

State of California
AIR RESOURCES BOARD

Notice of Public Availability of Modified Text

MINOR MODIFICATIONS TO THE ZERO EMISSION VEHICLE REGULATION

Public Hearing Dates: October 23, 2014 and May 21, 2015
Public Availability Date: April 20, 2015
Deadline for Public Comment: May 5, 2015

At its October 23, 2014 public hearing, the Air Resources Board (ARB or Board) heard testimony on proposed amendments to California Code of Regulations, title 13, sections 1962.1 and 1962.2, and proposed amendments to “California Exhaust Emission Standards and Test Procedures for 2009 through 2017 Model Zero-Emission Vehicles and Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck, and Medium-Duty Vehicle Classes,” as last amended May 30, 2014, and “California Exhaust Emission Standards and Test Procedures for 2018 and Subsequent Model Zero-Emission Vehicles and Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck, and Medium-Duty Vehicle Classes,” as last amended May 30, 2014. These regulations relate to the Board’s Zero Emission Vehicle (ZEV) program, which requires auto manufacturers to develop and commercialize ZEV technologies. The amendments were originally proposed in the Staff Report released for public review on September 2, 2014.

The Board did not take action on the proposal at the October 2014 Board hearing. Comments received prior to, and during, the public hearing are reflected in proposed modifications in this Notice. The changes are described below and are incorporated in the modified regulatory text shown in Attachments A and B to this Notice.

All regulatory documents for this rulemaking are available online at the following ARB website: <http://www.arb.ca.gov/regact/2014/zev2014/zev2014.htm>

Modified Text Being Made Available for Public Comment

The text of the modified regulatory language is shown in Attachments A, and B. The originally proposed regulatory language is shown in ~~striketrough~~ to indicate deletions and underline to indicate additions. New deletions and additions to the proposed language that are made public with this notice are shown in ~~double striketrough~~ and double underline format, respectively.

In the Final Statement of Reasons, staff will respond to all comments received on the record during all the comment periods. The Administrative Procedure Act requires that staff respond to comments received regarding any proposed modifications to regulatory text noticed. Therefore, for this Notice, staff will only address comments that are

responsive to the modifications proposed in this Notice, documents added to the record, or the changes detailed in Attachments A, and B.

Summary of Proposed Modifications

At the October 23, 2014 hearing, staff presented proposed amendments to the ZEV Regulation. There were five major components. Although staff is only proposing to modify two of the five components, all five are summarized here, in the same order as in the Initial Statement of Reasons (ISOR) for consistency.

IVM DEFINITION (REVENUE) PROVISION

Background

At the October 2014 Board hearing, ARB staff proposed that an Intermediate Volume manufacturer (IVM) not be subject to the large volume manufacturer (LVM) requirements until it exceeded both the 20,000 vehicle California production threshold and a \$40 Billion global automotive revenue threshold that more accurately reflected an automaker's ability to conduct advanced technology vehicle research and development (R&D). ARB staff is proposing to retain this provision, consistent with the general support indicated by Board members and other stakeholders.

However, ARB is proposing language to clarify that the revenue test is based on "automotive-related global revenue." This change responds to IVM suggestions that ARB revenue evaluations not consider revenue from an automaker's non-automotive units since this revenue is not available to the IVM for automotive purposes such as research and development. ARB staff agreed that this clarification is appropriate.

Proposed Language Changes

1. Add an "Automotive-related global revenue" definition to Section B.1 of California Exhaust Emission Standards and Test Procedures for 2018 and Subsequent Model Zero-Emission Vehicles and Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck and Medium-Duty Vehicle Classes.
2. Insert the phrase "automotive-related" in front of the phrase "global revenues" in paragraph three of section 1962.2(b)(7)(A).

LEAD TIME PROVISION

Background

At the October 2014 Board hearing, ARB staff proposed that an IVM comply with the ZEV requirements for LVMs beginning with the fifth consecutive three-year production volume average in excess of 20,000 vehicles. The additional two consecutive three-year production volume averages recognize the typical product development time frame and are consistent with the lead-time provisions established for those IVMs that transitioned to LVM status prior to 2018 in the ZEV Regulation, as it existed prior to the 2012 amendments.

Although some concerns were expressed about the proposal to provide IVMs additional lead time before they need to comply with the LVM requirements, ARB is proposing to retain this provision as it provides IVMs additional flexibility in bringing pure ZEV products to market prior to becoming subject to the LVM requirements.

ARB is also proposing language to clarify that: (1) the lead time clock does not run when automotive-related global revenue is less than or equal to \$40 Billion, and (2) the first three-year production volume average that can count toward transition to LVM requirements is the 2015 through 2017 model year period that corresponds with the 2018 reporting year.

