#### **Attachment A**

# California Environmental Protection Agency AIR RESOURCES BOARD

## **PROPOSED 15-DAY REGULATION ORDER**

California Code of Regulations
Section 1962.1
Section 1962.2
Section 1962.3 (Renumbered from 1962.2)

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#### Attachment A

#### PROPOSED 15-DAY MODIFIED REGULATION ORDER

Amend section 1962.1, title 13, California Code of Regulation (CCR), to read as follows:

[Note: Set forth below are the 2012 amendments to the California zero emission vehicle (ZEV) regulation. The 45-day originally noticed text amendments are shown <u>underline</u> to indicate additions and <u>strikeout</u> to indicate deletions, compared to the preexisting regulatory language. The 15-day modifications subject to comment are shown in <u>double underline</u> to indicate additions and <del>double strikeout</del> to show deletions. Text that has both <u>single underline</u> and <del>double strikeout</del> is additional text that staff proposed during the 45-day Public Notice period but proposed for retraction as part of this 15-day Public Notice period. Text with <u>single strikeout</u> and <u>double underline</u> is text being proposed for re-inclusion in the regulation. All other portions remain unchanged and are indicated by the symbol "\* \* \* \* \*" for reference.]

§ 1962.1 Zero-Emission Vehicle Standards for 2009 and Subsequentthrough 2017 Model Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles.

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- (b) Percentage ZEV Requirements.
  - (1) General Percentage ZEV Requirement.

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(B) Calculating the Number of Vehicles to Which the Percentage ZEV Requirement is Applied. For purposes of calculating a manufacturer's requirement in subdivision 1962.1(b)(1) for model years 2009 through 2017, a manufacturer may use a three year average method or same model year method, as described below in sections 1. and 2. A manufacturer may switch methods on an annual basis. This production averaging is used to determine ZEV requirements specified in subdivision 1962.1 (b)(1)(A) only, and has no effect on a manufacturer's size determination, specified in section 1900. In applying the ZEV requirement, a PC, LDT1, or LDT2, that is produced by one manufacturer (e.g., Manufacturer A), but is marketed in California by another manufacturer (e.g., Manufacturer B) under the other manufacturer's (Manufacturer B) nameplate, shall be treated as having been produced by the marketing manufacturer (Manufacturer B).

For 2012 and subsequent through 2017 model years, a manufacturer's production volume for the given model year will be based on the threevear average of the manufacturer's volume of PCs and LDT4s, and LDT2s, as applicable, produced and delivered for sale in California in the prior fourth, fifth and sixth model year (for example, 2013 model year ZEV requirements will be based on California production volume of PCs and LDT1s, and LDT2s as applicable, for the 2007 to 2009 model years, and 2014 model year ZEV requirements will be based on California production volume of PCs and LDTs, for the 2008 to 2010 model years). This production averaging is used to determine ZEV requirements only, and has no effect on a manufacturer's size determination. As an alternative to the three-year averaging of prior year production described above, a manufacturer may elect to base its ZEV obligation on the number of PCs and LDT4s, and LDT2s, as applicable, produced by the manufacturer and delivered for sale in California that same model year. For 2012 and subsequent model years, a A manufacturer may, on an annual basis, select either the three-year average or the same model-year calculation method. In applying the ZEV requirement, a PC, LDT1, or LDT2 as applicable, that is produced by one manufacturer (e.g., Manufacturer A), but is marketed in California by another manufacturer (e.g., Manufacturer B) under the other manufacturer's (Manufacturer B) nameplate, shall be treated as having been produced by the marketing manufacturer (Manufacturer B).

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## (7) Changes in Small Volume, Independent Low Volume, and Intermediate Volume Manufacturer Status.

(A) Increases in California Production Volume. In 2009-and subsequent-through 2017 model years, if a small volume manufacturer's average California production volume exceeds 4,500 units of new PCs, LDTs, and MDVs based on the average number of vehicles produced and delivered for sale for the three previous consecutive model years, or if an independent low volume manufacturer's average California production volume exceeds 10,000 units of new PCs, LDTs, and MDVs based on the average number of vehicles produced and delivered for sale for the three previous consecutive model years, the manufacturer shall no longer be treated as a small volume, or independent low volume manufacturer, as applicable, and shall comply with the ZEV requirements for intermediate volume manufacturers, as applicable, beginning with the sixth model year after the last of the three consecutive model years.

If an intermediate volume manufacturer's average California production volume exceeds 60,000 units of new PCs, LDTs, and MDVs based on the average number of vehicles produced and delivered for sale for the three previous consecutive model years (i.e., total production volume exceeds 180,000 vehicles in a three-year period), the manufacturer shall no longer be treated as an intermediate volume manufacturer and shall, beginning with the sixth model year after the last of the three

consecutive model-years, <u>or in model year 2018 (whichever occurs first),</u> comply with all ZEV requirements for LVMs.

Requirements will begin in the fourth model year, or in model year 2018 (whichever occurs first) rather than the sixth model year when a manufacturer ceases to be a small or intermediate independent low volume manufacturer in 2003 or subsequent years due to the aggregation requirements in majority ownership situations, except that if the majority ownership in the manufacturer was acquired prior to the 2001 model year, the manufacturer must comply with the stepped-up ZEV requirements starting in the 2010 model year. Requirements will begin in the fourth sixth model year, or in model year 2018 (whichever occurs first) rather than the sixth model year when a manufacturer ceases to be an intermediate volume manufacturer in 2003 or subsequent years through 2017 due to the aggregation requirements in majority ownership situation.

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(c) Partial ZEV Allowance Vehicles (PZEVs).

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- **(2) Baseline PZEV Allowance.** In order for a vehicle to be eligible to receive a PZEV allowance, the manufacturer must demonstrate compliance with all of the following requirements. A qualifying vehicle will receive a baseline PZEV allowance of 0.2.
- (A) SULEV Standards. For 2009 through 20143 model years, Ccertify the vehicle to the 150,000-mile SULEV exhaust emission standards for PCs and LDTs in sectionsubdivision 1961(a)(1). Bi-fuel, fuel-flexible and dual-fuel vehicles must certify to the applicable 150,000-mile SULEV exhaust emission standards when operating on both fuels. For 20154 through 2017 model years, certify the vehicle to the 150,000-mile SULEV 20 or 30 exhaust emission standards for PCs and LDTs in subdivision 1961.2(a)(1), or to the 150,000-mile SULEV exhaust emission standards for PCs and LDTs in subdivision 1961(a)(1). Bi-fuel, fuel flexible and dual-fuel vehicles must certify to the applicable 150,000-mile SULEV 20 or 30 exhaust emission standards when operating on both fuels:
- (B) Evaporative Emissions. For 2009 through 20143 model years, Ccertify the vehicle to the evaporative emission standards in sectionsubdivision 1976(b)(1)(E) (zero-fuel evaporative emissions standards). For 20154 through 2017 model years, certify the vehicle to the evaporative emission standards in subdivision 1976(b)(1)(G) or subdivision 1976(b)(1)(E);

(3) Zero-Emission VMT PZEV Allowance.

