State of California
AIR RESOURCES BOARD

2014 AMENDMENTS TO THE ZERO EMISSION VEHICLE REGULATION

Resolution 15-7

May 21, 2015

Agenda Item No.: 15-4-2

WHEREAS, sections 39600 and 39601 of the Health and Safety Code authorize the Air Resources Board (ARB or Board) to adopt standards, rules and regulations and to do such acts as may be necessary for the proper execution of the powers and duties granted to and imposed upon the Board by law;

WHEREAS, in section 43000 of the Health and Safety Code, the Legislature has declared that the emission of air pollutants from motor vehicles is the primary cause of air pollution in many parts of the State, and sections 39002 and 39003 of the Health and Safety Code charge the Board with the responsibility of air pollution control from motor vehicles;

WHEREAS, sections 43013, 43101, and 43104 of the Health and Safety Code authorize the Board to adopt emission standards and test procedures to control air pollution caused by motor vehicles;

WHEREAS, section 43018(a) of the Health and Safety Code directs the Board to endeavor to achieve the maximum degree of emission reduction possible from vehicular and other mobile sources in order to accomplish the attainment of State ambient air quality standards at the earliest practicable date;

WHEREAS, section 43018(c) of the Health and Safety Code provides that in carrying out section 43018, the Board shall adopt standards and regulations that will result in the most cost-effective combination of control measures on all classes of motor vehicles and motor vehicle fuel, including but not limited to, reductions in motor vehicle exhaust and evaporative emissions, and reductions in in-use vehicular emissions through durability and performance improvements;

WHEREAS, section 39667 of the Health and Safety Code directs the Board to consider revisions to ARB's emissions standards for vehicular sources to achieve the maximum possible reduction in public exposure to substances that the Board has identified as toxic air contaminants pursuant to section 39662 of the Health and Safety Code; such regulations affecting new motor vehicles are to be based on the most advanced technology feasible for the model-year and may include, but are not limited to, the required installation of vehicular control measures on new motor vehicles;

WHEREAS, the Board's California State Implementation Plan (SIP) for ozone establishes the State strategy for attaining the ambient air quality standard for ozone in all areas of the state as required by federal law; as part of the mobile source element

developed by ARB, the SIP relies on the California Low-Emission Vehicle program to provide significant reductions of ozone precursor pollutant emissions from passenger cars and light-duty trucks; and to reach the 1997 ozone standard by the attainment date in 2023, oxides of nitrogen emissions in the greater Los Angeles region must be reduced by two-thirds—even after implementing all of the regulations in place today—with the most significant share of needed emission reductions to come from long-term advanced clean air technologies;

WHEREAS, California's passenger cars and light-duty trucks are the single largest contributor of greenhouse gas emissions in the State, producing approximately 30 percent of all such emissions;

WHEREAS, in recognition of the devastating impacts of climate change emissions on California, Governor Arnold Schwarzenegger, in June 2005, enacted Executive Order S-3-05 which established the following greenhouse gas emission targets:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emission 80 percent below 1990 levels;

WHEREAS, the Legislature has enacted the California Global Warming Solutions Act of 2009 (AB 32; Health and Safety Code § 38500 et seq.) which declares that global warming poses a serious threat to the economic well being, public health, natural resources, and the environment of California, requires a comprehensive multi-year program to reduce California's greenhouse gas (GHG) emissions to 1990 levels by 2020, maintain and continue reductions in emissions of GHGs beyond 2020, and initiate the transformations required to achieve the AB 32's long-range climate objectives;

WHEREAS, in May 2012, Governor Edmond G. Brown, Jr. enacted Executive Order B-16-2012, calling for the support and facilitation of rapid commercialization of zero emission vehicles (ZEV) in California, and established benchmarks for efforts supporting the commercialization of ZEVs for 2015, 2020, and 2025;

WHEREAS, since its 1990 adoption, the Zero Emission Vehicle or ZEV Regulation has been modified eight times to better align the regulatory timeline and requirements with the status of ZEV technology and ZEV commercialization feasibility;