Proposed Language Changes

3. Insert language in paragraphs two and four of section 1962.2(b)(7)(A) clarifying that the first three-year production volume average that can count toward an IVM's transition to LVM requirements is the 2015 through 2017 model year period, which corresponds with the 2018 reporting year.
4. Add the lead time start language described in item 3 above to Section C.2.7(a) of California Exhaust Emission Standards and Test Procedures for 2018 and Subsequent Model Zero-Emission Vehicles and Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck and Medium-Duty Vehicle Classes to make it consistent with the changes made in Section 1962.2(b)(7)(A).
5. Insert language in paragraph three of section 1962.2(b)(7)(A) clarifying that the three-year production volume average corresponding to each fiscal year in the 2018 through 2020 time frame does not apply to the five consecutive three-year production volume averages necessary for transition to LVM requirements if the given fiscal year automotive-related revenue does not exceed \$40 Billion.
6. Add the lead time clock language described in item 5 above to Section C.2.7(a) of California Exhaust Emission Standards and Test Procedures for 2018 and Subsequent Model Zero-Emission Vehicles and Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck and Medium-Duty Vehicle Classes to make it consistent with the changes made in Section 1962.2(b)(7)(A).

ZEV PERCENTAGE REQUIREMENT PROVISION

Background

At the October 2014 Board hearing, ARB staff proposed a ZEV credit obligation for IVMs equivalent to the entire LVM optional TZEZV obligation plus one-fifth of the LVM pure ZEV obligation. The proposal addressed a consequence of prior regulatory modifications aimed at providing flexibility to IVMs. Specifically, the ZEV Regulation allows an IVM to meet its pre-2018 model year ZEV obligation solely with partial zero emission allowance vehicles (PZEV). The regulation requires an IVM to begin delivering ZEVs in 2018 and subsequent model years. However in recognition of the lower number of vehicle models offered by the typical IVM and its lesser R&D capabilities in comparison with LVMs, the ZEV Regulation allows an IVM to meet its entire ZEV obligation with transitional ZEVs (TZEZV). The consequence of this allowance is that IVMs would have to deliver twice as many advanced technology vehicles, as a percentage requirement, as an LVM.

The Board and many stakeholders were especially concerned about this provision because it had the greatest potential to reduce the number of ZEVs delivered to California. Members of the Board expressly stated that the purpose of the ZEV Program is to get vehicles on the road. Any proposal that would allow manufacturers to decrease the number of vehicles delivered would send the inappropriate signals to manufacturers and weaken the regulation's fundamental purpose. ARB staff is now proposing that the ZEV Percentage Requirement remain as adopted in 2012 and be revisited as part of the ZEV mid-term review process in 2016.

Proposed Language Changes

7. Modify section 1962.2(b)(1)(A) to delete the table inserted as part of the October 2014 rulemaking and instead insert a table with requirements equivalent to those that existed in this section prior to the proposed amendments.
8. Modify Section C.2.1(a) of California Exhaust Emission Standards and Test Procedures for 2018 and Subsequent Model Zero-Emission Vehicles and Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck and Medium-Duty Vehicle Classes to make it consistent with the changes made in Section 1962.2(b)(1)(A) in item 7 above.

POOLING PROVISION

Background

At the October 2014 Board hearing, ARB staff proposed to change the Section 177 State optional compliance path to provide additional flexibility for IVMs. Specifically, the proposal allows IVMs to: (1) place extra ZEVs in Section 177 States in the two model years prior to the start of their LVM requirements should they transition into LVM status, (2) have two additional years to place these extra ZEVs, and (3) pool TZEZV credits to

meet their total annual percentage obligations in each Section 177 State. ARB staff is proposing to retain this provision, consistent with the general support indicated by Board members and other stakeholders (including the Section 177 States).

ARB is proposing language to establish an opt-in sunset date for IVMs that choose the optional Section 177 State compliance path. Section 1962.1(d)(5)(E) already contains an opt-in sunset date for model years 2009 through 2017. However, the opt-in sunset date was inadvertently omitted in the 2018 and subsequent model years language.

Proposed Language Changes

9. Modify Section 1962.2(d)(5)(E)2.a. to add a September 1, 2016 opt-in sunset date.
10. Modify Section C.4.5(e)(1)(A) of California Exhaust Emission Standards and Test Procedures for 2018 and Subsequent Model Zero-Emission Vehicles and Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck and Medium-Duty Vehicle Classes to make it consistent with the changes made in Section 1962.2(d)(5)(E)2.a. in item 9 above.