(A) Calculation of Zero--Emission VMT Allowance. A vehicle that meets the requirements of sectionsubdivision 1962.1(c)(2) and has zero-emission vehicle miles traveled ("VMT") capability will generate an additional zero-emission VMT PZEV allowance calculated as follows:

Range	Zero-emission VMT Allowance
EAER <sub>u</sub> < 10 miles	0.0
EAER <sub>u</sub> ≥10 <del>miles</del> <u>to 40 miles</u> <del>and</del> R <sub>eda</sub> = 10 miles to 40 miles	EAER <sub>u</sub> x (1 – UF <sub>Rcda</sub> )/11.028
<del>R<sub>cda</sub> <u>EAER</u><sub>u</sub> &gt; 40 miles</del>	$\frac{\text{EAER}_{u40} / 29.63}{(\text{EAER}_{u40}) \text{ x } [1 - (\text{UF}_{40} * \text{R}_{cda} / \text{EAER}_{u})] / \\ 11.028}$ $\frac{\text{Where,}}{\text{UF}_{40} = \text{utility factor at 40 miles}}$ $\underline{\text{EAER}_{u40} = 40 \text{ miles}}$

## A vehicle cannot generate more than 1.39 zero-emission VMT PZEV

The urban equivalent all-electric range (EAER<sub>u</sub>) and urban charge depletion range actual (R<sub>cda</sub>) shall be determined in accordance with section  $\frac{F.12G.5.4}{F.5.5G.11.9}$ , respectively, of the "California Exhaust Emission Standards and Test Procedures for 2009 and Subsequentthrough 2017 Model Zero-Emission Vehicles, and Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck and Medium Duty Vehicle Classes," incorporated by reference in section 1962.1(h). The utility factor (UF) based on the charge depletion range actual (urban cycle) (R<sub>cda</sub>) shall be determined according to Section 4.5.2 Equation  $\frac{56}{2}$  and the "Fleet UF" Utility Factor Equation Coefficients in Section 4.5.2, Table 3 of SAE J2841 March 2009.

(B) Alternative Procedures. As an alternative to determining the zero-emission VMT allowance in accordance with the preceding section 1962.1(c)(3)(A), a manufacturer may submit for Executive Officer approval an alternative procedure for determining the zero-emission VMT potential of the vehicle as a percent of total VMT, along with an engineering evaluation that adequately substantiates the zero-emission VMT determination. For example, an alternative procedure may provide that a vehicle with zero-emissions of one regulated pollutant (e.g., NOx) and not another (e.g., NMOG) will qualify for a zero-emission VMT allowance of 1.5.

\* \* \* \* \*

allowances.

and subsequentthrough 2017 model-year ZEV, including a Type I.5x and Type IIx, other than a NEV or Type 0, earns 1 ZEV credit when it is produced and delivered for sale in California. A 2009 and subsequentthrough 2017 model-year ZEV earns additional credits based on the earliest year in which the ZEV is placed in service in California (not earlier than the ZEV's model year). The vehicle must be delivered for sale and placed in service in the same state (i.e California) Section 177 state or in California in order to earn the total credit amount. The total credit amount will be earned in the state (i.e. California or a Section 177 state) in which the vehicle was delivered for sale. The following table identifies the total credits that a ZEV in each of the eight ZEV tiers will earn, including the credit not contingent on placement in service, if it is placed in service in the specified calendar year or by June 30 after the end of the specified calendar year. A vehicle is not eligible to receive credits if it is placed in service after December 31, five calendar years after the model year. For example, if a vehicle is produced in 2012, but does not get placed until January 1, 2018, the vehicle would no longer be eligible for ZEV credits.

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## (E) Counting Specified ZEVs Placed in a Section 177 State and in California.

#### 1. Provisions for 2009 Model Year.

- a. <u>Manufacturers with a ZEV requirement producing Large volume manufacturers and intermediate volume manufacturers with credits earned from ZEVs, excluding NEVs and Type 0 ZEVs, that are either certified to the California ZEV standards or approved as part of an advanced technology demonstration program and are placed in service in a Section 177 state, may be counted towards compliance with the California percentage ZEV requirements in <u>sectionsubdivision</u> 1962.1(b), including the requirements in <u>sectionsubdivision</u> 1962.1(b)(2)(B), as if they were delivered for sale and placed in service in California.</u>
- **b.** Manufacturers with a ZEV requirement producing Large volume manufacturers and intermediate volume manufacturers with credits earned from ZEVs, excluding NEVs and Type 0 ZEVs, that are either certified to the California ZEV standards or approved as part of an advanced technology demonstration program and are placed in service in California may be counted towards compliance with the percentage ZEV requirements of anyall Section 177 states, including requirements based on sectionsubdivision 1962.1(b)(2)(B).
  - 2. Provisions for 2010 through 2017 Model Years.

<u>Manufacturers with a ZEV requirement producing</u> Specified model year <u>Large volume manufacturers and intermediate volume manufacturers with credits earned from ZEVs, including Type I.5x and Type IIx vehicles, and excluding NEVs and Type 0 ZEVs, that are either certified to the California ZEV standards applicable for the ZEV's model year or approved as part of an advanced technology demonstration program and are placed in service in California or in a Section 177 state may be counted towards compliance in California and in all Section 177 states, with the percentage ZEV requirements in <u>sectionsubdivision</u> 1962.1(b), provided that the credits are multiplied by the ratio of an</u>

LVM's manufacturer's applicable production volume for a model year, as specified in sectionsubdivision 1962.1(b)(1)(B), in the state receiving credit to the LVM's manufacturer's applicable production volume (hereafter, "proportional value"), as specified in section 1962.1(b)(1)(B), for the same model year in California. Credits generated in a Section 177 state will be earned at the proportional value in the Section 177 state, and earned in California at the full value specified in sectionsubdivision 1962.1(d)(5)(C). However, credits generated by 2010 and 2011 model-year vehicles produced, delivered for sale, and placed in service or as part of an advanced technology demonstration program in California to meet the any Section 177 state's requirements that implement sectionsubdivision 1962.1(b)(2)(B) are exempt from proportional value, with the number of credits exempted from proportional value allowed being limited to the number of credits needed to satisfy a manufacturer's Section 177 state's requirements that implement sectionsubdivision 1962.1(b)(2)(B)1.b. The table below specifies the qualifying model years for each ZEV type that may be counted towards compliance in all Section 177 states.