WHEREAS, at the December 2009 Board meeting, staff presented findings of an assessment of the current state of ZEV technology, including an analysis of pathways to meet California's long term 2050 GHG reduction goals in the light-duty vehicle (LDV) subsector, and a review of current and possible future complimentary policies for ZEV's;

WHEREAS, staff's 2009 assessment found that ZEVs are essential to meeting California's long term GHG emission reduction goals and ZEVs will need to be 100 percent of new vehicle sales no later than model year 2050, and that any future modifications to the ZEV Regulation should help keep the LDV subsector on track to reach an 80 percent reduction in GHG emissions by 2050;

WHEREAS, at the December 2009 Board meeting, the Board reaffirmed its commitment to meeting California's long term air quality and climate change reduction goals through commercialization of ZEV technologies;

WHEREAS, at a March 2012 hearing, the Board adopted amendments to the ZEV Regulation as part of the Advanced Clean Cars program, requiring 15 percent of new vehicle sales to be transitional zero emission vehicles and ZEVs by 2025 model year;

WHEREAS, the 2012 Final Regulation Order for substantial amendments to the ZEV Regulation and to the ZEV Standards and Test Procedures included the following elements applicable to 2018 and subsequent model years:

Increasing the overall ZEV requirements for 2018 and subsequent model years, by modifying the credit percentage requirement, and

Amending the intermediate volume manufacturers (IVM) size definition to bring all but the smallest manufacturers under the full ZEV requirements by model year 2018;

WHEREAS, at the 2012 hearing, the Board directed staff to review how the amended regulation would affect IVMs transitioning into large volume manufacturer (LVM) requirements in the 2018 model year and return to the Board by December 31, 2014, with a recommendation regarding more fair treatment of these manufacturers;

WHEREAS, in September 2013, ARB staff proposed minor modifications to the ZEV Regulation;

WHEREAS, at a October 2013 Board hearing, representatives from Jaguar Land Rover, Mazda, Mitsubishi, Subaru, and Volvo proposed changes to the ZEV Regulation that would provide them additional time to enter the advanced technology vehicle market;

WHEREAS, those changes included:

The addition of very small demonstration quantities of ZEVs through 2025;

The addition of large credit multipliers for any ZEVs produced;

The extension of travel and pooling provisions for both ZEV and transition zero emission vehicle (TZEV) credits in ZEV states;

The addition of extended service credits for cars offered either for sale or for extended leases; and

The allowance of three years to make up ZEV credit deficits;

WHEREAS, in accordance with the 2012 Board direction and the direction received during the 2013 ZEV rulemaking, staff assessed IVMs and LVMs to identify differences that could result in inequitable impacts upon IVMs under the regulation;

WHEREAS, IVMs generally have approximately a quarter of the revenue that LVMs collect and this lesser revenue limits an IVM's ability to commit to the same level of research and development (R&D) as LVMs generally commit to;

WHEREAS, without similar levels of R&D funding, IVMs are unlikely to be able to simultaneously develop both TZEV and ZEV products;

WHEREAS, IVMs developed partial zero emission vehicles (PZEV) to meet their pre-2018 model year obligations with their comparatively limited R&D budgets and these PZEVs accrue fewer ZEV credits than ZEVs under the regulation;

WHEREAS, LVMs, during the same time period in which IVMs were developing PZEVs, generally had the R&D budgets to develop and place ZEVs and thus were able to take advantage of incentives available during the early years of the ZEV program (such as early introduction multipliers and extended service credit to develop extensive credit banks);

WHEREAS, staff worked closely with the IVMs to develop amendments that provide IVMs the flexibility needed to successfully advance the commercialization of ZEV technologies;

WHEREAS, staff initially proposed amendments to the ZEV Regulation, as set forth in Appendix A to the Initial State of Reasons released to the public on September 2, 2014;

WHEREAS, the Board considered the proposed amendments on October 23, 2014 and directed staff to return with modifications that result in greater flexibility for IVMs while still maintaining stringency of the regulation;

WHEREAS, the Board heard stakeholder comments indicating that the midterm review process was a better forum for addressing the stringency of the ZEV Regulation;