CREDIT DEFICIT PROVISION

Background

At the October 2014 Board hearing, ARB staff proposed to allow automakers up to three model years to make up ZEV credit deficits. This proposal is consistent with the NMOG credit deficit provisions within the Advanced Clean Cars Program regulations. It also responds to the greater challenge faced by IVMs because they are in a less advanced stage of development as compared to LVMs, have fewer vehicles in the marketplace and fewer banked ZEV credits to rely upon.

However, ARB is concerned about LVMs developing sizable or insurmountable deficits under the three-year proposal. Consequently, ARB staff is now proposing to exclude LVMs from the three-year deficit provisions. Instead, LVMs would continue to be subject to the existing one-year deficit provisions.

Proposed Language Changes

11. Modify Section 1962.2(g)(7)(A) to bifurcate the credit deficit requirements so that LVMs continue to be allowed a one-year make up period while IVMs may have up to three years to make up the deficit. Clarify that IVMs may only be allowed a one-year make up period in the event that no ZEV or TZEV was produced and delivered for sale in California in the model year by an automaker.
12. Add the ZEV credit deficit language described in item 11 above to Section C.7.7(a) of California Exhaust Emission Standards and Test Procedures for 2018 and Subsequent Model Zero-Emission Vehicles and Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck and Medium-Duty Vehicle Classes to make it consistent with the changes made in Section 1962.2(g)(7)(A).

OTHER PROPOSED MODIFICATIONS

Background

ARB proposes correction of several incorrect references. Beyond the specific corrections listed below, ARB has made additional modifications to correct grammar and spelling. All of these changes are non-substantive.

Proposed Language Changes

13. Section 1962.2(c)(3)(A)1 references section G.7.5 of California Exhaust Emission Standards and Test Procedures for 2018 and Subsequent Model Zero-Emission Vehicles and Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck and Medium-Duty Vehicle Classes. The section should have referenced section G.7.3.
14. Section 1962.2(d)(5)(E)2.b references sections 1962.2(d)(5)(E)2.a.i and 1962.2(d)(5)(E)2.a.ii. The section should have referenced 1962.2(d)(5)(E)2.b.i and 1962.2(d)(5)(E)2.b.ii., respectively.
15. Section 1962.2(i)(16) references sections 1962.2(c)(3)(D) and 1962.2(c)(3)(E). The section should have referenced 1962.2(c)(3)(A).
16. Harmonize the TZEV definition language in Section B.1 of California Exhaust Emission Standards and Test Procedures for 2018 and Subsequent Model Zero-Emission Vehicles and Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck and Medium-Duty Vehicle Classes with that in section 1962.2(i)(16).
17. Section C.3.3(a)(1) of California Exhaust Emission Standards and Test Procedures for 2018 and Subsequent Model Zero-Emission Vehicles and Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck and Medium-Duty Vehicle Classes references section G.7.5. The section should have referenced section G.7.3.
18. Section C.4.5(e)(2)(B) of California Exhaust Emission Standards and Test Procedures for 2018 and Subsequent Model Zero-Emission Vehicles and Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck and Medium-Duty Vehicle Classes references sections C.4.5(e)(2)(A)i and C.4.5(e)(2)(A)ii. The section should have referenced C.4.5(e)(2)(B)i and C.4.5(e)(2)(B)ii., respectively.

ENVIRONMENTAL ANALYSIS

These proposed modifications do not alter implementation of the ZEV regulation in any way that affects the conclusions of the environmental analysis included in the Staff Report released for public review on September 2, 2014. Specifically:

- The proposed Revenue, Lead-Time, and Pooling provisions remain as proposed at the October 2014 Board hearing albeit with non-substantive clarifying language.
- The proposed Credit Recovery provision has been modified to preclude large volume manufacturers from being eligible for an additional two years of credit recovery as originally proposed. This decreases the likelihood that these

manufacturers will fall behind on their ZEV placements and is thus more protective of the environment than the language proposed at the October 2014 Board hearing.

- The proposed provision to reduce the ZEV Percentage Requirement is removed. Thus, the ZEV percentage requirement provisions remain as described within the 2012 ZEV Regulation. With the previously proposed reduction of the ZEV percentage requirement removed, the proposal with this modification is as protective of the environment as the 2012 regulatory language which was analyzed within the 2012 certified ACC Environmental Analysis (EA).

The other proposed modifications are primarily clarifying in nature, consisting of a new definition, reference, grammar, and spelling corrections that do not alter the compliance responses to the regulation.

In summary, the proposed modifications in this Notice do not alter the compliance responses to the ZEV regulation in any way that alters the analysis and conclusions of the environmental analysis included in the September 2014 Staff Report, and therefore, no additional environmental analysis or recirculation is required.

