POLICY STATEMENT OVERVIEW**

**Sections Affected:** Proposed amendments to title 13, California Code of Regulations (CCR), sections 1900, 1961, 1962, and 1962.1 and the incorporated "California Exhaust Emission Standards and Test Procedures for 2005 and Subsequent Model Zero-Emission Vehicles, and 2001 and Subsequent Model Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck, and Medium-Duty Vehicle Classes;" and the adoption of a new title 13, CCR, section 1962.1 and the incorporated "California Exhaust Emission Standards and Test Procedures for 2009 and Subsequent Model Zero-Emission Vehicles."

## **Background**

In 1990, pursuant to authority granted in Health and Safety Code division 26, part 5, chapter 1, section 43000 et seq., the California Air Resources Board adopted a far-reaching program to significantly reduce the environmental impact of light-duty vehicles through the introduction of zero emission vehicles (ZEVs) into the California fleet. The original program required that at least 2 percent, 5 percent and 10 percent of new vehicles have no direct emissions by 1998, 2001 and 2003, respectively. Although the ZEV program did not require a specific technology, the expectation in the early 1990's was that the requirements would be met through the introduction of battery electric vehicles (BEVs).

The ZEV program has been changed four times since its inception – in 1996, 1998, 2001, and most recently in 2003. While program requirements have been changed to reflect the status of technology, the original objective has not changed. California continues to maintain a strong commitment to the commercialization of zero emission passenger cars and light-duty trucks.

In response to program requirements, automakers have developed and demonstrated a limited number of ZEVs to evaluate their technological and commercial feasibility. In addition, automakers have commercialized near-zero emission advanced technology vehicles that support ZEV program goals and significantly reduce vehicle emissions.

The program was last modified in 2003 to address the state of technology and to focus research and development on fuel cell vehicle technology. Given the uncertainty in the pace of technology development, the Board directed that an independent panel of experts be convened in the 2006 to 2007 time frame to report on the status of ZEV technologies and their readiness for commercialization.

The panel's findings were presented to the Board in May 2007. Subsequent to presentations by the staff and panel, and after hearing public comment, the Board adopted Resolution 07-18 directing ARB staff to return to the Board with proposed changes that address the state of technologies needed to meet the regulation. The Resolution affirmed the Board's support for the program and emphasized that any changes proposed must strengthen the overall objectives of the program.

The panel's report has been central to ARB's assessment of the state of technology. The report, in combination with data presented at an ARB ZEV Technology Symposium held in September 2006 and other information collected, provides the technical basis for the proposed amendments in this rulemaking.

## **Description of the Proposed Regulatory Action**

In response to the Board's direction, and in consideration of the issues related to the commercialization of ZEV technologies, staff proposes to amend the program to reflect the state of technologies and to create an opportunity for new ZEV enabling vehicle technologies to contribute to compliance. In proposing these amendments, staff strives

to sustain the objective of commercialization of ZEV technologies while recognizing the current state of the technologies and the cost implications related to their development.

Utilizing the current regulatory framework that prompts commercialization incrementally through ZEV production phase-in periods and through a credit structure for the production of increasingly more advanced technologies, staff proposes amendments in the following areas:

*Creation of the “New Path” for 2012.* Combine the Base Path and Alternative Path requirements into a New Path where the ZEV obligation and options to use other vehicle types are expressed as annual percentage of sales. While the Phase III target of 25,000 vehicles is retained, up to 90 percent of the pure ZEV requirement may be met by producing vehicles from a new category called “enhanced” Advanced Technology Partial ZEVs (AT PZEVs). Enhanced AT PZEVs<sup>1</sup> are AT PZEVs with credit allowances<sup>2</sup> totaling more than 1.0 that use fuels that can be used in a ZEV, like electricity or hydrogen. Example Enhanced AT PZEVs are plug-in hybrid electric vehicles (PHEVs) and hydrogen internal combustion engine vehicles. Because vehicles in this category are granted less credit per vehicle than a pure ZEV, manufacturers choosing this option will have to produce a greater number of vehicles than if they complied without this option. The proposed changes act to simplify the regulation while maintaining the overall outcome of the Alternative Path.

*Create New ZEV Types.* Create new ZEV Types to enable specific vehicle market sector opportunities with both mid range ZEVs and higher range ZEVs.

*Establish Carry-Forward and Carry-Back provisions for ZEV credits.* Modify the credit provisions under the proposed “New Path” to be consistent with the existing provisions contained in the Alternative Path which allow compliance over a three year window. Additionally, modify the way credits may be used after a specified time to avoid the difficulty experienced now with forecasting regulatory outcomes because of amassed credits.

