

California Environmental Protection Agency
AIR RESOURCES BOARD

**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**

Adopted: March 22, 2012
Amended: December 6, 2012

Note: The proposed amendments to this document are shown in underline to indicate additions and strikeout to indicate deletions compared to the test procedures as adopted March 22, 2012. [No change] indicates proposed federal provisions that are also proposed for incorporation herein without change. Existing intervening text that is not amended in this rulemaking is indicated by “* * *”.

NOTE: This document is incorporated by reference in section 1962.2, title 13, California Code of Regulations (CCR). Additional requirements necessary to complete an application for certification of zero-emission vehicles and hybrid electric vehicles are contained in other documents that are designed to be used in conjunction with this document.

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C. Zero-Emission Vehicle Standards.

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3. Transitional Zero-Emission Vehicles (TZEV).

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3.2 TZEV Requirements. In order for a vehicle to be eligible to receive a ZEV allowance, the manufacturer must demonstrate compliance with all of the following requirements:

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(b) *Evaporative Emissions.* Certify the vehicle to the evaporative emission standards in subdivision 1976(b)(1)(G); or 1976(b)(1)(E)—Manufacturers may certify 2018 and 2019 TZEVs to the evaporative standards for PCs and LDTs in subdivision 1976(b)(1)(E);

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3.3 Allowances for TZEVs.

(a) *Zero-Emission Vehicle Miles Traveled TZEV Allowance Calculation.* A vehicle that meets the requirements of subdivision C.3.2 and has zero-emission vehicle miles traveled (VMT), as defined by and calculated by this test procedure and measured as equivalent all electric range (EAER) capability will generate allowance according to the following equation:

<i>UDDS Test Cycle Range (EAER)</i>	<i>Allowance</i>
<10 all electric miles	0.00
≥10 miles range	TZEV Credit = [(0.01) * EAER + 0.30]
>80 miles (credit cap)	1.10

(1) Allowance for US06 Capability. TZEVs with US06 all electric range capability (AER) of at least 10 miles shall earn an additional 0.2 allowance. US06 test cycle range capability shall be determined in accordance with section ~~E.8~~G.7.5 of these test procedures.

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7. Generation and Use of ZEV Credits; Calculation of Penalties

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7.6 Use of ZEV Credits.

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(c) GHG-ZEV Over Compliance Credits.

(1) *Application.* Manufacturers may apply to the Executive Officer, no later than December 31, 2016, to be eligible for this subdivision C.7.6(c), based on the following qualifications:

(A) A manufacturer must have no model year 2017 compliance debits and no outstanding debits from all previous model year compliance with sections 1961.1 and 1961.3, or compliance with the National greenhouse gas program as allowed by subdivisions 1961.1(a)(1)(A)(ii) and 1961.3(c), and

(B) A manufacturer must have no model year 2017 compliance debits and no outstanding debits from all previous model year compliance with section 1962.1, and

(C) A manufacturer must submit documentation of its projected product plans to show over compliance with the manufacturer's section 1961.3 requirements, or over compliance with the National greenhouse gas program requirements as allowed by subdivision 1961.3(c) by at least 2.0 gCO₂/mile in each model year through the entire 2018 through 2021 model year period.

(2) *Credit Generation and Calculation.* Manufacturers must calculate their over compliance with section 1961.3 requirements, or over compliance with the National greenhouse gas program requirements as allowed by subdivision 1961.3(c) for model years 2018 through 2021 based on compliance with the previous model year standard. For example, to generate credits for this subdivision C.7.6(c) for model year 2018, manufacturers would calculate credits based on model year 2017 compliance with section 1961.3, or compliance with the National greenhouse gas program requirements as allowed by subdivision 1961.3(c).

(A) At least 2.0 gCO₂/mile over compliance with section 1961.3, or over compliance with the National greenhouse gas program as allowed by subdivision 1961.3(c) is required in each year and the following equation must be used to calculate the amount of ZEV credits earned for purposes of this subdivision C.7.6(c):

$$[(\text{Manufacturer US PC and LDT Sales}) \times (\text{gCO}_2/\text{mile below manufacturer GHG standard for a given model year})] / (\text{Manufacturer GHG standard for a given model year})$$

(B) Credits earned under ~~section~~ subdivision 1961.3(a)(9), or credits earned under 40 CFR, part 86, Subpart S, 86.1866-12(a), 86.1866-12(b), or 86.1870-12 may not be included in the calculation of gCO₂/mile credits for use in the above equation in subdivision (A). All ZEVs included in the calculation above must include associated upstream emission values found in section 1961.3.

(C) Banked gCO₂/mile credits earned under 1961.1 and 1961.3, or under the National greenhouse gas program requirements as allowed by subdivision 1961.3(c) from previous model years or from other manufacturers may not be included in the calculation of gCO₂/mile credits for use in the above equation in subdivision (A).

(3) *Use of GHG-ZEV Over Compliance Credits.* A manufacturer may use no more than the percentage enumerated in the table below to meet either the total ZEV requirement nor the portion of their ZEV requirement that must be met with ZEV credits, with credits earned under this subdivision C.7.6(c).

2018	2019	2020	2021
50%	50%	40%	30%

Credits earned in any given model year under this subdivision C.7.6(c) may only be used in the applicable model year and may not be used in any other model year.

Credits calculated under this provision must also be removed from the GHG compliance bank, and cannot be banked for future compliance toward section 1961.3, towards compliance with the National greenhouse gas program requirements as allowed by subdivision 1961.3(c).

(4) *Reporting Requirements.* Annually, manufacturers are required to submit calculations of credits for this subdivision C.7.6(c) for the model year, any remaining credits/debits from previous model years under section 1961.3, or under the National greenhouse gas program requirements as allowed by subdivision 1961.3(c), and projected credits/debits for future years through 2021 under section 1961.3, or under the National greenhouse gas program requirements as allowed by subdivision 1961.3(c) and this subdivision C.7.6(c).

If a manufacturer, who has been granted the ability to generate credits under this subdivision C.7.6(c), fails to over comply by at least 2.0 gCO₂/mile in any one year, the manufacturer will be subject to the full ZEV requirements for the model year and future model years, and will not be able to earn credits for any other model year under this subdivision C.7.6(c).

~~(5) If the Executive Officer does not make a determination that a Federal greenhouse gas fleet standard is functionally equivalent to subdivision 1961.3, then this subdivision C.7.6(c)(1) through (4) is unavailable for use by any manufacturer.~~

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