WHEREAS, staff modified the proposal based upon comments received before and during the public hearing and released proposed modified text for a 15-day public comment period on April 20, 2015;

WHEREAS, the amendments proposed on April 20, 2015:

Modify the IVM definition to establish a maximum global revenue threshold that must be met before an IVM, that would otherwise transition to LVM status based upon vehicle sales volumes, is actually subject to the LVM requirements and provide an additional two years of production lead time once the IVM transitions to LVM requirements;

Provide a pathway for IVMs to pool compliance obligations in Section 177 states; and

Allow IVMs additional time to make up ZEV credit deficits (with an accompanying credit make-up plan);

WHEREAS, in aggregate, these changes allow IVMs to produce and deliver, to both California and Section 177 states, advanced technology vehicles within a time frame that accounts for necessary production lead time, R&D funding, and unforeseen circumstances;

WHEREAS, these changes provide for more equitable treatment of IVMs in comparison to LVMs, and allow for a level of feasibility and compliance flexibility comparable to the set of changes proposed by the IVMs during the 2013 ZEV rulemaking while not significantly adding complexity to the ZEV Regulation;

WHEREAS, ARB staff, as part of the midterm review process, will conduct an extensive evaluation of the state of advanced technology vehicles and this evaluation is scheduled to be completed in fall 2016;

WHEREAS, staff conducted one public workshop in July 2014, released concepts for public review, and held several focused stakeholder meetings throughout the rulemaking process, in order to involve the public and affected stakeholders in this regulatory development process;

WHEREAS, Section 177 states and automobile manufacturers have worked together to propose IVM-specific changes to improve the functionality of the Section 177 state optional compliance path that was incorporated into the ZEV Regulation in 2012;

WHEREAS, ARB's regulatory program that involves the adoption, approval, amendment, or repeal of standards, rules, regulations, or plans has been certified by the Secretary for Natural Resources under Public Resources Code section 21080.5 of the California Environmental Quality Act (CEQA; California Code of Regulations (Cal. Code Regs., tit. 14, § 15251(d)), and ARB conducts its CEQA review according to this certified program (Cal. Code Regs., tit. 17, §§ 60000-60007);

WHEREAS, staff determined that for the proposed amendments, ARB can rely on the environmental analysis prepared under its certified regulatory program for the amendments to the ZEV Regulation adopted as part of the Advanced Clean Cars program in 2012 (included as Appendix B to Staff Report released in December 2011). No additional environmental review is required because the record evidence shows that the amendments will not result in new significant adverse environmental impacts or a substantial increase in severity of previously identified significant adverse impacts, as described in Chapter IV of the Staff Report and the 15-Day Notice dated April 20, 2015;

WHEREAS, staff issued an Errata document on October 14, 2014 (Errata) which corrected limited textual errors in the Proposed Regulation Order;

WHEREAS, staff plans to issue a second 15-Day Notice to ensure clarity and resolve limited textual errors identified in the Errata;

WHEREAS, public hearings and other administrative proceedings have been held in accordance with the provisions of Chapter 3.5 (commencing with § 11340), part 1, division 3, title 2 of the Government Code;

WHEREAS, at the May 21, 2015, hearing, the Board directed staff to consider the feasibility of returning to the Board with the midterm review at some time before December 2016.

WHEREAS, the Board finds that:

The proposed amendments to the ZEV Regulation are necessary and appropriate to assure that California continues to receive the cleanest vehicles available;

The proposed amendments have the effect of: adding production lead time and a global revenue test, providing a pathway for IVMs to pool compliance obligations in Section 177 states, allowing IVMs additional time to make up ZEV credit deficits, and correcting grammatical and California Code of Regulations reference errors;

Based on the analyses performed for the Staff Report and 15-Day Notice, the proposed amendments to the ZEV Regulation are necessary, appropriate, cost-effective, and technologically feasible;

