

CALIFORNIA AIR RESOURCES BOARD

NOTICE OF PUBLIC MEETING TO CONSIDER AN INFORMATIONAL REPORT ON ZERO-EMISSION VEHICLE (ZEV) CREDITS FOR SUPPLEMENTAL ACTIVITIES: STATIONARY FUEL CELLS, HYDROGEN INFRASTRUCTURE AND TRANSPORTATION SYSTEM CREDITS.

The Air Resources Board (ARB or Board) will conduct a public meeting at the time and place noted below to consider an informational report on ZEV credits for supplemental activities including stationary fuel cells, hydrogen infrastructure, and transportation systems.

DATE: September 25, 2003
TIME: 9:00 a.m.
PLACE: California Environmental Protection Agency
Air Resources Board
Auditorium, Second Floor
1001 I Street
Sacramento, California 95814

This item will be considered at a two-day meeting of the Board, which will commence at 9:00 a.m., September 25, 2003, and may continue at 8:30 a.m., September 26, 2003. This item may not be considered until September 26, 2003. Please consult the agenda for the meeting, which will be available at least ten days before September 25, 2003, to determine the day on which this item will be considered.

If you have special accommodation or language needs, please contact ARB's Clerk of the Board at (916) 322-5594, or send an email to sdorais@arb.ca.gov as soon as possible. Text Telephone/Telecommunications Device for the Deaf/Speech-to-Speech users may dial 7-1-1 for the California Relay Service.

OVERVIEW

At a public hearing on April 24, 2003, the Board considered and adopted amendments to the ZEV regulation. The Board also directed staff through Resolution 03-4 to report back on providing ZEV credits for stationary fuel cells, hydrogen infrastructure and station car/carsharing projects. These supplementary activities hold the potential to enhance the commercial success of fuel cell and battery electric ZEVs. The report to the Board reviews the role the ZEV regulation could play in promoting these activities and provides recommendations on whether changes to the regulations are appropriate.

STAFF FINDINGS AND RECOMMENDATIONS

Stationary Fuel Cells

Bringing fuel cell vehicles to commercial success will require reduced cost, improvements in vehicle fuel cell performance and durability, as well as vehicle system integration. The use of mobile source fuel cells in stationary applications has the potential to foster overall fuel cell development through increased fuel cell production. Specifically, increased production can foster development and cost reduction of materials and manufacturing as well as providing additional operating experience. However, stationary fuel cells do not address all of the challenges faced by fuel cell vehicles. The benefits to motor vehicle fuel cell development are limited. Additionally, staff is concerned about the precedent of mingling stationary and mobile activities for regulatory compliance. The integrity of ARB's motor vehicle regulations needs to be carefully weighed when considering whether or not to grant stationary fuel cells ZEV credits.

Staff is hesitant to recommend ZEV credit for stationary fuel cells. However, if the Board chooses to award such credits, staff believes the credits should:

- Limit credit to Advanced Technology Partial Zero-Emission Vehicle (silver) rather than pure ZEV (gold)
- Limit credit to fuel cell stack technology used in motor vehicles
- Limit credit to placements in California
- Cap credit generation so as to not overwhelm the ZEV program
- Sunset availability of credit after 2008
- Continue only if the Expert Review Panel determines they are still ZEV enabling

Hydrogen Infrastructure

The development of hydrogen infrastructure to support deployment of fuel cell ZEVs is a critical challenge to the successful implementation of the ZEV regulation. The ready availability of hydrogen fuel will be important to public acceptance of fuel cell vehicles. In addition, the continued development of hydrogen production from renewable or clean sources will be needed to achieve well-to-wheel emission reductions. It is expected that hydrogen infrastructure will be deployed by energy companies. Since the ZEV regulation is a requirement for auto manufacturers, providing ZEV credits for refueling stations targets the wrong sector. For this reason, staff recommends against the near-term allowance of ZEV credit for any fueling infrastructure deployment. Instead, staff recommends that the Board take the following steps to foster the development of hydrogen infrastructure:

- Rely on the existing Clean Fuels Outlet Program, making whatever adjustments are needed for hydrogen appliances
- Continue working closely with the California Fuel Cell Partnership to accelerate the

development of vehicle refueling interface standards as well as codes and standards that govern hydrogen storage, transport, and dispensing facilities.

- Explore using the California Energy Commission/Caltrans/ARB Transportation System Partnership to create a California Hydrogen Corridor as an appropriate mechanism to support stations along interstate highways.

Transportation Systems

Transportation systems, in the form of station car or car sharing programs, are valuable to ARB's efforts to improve air quality. Coupled with use of ZEV regulation vehicles, such programs not only improve air quality, they support commercialization of ZEVs. Staff recommends development of regulations that do not increase the value of the credits for transportation systems, but do expand the types of projects that are eligible for these credits. Staff's specific proposals are as follows:

- Make NEVs eligible for transportation system credit, but do not allow such credit to be applied to the "alternative path" fuel cell obligation
- Allow other, non-NEV related transportation system credit to count on the alternative path, but cap those credits to the 50 percent battery electric vehicle portion of the ZEV obligation.

CONCLUSION AND NEXT STEPS

Providing regulatory incentives in the form of ZEV credits for the supplementary activities described in this report may provide benefits to ZEV development and deployment. However, care must be taken to avoid providing incentives where no incentive is warranted, and to protect the balanced vehicle production requirements established in the regulation to achieve commercialization.

If the Board decides that additional ZEV credits are appropriate, staff would begin a series of workshops and meetings with affected parties to develop actual regulatory language. The final regulatory proposal would be published for 45-day public comment and would be brought to the Board for consideration by spring 2004.

Availability of Documents and Agency Contact Person

ARB staff will present a written informational report at the meeting. Copies of the report entitled "Zero-Emission Vehicles (ZEV) Credits for Supplementary Activities: Stationary Fuel Cells, Hydrogen Infrastructure, Transportation System Credits," may be obtained from the Board's Public Information Office, 1001 "I" Street, 1st Floor, Visitors and Environmental Services Center, Sacramento, California 95814, (916) 322-2990, at least 10 days prior to the scheduled meeting (September 25, 2003). The report may also be obtained from ARB's Internet site at,

<http://www.arb.ca.gov/msprog/zevprog/2003rule/2003rule.htm>.

Interested members of the public may present comments orally or in writing at the meeting, and in writing or by e-mail before the meeting. To be considered by the Board, written comments submissions not physically submitted at the meeting must be received no later than 12:00 noon, September 24, 2003, and addressed to the following:

Postal mail is to be sent to:

Clerk of the Board
Air Resources Board
1001 "I" Street, 23rd Floor
Sacramento, California 95814

Electronic mail is to be sent to zevsp03@listserv.arb.ca.gov and received at ARB **no later than 12:00 noon, September 24, 2003.**

Facsimile submissions are to be transmitted to the Clerk of the Board at (916) 322-3928 and received at ARB **no later than 12:00 noon, September 24, 2003.**

The Board requests, but does not require, 30 copies of any written submission.

Further inquiries concerning the substance of this matter should be directed to Mr. Gerhard Achtelik, Air Pollution Specialist, 916-323-8973, ZEV Implementation Section, On-Road Controls Branch, Mobile Source Control Division, P.O. Box 2815, Sacramento, California 95812.

No amendments to the ZEV regulation will be considered or adopted by the Board at this meeting.

CALIFORNIA AIR RESOURCES BOARD

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Catherine Witherspoon
Executive Officer

Date: September 18, 2003

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Web-site at www.arb.ca.gov.