ECONOMIC IMPACTS ANALYSIS

From the standpoint of the IVMs, four of the five provisions proposed at the October 2014, Board hearing remain unchanged. The fifth provision – reducing the ZEV Percentage Requirement – is removed, thus reverting the ZEV percentage requirements back to the existing ZEV Percentage Requirement provisions already codified within the ZEV Regulation as amended under the 2012 ACC amendments. Therefore, as the IVM ZEV credit obligation has not changed, and assuming the likely compliance scenario used within the 2012 ACC amendments, anticipated cost to the IVMs will be no different from that projected in 2012. Similarly, with the same ZEV credit obligation and likely compliance scenario, ARB staff does not expect any cost savings to accrue as a result of the modifications proposed here.

Additionally, ARB does not expect an increase in costs as a result of the non-substantive reference, grammar, and spelling changes. Such changes do not materially alter the requirements or conditions of the proposed rulemaking action.

ADDITIONAL ANALYSIS AND CONSIDERATIONS

The likely compliance scenario discussed above is not the only option available to IVMs delivering products to comply with their ZEV credit obligations. There is a broad spectrum of compliance possibilities that ranges from full compliance with fuel cell electric vehicles (FCEV) at one end to TZEV-only compliance at the other.

Since FCEVs garner greater ZEV credit, fewer vehicles would have to be delivered and costs would be lower than for the likely compliance scenario. An IVM choosing to comply solely with FCEVs would have to deliver approximately 21,000 vehicles in the

2018 through 2025 time period, whereas an IVM complying under the likely compliance scenario would be expected to deliver almost 18,000 pure ZEVs (including a small percent of FCEVs) and about 63,000 TZEVs. Expected costs for compliance solely with FCEVs could save in excess of \$100 million as compared to the expected cost under the likely compliance scenario. The tradeoff for that savings is that an IVM would have to develop, bring to market, and ramp up deliveries of a pure ZEV several years earlier than they would under the likely compliance scenario.

In contrast, TZEVs garner lesser ZEV credit, so an IVM choosing to comply in this way would have to deliver more vehicles at a greater cost. For example, if an IVM wanted to exercise the compliance flexibility offered by the proposed modifications to the IVM definition (in particular, the additional lead time provided by the revenue test), it could avoid having to deliver any of the approximately 17,800 pure ZEVs otherwise required in the 2018 through 2025 time period, but in exchange, it would have to deliver approximately 57,500 additional TZEVs above the approximately 63,000 TZEVs otherwise required. This represents an increase in total deliveries of advanced technology vehicles of almost 50 percent versus what is expected under the existing regulation. Expected costs for compliance solely with TZEVs could be approximately \$82 million more than the likely compliance scenario. The tradeoff is the IVM could take advantage of the lead time flexibility and could delay making the investments necessary to develop and bring to market a pure ZEV in the 2018 through 2025 time period.

Existing ZEV credit bank balances also factor into possible IVM compliance scenarios. Current account balances are anticipated to allow each IVM to comply through at least the 2018 model year. However, these balances are not expected to play a major role in an IVM's compliance scenario selection process.

Agency Contacts

Inquiries concerning the substance of the proposed regulation may be directed to Mr. Mark Williams at 916 327-5610 or Ms. Elise Keddie at 916 323-8974.

Public Comments

Written comments will only be accepted on the modifications identified in this notice and may be submitted by postal mail or electronic mail submittal as follows:

Postal mail: Clerk of the Board, Air Resources Board
1001 I Street, Sacramento, California 95814

Electronic submittal: <http://www.arb.ca.gov/lispub/comm/bclist.php>

Please note that under the California Public Records Act (Gov. Code § 6250 et seq.), your written and verbal 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.

In order to be considered by the Executive Officer, comments must be directed to ARB in one of the two forms described above and received by ARB by 5:00 p.m., on the deadline date for public comment listed at the beginning of this notice. Only comments relating to the above-described modifications to the text of the regulations shall be considered by the Executive Officer.

If you need this document in an alternate format or another language, please contact the Clerk of the Board at (916) 322-5594 or by facsimile at (916) 322-3928 no later than five (5) business days from the release date of this notice. TTY/TDD/Speech to Speech users may dial 711 for the California Relay Service.

Si necesita este documento en un formato alternativo u otro idioma, por favor llame a la oficina del Secretario del Consejo de Recursos Atmosféricos al (916) 322-5594 o envíe un fax al (916) 322-3928 no menos de cinco (5) días laborales a partir de la fecha del lanzamiento de este aviso. Para el Servicio Telefónico de California para Personas con Problemas Auditivos, ó de teléfonos TDD pueden marcar al 711.

Attachments