Vehicle Type	Model Years:
Type I, I.5, or II ZEV	2009 – <del>2014</del> <u>2017</u>
Type III, IV, or V ZEV	2009 – 2017
Type I.5x or Type IIx	2012 – 2017

<u>3. Optional Section 177 State Compliance Path.</u> Large volume manufacturers and intermediate volume manufacturers that choose to elect the optional section 177 state compliance path must notify the Executive Officer and each section 177 state in writing no later than September 1, 2014.

a. Additional 2016 and 2017 Model Year ZEV Requirements. Large volume manufacturers and intermediate volume manufacturers that elect the optional section 177 state compliance path must generate additional 2012 through 2017 model year ZEV credits, including no more than 50% Type 1.5x and Type IIx vehicle credits and excluding all NEV and Type 0 ZEV credits, in each section 177 state equal to the following percentages of their sales volume determined under subdivision 1962.1(b)(1)(B):

Model	Additional Section 177
Years	State ZEV Requirements
<u>2016</u>	<u>0.75%</u>
2017	<u>1.50%</u>

Subdivision 1962.1(d)(5)(E)2. shall not apply to any ZEV credits used to meet a manufacturer's additional 2016 and 2017 model year ZEV requirements under this subdivision 1962.1(d)(5)(E)3.a. ZEVs produced to meet a manufacturer's additional 2016 and 2017 model year ZEV requirements under this subdivision 1962.1(d)(5)(E)3.a. must be placed in service in the section 177 states no later than June 30, 2018.

- Trading and Transferring ZEV Credits within the West Region Pool and East Region Pool. Manufacturers may trade or transfer specified model year ZEV credits, used to meet the same model year requirements in subdivision 1962.1(d)(5)(E)3.c. within the West Region pool, and will incur no premium on their credit values. For example, for a manufacturer to make up a 2016 model year shortfall of 100 credits in State X, the manufacturer may transfer 100 (2016 model year) ZEV credits from State Y, within the West Region pool. Manufacturers may trade or transfer specific model year ZEV credits, used to meet the same model year requirements in subdivision 1962.1(d)(5)(E)3.c., within the East Region pool, and will incur no premium on their credit values. For example, for a manufacturer to make up a 2016 model year shortfall of 100 credits in State W, the manufacturer may transfer 100 (2016 model year) ZEV credits from State Z, within the East Region pool.
- ii. Trading and Transferring ZEV Credits between the West Region Pool and East Region Pool. Manufacturers may trade or transfer specified model year ZEV credits used to meet the same model year requirements in subdivision 1962.1(d)(5)(E)3.c. between the West Region pool and the East Region pool; however, any credits traded or transferred will incur a premium of 30% of their value. For example, in order for a manufacturer to make up a 2016 model year shortfall of 100 credits in the West Region Pool, the manufacturer may transfer 130 (2016 model year) ZEV credits from the East Region Pool. No credits may be traded or transferred to the East Region pool or West Region pool from a manufacturer's California ZEV bank, or from the East Region pool or West Region pool to a manufacturer's California ZEV bank.

b. Reduced TZEV Percentages. Large volume manufacturers and intermediate volume manufacturers that elect the optional section 177 state compliance path and that fully comply with the additional 2016 and 2017 model year ZEV requirements in this subdivision 1962.1(d)(5)(E)3.a. are allowed to meet TZEV percentages reduced from the allowed TZEV percentages in subdivision 1962.1(b)(2)(D)2. and 3. in 2015 through 2017 model year in each section 177 state as enumerated below:

Model Year	<u>2015</u>	<u>2016</u>	<u>2017</u>
Existing TZEV Percentage	3.00%	3.00%	<u>3.00%</u>
Section 177 State Adjustment for Optional Compliance Path for TZEVs	<u>75.00%</u>	80.00%	<u>85.00%</u>
New Section 177 State Optional Compliance Path TZEV Percentage	<u>2.25%</u>	<u>2.40%</u>	<u>2.55%</u>

Manufacturers may meet the reduced TZEV percentages above with credits from ZEVs or credits from TZEVs. These reduced TZEV percentages also reduce the total ZEV percent requirement, as illustrated in subdivision 1962.1(d)(5)(E)3.c.

i. Trading and Transferring TZEV Credits within the West Region Pool and the East Region Pool. Manufacturers may trade or transfer specified TZEV credits used to meet the same model year subdivision 1962.1(d)(5)(E)3.c. requirements within the West Region pool, and will incur no premium on their credit values. For example, for a manufacturer to make up a 2016 shortfall of 100 credits in State X, the manufacturer may transfer 100 (2016 model year) TZEV credits from State Y, within the West Region pool. Manufacturers may trade or transfer TZEV credits to meet the same model year subdivision 1962.1(d)(5)(E)3.c. within the East Region pool, and will incur no premium on their credit values. For example, for a manufacturer to make up a 2016 model year shortfall of 100 credits in State W, the manufacturer may transfer 100 (2016 model year) TZEV credits from State Z, within the East Region pool.

ii. Trading and Transferring TZEV Credits between the West Region Pool and the East Region Pool. Manufacturers may trade or transfer specified TZEV credits used to meet the same model year percentages in subdivision 1962.1(d)(5)(E)3.c. between the West Region pool and the East Region pool; however, any credits traded or transferred will incur a premium of 30% of their value. For example, in order for a manufacturer to make up a 2016 model year shortfall of 100 credits in the West Region Pool, the manufacturer may transfer 130 (2016 model year) TZEV credits from the East Region Pool. No credits may be traded or transferred to the East Region pool or West Region pool from a manufacturer's California ZEV bank, or from the East Region pool or West Region pool to a manufacturer's California ZEV bank.

c. Total Requirement Percentages. Requirements for the minimum ZEV floor, and allowed percentages for AT PZEVs and PZEVs in subdivision 1962.1(b) remain in effect for large and intermediate volume manufacturers choosing the optional section 177 state compliance path in each section 177 state. However, the optional section 177 compliance path requires manufacturers to meet additional ZEV requirements and allows manufacturers to meet reduced TZEV percentages as described above in subdivision 1962.1(d)(5)(E)3.a. and b. The table below enumerates the total annual percentage obligation in each section 177 state for the 2015 through 2017 model years if the manufacturer elects the optional section 177 state compliance path and produces the minimum number of credits required to meet its minimum ZEV floor and the maximum percentage allowed to be met with credits from TZEVs, AT PZEVs and PZEVs.

<u>Years</u>	Total ZEV Percent Requirement for Optional Compliance	Minimum ZEV Floor for Optional Compliance Path	TZEVs for Optional Compliance Path	<u>AT PZEVs</u> (no change)	<u>PZEVs</u> (no change)
2015	<u>Path</u> 13.25%	3.00%	2.25%	2.00%	6.00%
2016	14.15%	3.75%	2.40%	2.00%	6.00%
<u>2017</u>	<u>15.05%</u>	<u>4.50%</u>	<u>2.55%</u>	<u>2.00%</u>	<u>6.00%</u>

d. Reporting Requirements. On an annual basis, by May 1st of the calendar year following the close of a model year, each manufacturer that elects the optional section 177 state compliance path shall submit, in writing, to the Executive Officer and each section 177 state a report, including an itemized list, that demonstrates the manufacturer has met the requirements of this subdivision 1962.1(d)(5)(E)3. in each section 177 state as well as in the East Region pool and in the West Region pool. The itemized list shall include the following:

- i. The manufacturer's total applicable volume of PCs and LDTs delivered for sale in each section 177 state within the pool, as determined under subdivision 1962.1(b)(1)(B).
- ii. Make, model, vehicle identification number, credit earned, and section 177 state where delivery for sale and placement in service for ZEV occurred to meet the manufacturer's additional ZEV obligation under subdivision 1962.1(d)(5)(E)3.a.
- <u>iii.</u> Make, model, vehicle identification number, credit earned, and section 177 state where delivery for sale of each TZEV occurred and section 177 state where delivery for sale and placement in

<u>service of each ZEV occurred to meet manufacturer's requirements</u> under subdivision 1962.1(d)(5)(E)3.c.