*Provide More Equal Treatment of Battery Electric Vehicles.* Eliminate the cap on the use of full-function and city battery electric vehicles within the Alternative Compliance Path. Change the ratio for substitution for each vehicle type to be consistent with the credits earned by each ZEV type.

*Adjust Credits for AT PZEVs.* Modify the AT PZEV requirements, primarily to address PHEVs. The proposed amendments include addressing deployment of “blended” HEVs through an equivalent all electric range (EAER) credit, adjusting the credits for advanced componentry and fuel cycle emissions, and other conforming changes.

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<sup>1</sup> In discussion papers and conversations with stakeholders, this classification of vehicles has been referred to as Silver+.

<sup>2</sup> Allowances are part of a vehicle’s credit calculation and credits are the sum of the allowances given.

*Increase Credit for Neighborhood Electric Vehicles.* Double the existing credit for neighborhood electric vehicles (NEV) to 0.3 credits per vehicle to reflect the vehicle's positive environmental benefits but limited functionality compared with full function battery or fuel cell EVs.

*Extend the "Travel" Provision.* Extend the provision that allows certain ZEVs placed in any state that has adopted California's ZEV program to count towards California's ZEV requirement through 2017. Include Type I and II ZEVs within the provision but sunset the application of this provision for these vehicles in 2014.

*Modify Transition for Intermediate Automakers.* Create a ramp up period of six years for intermediate volume manufacturers who are transitioning to large volume status. During this time, an automaker would be allowed to meet their ZEV requirements for increasing numbers of PZEVs of which a percentage must be AT PZEVs.

*Public Availability of ZEV Credit Data.* Require that all production data be publicly available and release ZEV credit bank balance information by a specified date.

*Additional Conforming and Technical Amendments.* Amend the ZEV regulations throughout to make additional modifications that provide for consistency with the above areas and that provide additional technical changes to improve the flexibility and the utility of the regulations. All amendments and additions to the regulations are described in detail in the Staff Report: Initial Statement of Reasons (ISOR) for the proposed regulatory action, whose availability is described below.

## **COMPARABLE FEDERAL REGULATIONS**

Currently, there are no comparable federal regulations mandating auto manufacturers to produce PZEVs, AT PZEVs, and/or ZEVs.

## **AVAILABILITY OF DOCUMENTS AND AGENCY CONTACT PERSONS**

The Board staff has prepared a Staff Report: Initial Statement of Reasons (ISOR) for the proposed regulatory action, which includes a summary of the economic and environmental impacts of the proposal. The report is entitled: "Initial Statement of Reasons for Rulemaking, 2008 Proposed Amendments to the California Zero Emission Vehicle Program Regulations."

Copies of the ISOR and the full text of the proposed regulatory language, in underline and strikethrough format to allow for comparison with the existing regulations, may be accessed on the ARB's web site listed below, or may be obtained from the Public Information Office, Air Resources Board, 1001 I Street, Visitors and Environmental Services Center, 1<sup>st</sup> Floor, Sacramento, CA 95814, (916) 322-2990 at least 45 days prior to the scheduled hearing on March 27, 2008.

Upon its completion, the Final Statement of Reasons (FSOR) will be available and copies may be requested from the agency contact persons in this notice, or may be accessed on the web site listed below.

Inquiries regarding the substance of the proposed regulatory action may be directed to the designated agency contact persons, Dr. Elise Keddie, Manager, ZEV Implementation Section at (916) 323-8966 or by e-mail at [ekeddie@arb.ca.gov](mailto:ekeddie@arb.ca.gov) or Mr. Mark Williams, Air Pollution Specialist, at (916) 327-5610 or by e-mail at [mwilliam@arb.ca.gov](mailto:mwilliam@arb.ca.gov).

Further, the agency representative and designated back-up contact persons to whom nonsubstantive inquiries concerning the proposed administrative action may be directed are Ms. Alexa Malik, Board Administration & Regulatory Coordination Unit, (916) 322-4011, or Ms. Amy Whiting, Regulations Coordinator, (916) 322-6533. The Board has compiled a record for this rulemaking action, which includes all the information upon which the proposal is based. This material is available for inspection upon request to the contact persons.

This notice, the ISOR, and all subsequent regulatory documents, including the FSOR, when completed, are available on the ARB Internet site for this rulemaking at <http://www.arb.ca.gov/regact/2008/zev2008/zev2008.htm>.

### **COSTS TO PUBLIC AGENCIES AND TO BUSINESSES AND PERSONS AFFECTED**

The determinations of the Board's Executive Officer concerning the costs or savings necessarily incurred in reasonable compliance with the proposed regulations are presented below.