The proposed amendments are covered by the prior environmental analysis prepared for the ZEV Regulation as part of the ACC Program to comply with CEQA and no additional environmental review, or revisions to the prior environmental analysis, are required because substantial evidence in the record shows there are no changes that will result in new significant adverse environmental impacts or a substantial increase in severity of previously identified significant adverse impacts;

No reasonable alternatives to the amendments considered to date, or that have otherwise been identified and brought to the attention of ARB, would be more effective at carrying out the purpose for which the regulation is proposed or would be as effective and less burdensome to affected entities than the proposed regulation;

The proposed amendments are consistent with ARB's environmental justice policies and do not disproportionately impact people of any race, culture, or income;

The proposed amendments were developed in an open public process, in consultation with affected parties, through public workshops and other outreach efforts, and these efforts are expected to continue; and

It is appropriate to address questions on the stringency of the credit percentage requirement of the ZEV Regulation as part of the midterm review process.

NOW, THEREFORE, BE IT RESOLVED that the Board hereby approves for adoption amendments to California Code of Regulations, title 13, section 1962.1 and the incorporated "California Exhaust Emission Standards and Test Procedures for 2009

through 2017 Model Zero Emission Vehicles;" and amendments to Cal Code Regs., title 13, section 1962.2 and the incorporated "California Exhaust Emission Standards and Test Procedures for 2018 and Subsequent Model Zero Emission Vehicles" as set forth in Attachments A, B, C, D, and E.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to make modified regulatory language that ensures clarity and resolves the limited textual errors identified in the Errata document released on October 14, 2014, and any additional conforming modifications that are appropriate, available for public comment, with any additional supporting documents and information, for a period of at least 15 days. The Executive Officer shall consider written comments submitted during the public review period and make any further conforming modifications that are appropriate available for public comment for at least 15 days. The Executive Officer may present the regulation to the Board for further consideration if warranted, and if not, the Executive Officer shall take final action to adopt the regulation after addressing all appropriate modifications.

BE IT FURTHER RESOLVED that if there is a possibility that any modifications to the regulation made available for one or more 15 day public comment periods may affect the conclusion of the environmental analysis, the Executive Officer shall prepare and circulate any additional environmental analysis to the extent required by ARB's regulations at California Code of Regulations, title 17, sections 60000-60007, and prepare written responses to any comments received raising significant environmental issues as necessary, to present to the Board for approval along with the final regulation.

BE IT FURTHER RESOLVED that the Board hereby determines that the regulations adopted herein will not cause California motor vehicle emission standards, in the aggregate, to be less protective of public health and welfare than applicable federal standards, are needed to meet compelling and extraordinary conditions, will not cause the California emission standards and test procedures for new motor vehicles and engines to be inconsistent with section 202(a) of the Clean Air Act, and raise no new issues affecting previous waiver determinations of the Administrator of United States Environmental Protection Agency pursuant to section 209(b) of the Clean Air Act.

BE IT FURTHER RESOLVED that the Executive Officer shall, upon adoption, forward the regulations to the U.S. Environmental Protection Agency with a request either for a waiver of federal preemption pursuant to section 209(b) of the Clean Air Act, or a confirmation that the regulations are within the scope of previous waivers.

I hereby certify that the above is a true and correct copy of Resolution 15-7 as adopted by the Air Resources Board.

Tracy Jensen, Clerk of the Board

Resolution 15-7

May 21, 2015

Identification of Attachments to the Board Resolution

Attachment A: Proposed Regulation Order, sections 1962.1 and 1962.2, Title 13, California Code of Regulations, as set forth in the Attachment to the Errata, released October 14, 2014

Attachment B: 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 set forth in Appendix B of the Initial Statement of Reasons, released September 5, 2014.

Attachment C: Proposed Amendments to 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 set forth in Appendix C of the Initial Statement of Reasons, released September 5, 2014.

Attachment D: Proposed 15-Day Modifications; Amendments to section 1962.2, Title 13, California Code of Regulations, as set forth in Attachment A of the Notice of Public Availability of Modified Text, dated April 20, 2015.

Attachment E: Proposed 15-Day Modifications; 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 set forth in Attachment B of the Notice of Public Availability of Modified Text, dated April 20, 2015.