#### e. Failure to Meet Optional Section 177 State Compliance Path

Requirements. A manufacturer that elects the optional section 177 state compliance path and does not meet the requirements in subdivision 1962.1(d)(5)(E)3.a. by June 30, 2018 in all section 177 states within an applicable pool shall be treated as subject to the total ZEV percentage requirements in section 1962.1(b) for the 2015 through 2017 model years in each section 177 state and the pooling provisions in subdivision 1962.1(d)(5)(E)3.a. shall not apply. Any transfers of ZEV credits between section 177 states will be null and void, and ZEV credits will return to the section 177 state in which the credits were earned. A manufacturer that elects the optional section 177 state compliance path and does not meet the percentages in subdivision 1962.1(d)(5)(E)3.b. in a model year or make up their deficit within the specified time and with the specified credits allowed by subdivision 1962.1(g)(7)(A) in all section 177 states within an applicable pool shall be treated as subject to the total ZEV percentage requirements in section 1962.1(b) for the 2015 through 2017 model years and the pooling provisions in subdivision 1962.1(d)(5)(E)3.b. shall not apply. Any transfers of TZEV credits between section 177 states will be null and void if a manufacturer fails to comply, and TZEV credits will return to the section 177 state in which the credits were earned. Penalties shall be calculated separately by each section 177 state where a manufacturer fails to make up the ZEV deficits by the end of the 2018 model year.

f. The provisions in section 1962.1 shall apply to a manufacturer electing the optional section 177 state compliance path, except as specifically modified by this subdivision 1962.1(d)(5)(E)3.

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(g) Generation and Use of ZEV Credits; Calculation of Penalties

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## (2) ZEV Credit Calculations.

(A) Credits from ZEVs. For model years 2009 through 2014, ‡the amount of g/mi ZEV-credits earned by a manufacturer in a given model year from ZEVs shall be expressed in units of g/mi NMOG, and shall be equal to the number of credits from ZEVs produced and delivered for sale in California that the manufacturer applies towards meeting the ZEV requirements for the model year subtracted from the number of ZEV credits produced and delivered for sale in California by the manufacturer in the model year or model years and then multiplied by the NMOG fleet average requirement for PCs and LDT1s or LDT2s as applicable, for 2009 through 2011 model years, and for PCs and LDT1s for 2012 through 2014 that model years.

For model years 2015 through 2017, the amount of credits earned by a manufacturer in a given model year from ZEVs shall be expressed in units of credits, and shall be equal to the number of credits from ZEVs produced and delivered for sale in California that the manufacturer applies towards meeting the ZEV requirements, or, if applicable, requirements specified under subdivision 1962.1(d)(5)(E)3., for the model year subtracted from the number of ZEV credits produced and delivered for sale in California by the manufacturer in the model year or model years.

(B) Credits from PZEVs. For model years 2009 through 2014, ‡the amount of g/mi ZEV-credits from PZEVs earned by a manufacturer in a given model year shall be expressed in units of g/mi NMOG, and shall be equal to the total number of PZEVs produced and delivered for sale in California that the manufacturer applies towards meeting its ZEV requirement for the model year subtracted from the total number of PZEV allowances from PZEVs produced and delivered for sale in California by the manufacturer in the model year or model years and then multiplied by the NMOG fleet average requirement for PCs and LDT1s or LDT2s as applicable, for 2009 through 2011 model years, and for PCs and LDT1s for 2012 through 2014 that model years.

For model years 2015 through 2017, the amount of credits earned by a manufacturer in a given model year from PZEVs shall be expressed in units of credits, and shall be equal to the number of credits from PZEVs produced and delivered for sale in California that the manufacturer applies towards meeting the ZEV requirements, or, if applicable, requirements specified under subdivision 1962.1(d)(5)(E)3., for the model year subtracted from the number of PZEV credits produced and delivered for sale in California by the manufacturer in the model year or model years.

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## (5) ZEV Credits for Transportation Systems.

(A) General. In model years 2009 through 2011, a ZEV placed, for two or more years, as part of a transportation system may earn additional ZEV credits, which may be used in the same manner as other credits earned by vehicles of that category, except as provided in subdivision (g)(5)(C) below. In model years 201209 and subsequent through 2017, a ZEV, Type I.5x and Type IIx vehicles, or TZEV placed, for two or more years, as part of a transportation system may earn additional ZEV credits, which may be used in the same manner as other credits earned by vehicles of that category, except as provided in subdivision (d)(5)(E)2. and as provided in sectionsubdivision (g)(5)(C) below. In model years 2009 through 2011, an Enhanced AT PZEV\_TZEV, AT PZEV or PZEV placed as part of a transportation system may earn additional ZEV credits, which may be used in the same manner as other credits earned by vehicles of that category, except as provided in sectionsubdivision (g)(5)(C) below. A NEV is not eligible to earn credit for transportation systems. To earn such credits, the manufacturer must demonstrate to the reasonable satisfaction of the Executive Officer

that the vehicle will be used as a p art of a project that uses an innovative transportation system as described in sectionsubdivision (g)(5)(B) below.

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## (C) Cap on Use of <u>Transportation System Credits</u>.

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2. Enhanced AT PZEVs TZEVs. Credits earned or allocated by Enhanced AT PZEVsTZEVs pursuant to this sectionsubdivision (g)(5), not including all credits earned by the vehicle itself, may be used to satisfy up to one-tenth of a manufacturer's ZEV obligation in any given model year, or, if applicable, up to one-tenth of the total ZEV percentages specified under subdivision 1962.1(d)(5)(E)3., but may only be used in the same manner as other credits earned by vehicles of that category.