Pursuant to Government Code sections 11346.5(a)(5) and 11346.5(a)(6), the Executive Officer has determined that the proposed regulatory action would not create costs or savings to any state agency or in federal funding to the state, costs or mandate to any local agency or school district whether or not reimbursable by the state pursuant to part 7 (commencing with section 17500), division 4, title 2 of the Government Code, or other nondiscretionary cost or savings to state or local agencies.

In developing this regulatory proposal, the ARB staff evaluated the potential economic impacts on representative private persons or businesses. The ARB is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed action.

The Executive Officer has made an initial determination that the proposed regulatory action will not have a significant statewide adverse economic impact directly affecting businesses, including the ability of California businesses to compete with businesses in other states, or on representative private persons.

In accordance with Government Code section 11346.3, the Executive Officer has determined that the proposed regulatory action would not affect the creation or elimination of jobs within the State of California, the creation of new businesses or elimination of existing businesses within the State of California, or the expansion of businesses currently doing business within the State of California. A detailed assessment of the economic impacts of the proposed regulatory action can be found in the ISOR.

The Executive Officer has also determined, pursuant to title 1, CCR, section 4, that the proposed regulatory action may affect small businesses. Any business involved in manufacturing, purchasing or servicing passenger cars and light-duty trucks could be affected by the proposed amendments. Also affected are businesses that supply parts for these vehicles. Some affected businesses may be small businesses. California accounts for only a small share of total nationwide motor vehicle and parts manufacturing. As discussed below, the Executive Officer has determined that the proposed regulatory action will not have a significant cost impact on directly affected persons or businesses.

The cost savings estimated to result from the proposed amendments for model year 2012 through 2014 are \$1.3 billion annually, dependent on compliance strategies, due to the reduction in the number of Type III ZEVs required to be produced, and the lower cost of the Enhanced AT PZEVs that would be produced in their place.

Before taking final action on the proposed regulatory action, the Board must determine that no alternative considered by the agency would be more effective in carrying out the purpose for which the action is proposed or would be as effective as and less burdensome to affected private persons or businesses than the proposed action.

### **SUBMITTAL OF COMMENTS**

The public may present comments relating to this matter orally or in writing at the hearing, and in writing or by e-mail before the hearing. To be considered by the Board, written submissions not physically submitted at the hearing must be received no later than **12:00 noon, March 26, 2008**, and addressed to the following:

- Postal Mail: Clerk of the Board, Air Resources Board  
1001 I Street, Sacramento, California 95814
- Electronic mail: <http://www.arb.ca.gov/listpub/comm/bclist.php>
- Facsimile submittal: (916) 322-3928

Please note that under the California Public Records Act (Government Code section 6250 et seq.), your written and oral comments, attachments, and associated contact information (e.g., your address, phone, email, etc.) become part of the public

record and can be released to the public upon request. Additionally, this information may become available via Google, Yahoo, and any other search engines.

The Board requests but does not require that 30 copies of any written statement be submitted and that all written statements be filed at least 10 days prior to the hearing so that ARB staff and Board Members have time to fully consider each comment. The board encourages members of the public to bring to the attention of staff in advance of the hearing any suggestions for modification of the proposed regulatory action.

### **STATUTORY AUTHORITY AND REFERENCES**

This regulatory action is proposed under that authority granted in Health and Safety Code, sections 39500, 39600, 39601, 43013, 43018, 43018.5, 43101, 43104, and 43105; and Government Code section 6253.4. This action is proposed to implement, interpret and make specific sections 39002, 39003, 39667, 43000, 43009.5, 43013, 43018, 43018.5, 43100, 43101, 43101.5, 43102, 43104, 43105, 43106, 43107, 43204, 43205, 43205.5, and 43211, Health and Safety Code; and section 6253.4, Government Code.

### **HEARING PROCEDURES**

The public hearing will be conducted in accordance with the California Administrative Procedure Act, title 2, division 3, part 1, chapter 3.5 (commencing with section 11340) of the Government Code.

Following the public hearing, the Board may adopt the regulatory language as originally proposed, or with non substantial or grammatical modifications. The Board may also adopt the proposed regulatory language with other modifications if the text as modified is sufficiently related to the originally proposed text that the public was adequately placed on notice that the regulatory language as modified could result from the proposed regulatory action; in such event the full regulatory text, with the modifications clearly indicated, will be made available to the public, for written comment, at least 15 days before it is adopted.

The public may request a copy of the modified regulatory text from the ARB's Public Information Office, Air Resources Board, 1001 I Street, Visitors and Environmental Services Center, 1<sup>st</sup> Floor, Sacramento, CA 95814, (916) 322-2990.

CALIFORNIA AIR RESOURCES BOARD

/s/

James Goldstene  
Executive Officer

Date: January 29, 2008