- manufacturer may meet the ZEV requirements in any given model year by submitting to the Executive Officer a commensurate amount of g/mi ZEV credits, consistent with sectionsubdivision 1962.1(b). For model years 2015 through 2017, a manufacturer may meet the ZEV requirements in any given model year by submitting to the Executive Officer a commensurate amount of ZEV credits, consistent with subdivision 1962.1(b). Credits in each of the categories may be used to meet the requirement for that category as well as the requirements for lesser credit earning ZEV categories, but shall not be used to meet the requirement for a greater credit earning ZEV category. For example, credits produced from Enhanced AT PZEVsTZEVs may be used to comply with AT PZEV requirements, but not with the portion that must be satisfied with ZEVs. These credits may be earned previously by the manufacturer or acquired from another party.
- **(A) NEVs.** Credits earned from NEVs offered for sale or placed in service in model years 2001 through 2005 cannot be used to satisfy more than the percentage limits described in the following table:

Model Years	ZEV Obligation that:	Percentage limit for NEVs allowed to meet each Obligation <sup>1</sup> :
2009 – 2011	Must be met with ZEVs	50%
2009	May be met with AT DZEVe but not DZEVe	75%
2010 –	- May be met with AT PZEVs but not PZEVs	50%

2011		
2009 – 2011	May be met with PZEVs	No Limit
	Must be met with ZEVs	0%
2012 – <del>2014</del> 2017	May be met with <del>Enhanced AT</del> <del>PZEVs</del> and AT PZEVs	50%
	May be met with PZEVs	No Limit

<sup>&</sup>lt;sup>1</sup> If applicable, obligation in this table means requirements specified under subdivision 1962.1(d)(5)(E)3...

Additionally, credits earned from NEVs offered for sale or placed in service in model years 2006 through 2017 or later can be used to meet the percentage limits described in the following table:

Model Years	ZEV Obligation that:	Percentage Limit for NEVs allowed to meet each Obligation <sup>1</sup> :
	May be met through compliance with Primary Requirements	No Limit
2009 - 2011	May be met through compliance with Alternative Requirements, and must be met with ZEVs	0%
	May be met through compliance Alternative Requirements, and may be met with AT PZEVs or PZEVs	No Limit
2012 –	Must be met with ZEVs	0%
<del>2014</del> 2017	May be met with <del>Enhanced AT</del> <del>PZEVs</del> TZEVs, AT PZEVs, or PZEVs	No Limit

<sup>&</sup>lt;sup>1</sup> If applicable, obligation in this table means requirements specified under subdivision 1962.1(d)(5)(E)3..

This limitation applies to NEV credits earned by the same manufacturer or earned by another manufacturer and acquired.

(i) **ZEV-Specific Definitions.** The following definitions apply to this section 1962.1.

- (5) "Conventional rounding method" means to increase the last digit to be retained when the following digit is five or greater. Retain the last digit as is when the following digit is four or less.
- (6) "East Region pool" means the combination Section 177 states east of the Mississippi River.
- (4<u>57</u>) "Electric drive system" means an electric motor and associated power electronics which provide acceleration torque to the drive wheels sometime during normal vehicle operation. This does not include components that could act as a motor, but are configured to act only as a generator or engine starter in a particular vehicle application.
- (568) "Enhanced AT PZEV" means any model year 2009 through 2011 PZEV that has an allowance of 1.0 or greater per vehicle without multipliers and makes use of a ZEV fuel. Enhanced AT PZEV means Transitional Zero Emission Vehicle.
- (6<u>79</u>) "Neighborhood electric vehicle" or "NEV" means a motor vehicle that meets the definition of Low-Speed Vehicle either in section 385.5 of the Vehicle Code or in 49 CFR 571.500 (as it existed on July 1, 2000), and is certified to zero-emission vehicle standards.
- (7<u>810</u>)"Placed in service" means having been sold or leased to an end-user and not to a dealer or other distribution chain entity, and having been individually registered for on-road use by the California Department of Motor Vehicles DMV.
- (911) "Proportional value" means the ratio of a manufacturer's California applicable sales volume to the manufacturer's Section 177 state applicable sales volume. In any given model year, the same applicable sale volume calculation method must be used to calculate proportional value.
- (4012) "Range Extended Battery Electric Vehicle" means a vehicle powered predominantly by a zero emission energy storage device, able to drive the vehicle for more than 75 all-electric miles, and also equipped with a backup APU, which does not operate until the energy storage device is fully depleted, and meeting requirements in subdivision 1962.1(d)(5)(G),
- (8<u>1113</u>) "Regenerative braking" means the partial recovery of the energy normally dissipated into friction braking that is returned as electrical current to an energy storage device.
- (91214) "Section 177 state" means a state that is administering the California ZEV requirements pursuant to Section 177 of the federal Clean Air Act (42 U.S.C. § 7507).

- (1315) <u>"Transitional Zero Emission Vehicle" means a PZEV that has an allowance of 1.0 or greater, and makes use of a ZEV fuel.</u>
- (101416) "Type 0, I, I.5, II, III, IV, and V ZEV" all have the meanings set forth in section 1962.1(d)(5)(A).
- (17) "West Region pool" means the combination of Section 177 states west of the Mississippi River.
- (111518) "ZEV fuel" means a fuel that provides traction energy in on-road ZEVs. Examples of current technology ZEV fuels include electricity, hydrogen, and compressed air.

\* \* \* \* \*

Note: Authority cited: Sections 39600, 39601, 43013, 43018, 43101, 43104 and 43105, Health and Safety Code. Reference: Sections <u>38562</u>, 39002, 39003, 39667, 43000, 43009.5, 43013, 43018, 43018.5, 43100, 43101, 43101.5, 43102, 43104, 43105, 43106, <u>43204</u>, 43205, 43206, and 43205.5, Health and Safety Code.

Adopt section 1962.2, title 13, California Code of Regulation (CCR) to read as follows:

[Note: Set forth below are the 2012 amendments to the California zero emission vehicle (ZEV) regulation. This is a newly adopted regulation is shown without underline as permitted by California Code of Regulations, title 1, section 8. The 15-Day proposed modifications are shown in <u>single underline</u> to indicate additions and <u>single strikeout</u> to indicate deletions.]

- § 1962.2 Zero-Emission Vehicle Standards for 2018 and Subsequent Model Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles.
- (a) **ZEV Emission Standard.** The Executive Officer shall certify new 2018 and subsequent model year passenger cars, light-duty trucks, and medium-duty vehicles as ZEVs, vehicles that produce zero exhaust emissions of any criteria pollutant (or precursor pollutant) or greenhouse gas, excluding emissions from air conditioning systems, under any possible operational modes or conditions.
- (b) Percentage ZEV Requirements.
  - (1) General Percentage ZEV Requirement.

- **(B)** Calculating the Number of Vehicles to Which the Percentage ZEV Requirement is Applied. For 2018 and subsequent model years, a manufacturer's production volume for the given model year will be based on the three-year average of the manufacturer's volume of PCs and LDTs, produced and delivered for sale in California in the prior second, third, and fourth model year [for example, 2019 model year ZEV requirements will be based on California production volume average of PCs and LDTs for the 2015 to 2017 model years]. This production averaging is used to determine ZEV requirements only, and has no effect on a manufacturer's size determination (eg. three-year average calculation method). In applying the ZEV requirement, a PC or LDT, that is produced by one manufacturer (e.g., Manufacturer A), but is marketed in California by another manufacturer (e.g., Manufacturer B) under the other manufacturer's (Manufacturer B) nameplate, shall be treated as having been produced by the marketing manufacturer (i.e., Manufacturer B).
  - 1. [Reserved]
  - 2. [Reserved]
- **3.** A manufacturer may apply to the Executive Officer to be permitted to base its ZEV obligation on the number of PCs and LDTs, produced by the manufacturer and delivered for sale in California that same model year (ie, same model-year calculation method) as an alternative to the three-year averaging of prior year

production described above, for up to two model years, total, between model year 2018 and model year 2025. For the same model-year calculation method to be allowed, a manufacturer's application to the Executive Officer must show that their volume of PCs and LDTs produced and delivered for sale in California has decreased by 40 at least 30 percent from the previous year due to circumstances that were unforeseeable and beyond their control.

\* \* \* \* \*

(c) Transitional Zero Emission Vehicles (TZEV).

\* \* \* \* \*

- **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:
- (A) SULEV Standards. Certify the vehicle to the 150,000-mile SULEV 20 or 30 exhaust emission standards for PCs and LDTs in subdivision 1961.2(a)(1). Bi-fuel, fuel flexible and dual-fuel vehicles must certify to the applicable 150,000-mile SULEV 20 or 30 exhaust emission standards when operating on both fuels. Manufacturers may certify 2018 and 2019 TZEVs to the 150,000-mile SULEV exhaust emission standards for PCs and LDTs in subdivision 1961(a)(1);
- **(B) Evaporative Emissions.** Certify the vehicle to the evaporative emission standards in subdivision 1976(b)(1)(G). Manufacturers may certify 2018 and 2019 TZEVs to the evaporative standards for PCs and LDTs in subdivision 1976(b)(1)(E);

\* \* \* \* \*

## (3) Allowances for TZEVs

(A) Zero Emission Vehicle Miles Traveled TZEV Allowance Calculation. A vehicle that meets the requirements of subdivision 1962.2(c)(2) and has zero-emission vehicle miles traveled (VMT), as defined by and calculated by the "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", incorporated by reference, and measured as all electric R<sub>cda-</sub> equivalent all electric range (EAER) capability will generate an allowance according to the following equation:

UDDS Test Cycle Range (R <sub>cda</sub> )	Allowance
<10 all electric miles	0.0 <u>0</u>
≥10 all electric miles	TZEV Credit = $[(0.01) * R_{cda} EAER + 0.30]$
>80 miles (credit cap)	1. <u>310</u>

1. Allowance for US06 Capability. TZEVs with US06 all electric range capability ( $R_{cda}AER$ ) of at least 10 miles shall earn an additional 0.2 allowance. US06 test cycle range capability shall be determined in accordance with section EF.8 of the "California Exhaust Emission Standards and Test Procedures for the 2018 and Subsequent Model Zero-Emission Vehicles, and Hybrid Electric Vehicles in the Passenger Car, Light-Duty Truck, and Medium Duty Vehicle Classes," incorporated by reference in subdivision 1962.2(h).

\* \* \* \* \*

(d) Qualification for Credits From ZEVs.

\* \* \* \* \*

- (5) Credits for 2018 and Subsequent Model Year ZEVs.
- (A) ZEV Credit Calculations. Credits from a ZEV delivered for sale are based on the ZEV's UDDS all electric range, determined in accordance with the "California Exhaust Emission Standards and Test Procedures for the 2018 and Subsequent Model Zero-Emission Vehicles, and Hybrid Electric Vehicles in the Passenger Car, Light-Duty Truck, and Medium Duty Vehicle Classes," incorporated by reference, using the following equation:

ZEV Credit = (0.01) \* (UDDS range) + 0.50

- (E) Counting Specified ZEVs Placed in Service in a Section 177 State and in California.
- <u>nanufacturers and intermediate volume manufacturers with credits earned from half ydrogen fuel cell vehicles that are certified to the California ZEV standards applicable for the ZEV's model year, delivered for sale and placed in service in California or in a Section 177 state, may be counted towards compliance in California and in all Section 177 states with the percentage ZEV requirements in subdivision 1962.2(b). The credits earned are multiplied by the ratio of a manufacturer's applicable production volume for a model year, as specified in subdivision 1962.2(b)(1)(B), in the state receiving credit to</u>

the manufacturer's applicable production volume as specified in subdivision 1962.2(b)(1)(B), for the same model year in California\_(hereafter, "proportional value"). Credits generated from ZEV placement in a Section 177 state will be earned at the proportional value in the Section 177 state, and earned in California at the full value specified in subdivision 1962.2(d)(5)(A).

#### 2. Optional Section 177 State Compliance Path.

a. Reduced ZEV and TZEV Percentages. Large volume manufacturers and intermediate volume manufacturers that have fully complied with the optional section 177 state compliance path requirements in subdivision 1962.1(d)(5)(E)3. are allowed to meet ZEV percentage requirements and optional TZEV percentages reduced from the minimum ZEV floor percentages and TZEV percentages in subdivision 1962.2(b)(2)(E) in each section 177 state equal to the following percentages of their sales volume determined under subdivision 1962.2(b)(1)(B):

### **ZEVs**

<u>LL V S</u>				
Model Year	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
Existing Minimum ZEV Floor	<u>2.00%</u>	4.00%	6.00%	<u>8.00%</u>
Section 177 State Adjustment for Optional Compliance Path	62.5%	<u>75%</u>	<u>87.5%</u>	<u>100%</u>
Minimum Section 177 State ZEV Requirement	<u>1.25%</u>	3.00%	<u>5.25%</u>	8.00%

#### **TZEVs**

Model Year	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
Existing TZEV Percentage	2.50%	3.00%	<u>3.50%</u>	4.00%
Section 177 State Adjustment for Optional Compliance Path	90.00%	100%	<u>100%</u>	100%
New Section 177 State TZEV Percentage	<u>2.25%</u>	3.00%	<u>3.50%</u>	<u>4.00%</u>

**Total Percent Requirement** 

Model Year	<u>2018</u>	2019	2020	<u>2021</u>
New Total Section 177 State Optional	3.50%	6.00%	8.75%	12.00%
Requirements		_		

i. Trading and Transferring ZEV and TZEV Credits within
West Region Pool and East Region Pool. Manufacturers that
have fully complied with the optional section 177 state compliance
path requirements in subdivision 1962.1(d)(5)(E)3. may trade or
transfer specified model year ZEV and TZEV credits within the
West Region pool to meet the same model year requirements in

subdivision 1962.2(d)(5)(E)2.a, and will incur no premium on their credit values. For example, for a manufacturer to make up a 2019 model year shortfall of 100 credits in State X, the manufacturer may transfer 100 (2019 model year) ZEV credits from State Y, within the West Region pool. Manufacturers that have fully complied with the optional section 177 state compliance path requirements in subdivision 1962.1(d)(5)(E)3. may trade or transfer specified model year ZEV and TZEV credits within the East Region pool to meet the same model year requirements in subdivision 1962.2(d)(5)(E)2.a, and will incur no premium on their credit values. For example, for a manufacturer to make up a 2019 model year shortfall of 100 credits in State W, the manufacturer may transfer 100 (2019 model year) ZEV credits from State Z, within the East Region pool.

- the West Region Pool and East Region Pool. Manufacturers that have fully complied with the optional section 177 state compliance path requirements in subdivision 1962.1(d)(5)(E)3. may trade or transfer specified model year ZEV and TZEV credits to meet the same model year requirements in subdivision 1962.2(d)(5)(E)2.a. between the West Region pool and the East Region pool; however, any credits traded will incur a premium of 30% of their value. For example, in order for a manufacturer to make up a 2019 model year shortfall of 100 credits in the West Region Pool, the manufacturer may transfer 130 (2019 model year) credits from the East Region Pool. No credits may be traded or transferred to the East Region pool or West Region pool from a manufacturer's California ZEV bank, or from the East Region pool or West Region pool to a manufacturer's California ZEV bank.
- b. Reporting Requirements. On an annual basis, by May 1st of the calendar year following the close of a model year, each manufacturer that elects the optional section 177 state compliance path under subdivision 1962.1(d)(5)(E)3, shall submit, in writing, to the Executive Officer and each section 177 state a report, including an itemized list, that indicates where vehicles have been placed within the East Region pool and within the West Region pool. The itemized list shall include the following:
  - i. The manufacturer's total applicable volume of PCs and LDTs delivered for sale in each section 177 state within the regional pool, as determined under subdivision 1962.2(b)(1)(B).
  - ii. Make, model, vehicle identification number, credit earned, and section 177 state where delivery for sale of each TZEV and ZEV occurred and to meet manufacturer's requirements under subdivision 1962.2(d)(5)(E)2.a.

c. Failure to Meet Optional Section 177 State Compliance Path

Requirements. A manufacturer that elects the optional section 177 state compliance path under subdivision 1962.1(d)(5)(E)3, and does not meet the modified percentages in subdivision 1962.2(d)(5)(E)2.a. in a model year or make up their deficit within the specified time and with the specified credits allowed by subdivision 1962.2(g)(7)(A) in all section 177 states of the applicable pool, shall be treated as subject to the total ZEV percentage requirements in section 1962.2(b) for the 2018 through 2021 model years in each section 177 state, and the pooling provisions in subdivision 1962.2(d)(5)(E)2.a. shall not apply. Any transfers of ZEV or TZEV credits between section 177 states will be null and void if a manufacturer fails to comply, and ZEV or TZEV credits will return to the section 177 state in which the credits were earned. Penalties shall be calculated separately by each section 177 state where a manufacturer fails to make up the ZEV deficits by the end of the 2018 model year.

d. The provisions of section 1962.2 shall apply to a manufacturer electing the optional section 177 state compliance path, except as specifically modified by this subdivision 1962.2(d)(5)(E)2.

\* \* \* \* \*

**(G) BEVx.** A BEVx must meet the following in order to receive credit, based on its all electric UDDS Range, through subdivision 1962.2(d)(5)(A):

\* \* \* \* \*

**3.** *Minimum Zero Emission Range Requirements.* BEVxs must have a minimum of 8075 miles UDDS all electric range.

\* \* \* \*

(g) Generation and Use of Credits; Calculation of Penalties

- (2) ZEV Credit Calculations.
- (A) Credits from ZEVs. The amount of credits earned by a manufacturer in a given model year from ZEVs shall be expressed in units of credits, and shall be equal to the number of credits from ZEVs produced and delivered for sale in California that the manufacturer applies towards meeting the ZEV requirements, or, if applicable, requirements specified under subdivision 1962.2(d)(5)(E)2.a. for the model year subtracted from the number of ZEVs produced and delivered for sale in California by the manufacturer in the model year.

(B) Credits from TZEVs. The amount of credits earned by a manufacturer in a given model year from TZEVs shall be expressed in units of credits, and shall be equal to the total number of TZEVs produced and delivered for sale in California that the manufacturer applies towards meeting its ZEV requirement, or, if applicable, requirements specified under subdivision 1962.2(d)(5)(E)2.a. for the model year subtracted from the total number of ZEV allowances from TZEVs produced and delivered for sale in California by the manufacturer in the model year.

\* \* \* \* \*

## (5) ZEV Credits for Transportation Systems.

\* \* \* \* \*

### (C) Cap on Use of Transportation System Credits.

- **1. ZEVs.** Transportation system credits earned or allocated by ZEVs or BEVxs pursuant to subdivision 1962.1 (g)(5), not including any credits earned by the vehicle itself, may be used to satisfy up to one-tenth of a manufacturer's ZEV obligation in any given model year, and may be used to satisfy up to one-tenth of a manufacturer's ZEV obligation which must be met with ZEVs, as specified in subdivision 1962.2(b)(2)(E), or, if applicable, requirements specified under subdivision 1962.2(d)(5)(E)2.a. Manufacturers may not use transportation system credits earned by ZEVs to comply with requirements specified in subdivision 1962.2(d)(5)(F)
- **2.** *TZEVs.* Transportation system credits earned or allocated by TZEVs pursuant to subdivision 1962.1(g)(5), not including all credits earned by the vehicle itself, may be used to satisfy up to one-tenth of the portion of a manufacturer's ZEV obligation that may be met with TZEVs, or, if applicable, the portion of a manufacturer's obligation that may be met with TZEVs specified under subdivision 1962.2(d)(5)(E)2.a. in any given model year, but may only be used in the same manner as other credits earned by vehicles of that category. Manufacturers may not use transportation system credits earned by TZEVs to comply with requirements specified in subdivision 1962.2(d)(5)(F)
- (6) Use of ZEV Credits. A manufacturer may meet the ZEV requirements in a given model year by submitting to the Executive Officer a commensurate amount of ZEV credits, consistent with subdivision 1962.2(b). Credits in each of the categories may be used to meet the requirement for that category as well as the requirements for lesser credit earning ZEV categories, but shall not be used to meet the requirement for a greater credit earning ZEV category, except for discounted PZEV and AT PZEV credits. For example, credits produced from TZEVs may be used to comply with the portion of the requirement that may be met with credits from TZEV, but not with the portion that must be satisfied with credits from ZEVs. These credits may be earned previously by the manufacturer or acquired from another party.

- (A) Use of Discounted PZEV and AT PZEV Credits and NEV Credits. For model years 2018 through 2025, discounted PZEV and AT PZEV credits, and NEV credits may be used to satisfy up to one-quarter of the portion of a manufacturer's requirement that can be met with credits from TZEVs, or, if applicable, the portion of a manufacturer's obligation that may be met with TZEVs specified under subdivision 1962.2(d)(5)(E)2.a.. Intermediate volume manufacturers may fulfill their entire requirement with discounted PZEV and AT PZEV credits, and NEV credits in model years 2018 and 2019. These credits may be earned previously by the manufacturer or acquired from another party. Discounted PZEV and AT PZEV credits may no longer be used after model year 2025 compliance.
- **(B) Use of BEVx Credits.** BEVx credits may be used to satisfy up to 50% of the portion of a manufacturer's -requirement that must be met with ZEV credits.
  - (C) GHG-ZEV Over Compliance Credits.
- **1. Application.** Manufacturers may apply to the Executive Officer, no later than May 1, 2018 December 31, 2016, to be eligible for this subdivision 1962.2(g)(6)(C), based on the following qualifications:

\* \* \* \* \*

**2. Credit Generation and Calculation.** Manufacturers must calculate their over compliance with section 1961.3 requirements for model years 2018 through 2021 based on compliance with the previous model year standard. For example, to generate credits for this subdivision 1962.2(g)(6)(C) for model year 2018, manufacturers would calculate credits based on model year 2017 compliance with section 1961.3.

\* \* \* \* \*

**b.** Credits earned under section 1961.3( $\frac{ba}{2}$ )(9) may not be included in the calculation of gCO<sub>2</sub>/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 1962.2(g)(6)(C).

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

Credits earned in any given model year under this subdivision 1962.2(g)(6)(C) may only be used in the applicable model year and may not be used in any other model year.

gCO<sub>2</sub>/mile credits used to calculate GHG-ZEV over compliance credits under this provision must also be removed from the manufacturer's GHG compliance bank, and cannot be banked for future compliance toward <u>section</u> 1961.3.

- **4. Reporting Requirements.** Annually, manufacturers are required to submit calculations of credits for this subdivision 1962.2(g)(6)(C) for the model year, any remaining credits/debits from previous model years under 1961.3, and projected credits/debits for future years through 2021 under <a href="mailto:section">section</a> 1961.3 and this subdivision 1962.2(g)(6)(C).
- a. If a manufacturer, who has been granted the ability to generate credits under this subdivision 1962.2(g)(6)(C), fails to over comply by at least  $2.0\underline{0}$  gCO<sub>2</sub>/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 1962.2(g)(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, than this subdivision 1962.2(g)(6)(C) 1. through 4. is unavailable for use by any manufacturer.

- (i) **ZEV-Specific Definitions.** The following definitions apply to this section 1962.2.
- (3) "Conventional rounding method" means to increase the last digit to be retained when the following digit is five or greater. Retain the last digit as is when the following digit is four or less.
- (34) "Discounted PZEV and AT PZEV credits" means credits earned under section 1962 and 1962.1 by delivery for sale of PZEVs and AT PZEVs, discounted according to subdivision 1962.1(g)(2)(F).
- (5) "East Region pool" means the combination of Section 177 states east of the Mississippi River.
- (46) "Energy storage device" means a storage device able to provide the minimum power and energy storage capability to enable engine stop/start capability, traction boost, regenerative braking, and (nominal) charge sustaining mode driving capability. In the case of TZEVs, a minimum range threshold relative to certified, new-vehicle range capability is not specified or required.

- (57) "Hydrogen fuel cell vehicle" means a ZEV that is fueled primarily by hydrogen, but may also have off-vehicle charge capability.
- (68) "Hydrogen internal combustion engine vehicle" means a TZEV that is fueled exclusively by hydrogen.
- (79) "Majority ownership situations" means when one manufacturer owns another manufacturer more than 33.4%, for determination of size under CCR Section 1900.
- (810) "Manufacturer US PC and LDT Sales" means a manufacturer's total passenger car and light duty truck (up to 8,500 pounds loaded vehicle weight) sales sold in the United States of America in a given model year.
- **(911)** "Neighborhood electric vehicle" or "NEV" means a motor vehicle that meets the definition of Low-Speed Vehicle either in section 385.5 of the Vehicle Code or in 49 CFR 571.500 (as it existed on July 1, 2000), and is certified to zero-emission vehicle standards.
- (1012) "Placed in service" means having been sold or leased to an end-user and not to a dealer or other distribution chain entity, and having been individually registered for on-road use by the California DMV.
- (4113) "Proportional value" means the ratio of a manufacturer's California applicable sales volume to the manufacturer's Section 177 state applicable sales volume. In any given model year, the same applicable sales volume calculation method must be used to calculate proportional value.
- (1214) "Range Extended Battery Electric Vehicle" or "BEVx" means a vehicle powered predominantly by a zero emission energy storage device, able to drive the vehicle for more than 75 all-electric miles, and also equipped with a backup APU, which does not operate until the energy storage device is fully depleted, and meeting requirements in subdivision 1962.2(d)(5)(G).
- (1315) "Section 177 state" means a state that is administering the California ZEV requirements pursuant to Section 177 of the federal Clean Air Act (42 U.S.C. § 7507).
- **(14<u>16</u>)** "Transitional zero emission vehicle" or "TZEV" means a vehicle that meet the all criteria of subdivision 1962.2(c)(2) and qualifies for an allowance in subdivision 1962.2(c)(3)(D) or (E).
- (17) "West Region pool" means the combination of Section 177 states west of the Mississippi River.

- (1518) "Zero emission vehicle" or "ZEV" means a vehicle that produces zero exhaust emissions of any criteria pollutant (or precursor pollutant) or greenhouse gas under any possible operational modes or conditions.
- (1619) "Zero emission vehicle fuel" means a fuel that provides traction energy in on-road ZEVs. Examples of current technology ZEV fuels include electricity, hydrogen, and compressed air.
- (j) Abbreviations. The following abbreviations are used in this section 1962.2:

\* \* \* \* \*

"EAER $_{u40}$ " means the equivalent all-electric range that a 40 mile  $R_{cda}$  plug-in hybrid electric vehicle achieves.

\* \* \* \* \*

"Reda" means charge depletion actual range (urban Cycle).

\* \* \* \* \*

"UF" means utility factor.

\* \* \* \* \*

Note: Authority cited: Sections 39600, 39601, 43013, 43018, 43101, 43104 and 43105, Health and Safety Code. Reference: Sections 38562, 39002, 39003, 39667, 43000, 43009.5, 43013, 43018, 43018.5, 43100, 43101, 43101.5, 43102, 43104, 43105, 43106, 43107, 43204, and 43205.5, Health and Safety Code.

Amend and Renumber section 1962.2, title 13, California Code of Regulation (CCR), to read as follows:

[Note: Set forth below are the 2012 amendments to the electric vehicle charging requirements. The text of the amendments is shown in <u>underline</u> to indicate additions and <del>strikeout</del> to indicate deletions, compared to the preexisting regulatory language. The further proposed amendments subject to comment are shown in <u>double underline</u> to indicate additions and <del>double strikeout</del> to show deletions. All other portions remain unchanged and are indicated by the symbol "\* \* \* \* \*" for reference.]

### § 1962.<del>2.3.</del> Electric Vehicle Charging Requirements

\* \* \* \* \*

## (c) Requirements.

- (1) Beginning with the 2006 model year, all vehicles identified in subsection (a) must be equipped with a conductive charger inlet port and charging system which meets all the specifications applicable to AC Level 1 and Level 2 charging contained in Society of Automotive Engineers (SAE) Surface Vehicle Recommended Practice SAE J1772 REV NOV 2001 JAN 2010, SAE Electric Vehicle and Plug in Hybrid Electric Vehicle Conductive Charge Coupler, which is incorporated herein by reference. All such vehicles must also be equipped with an on-board charger with a minimum output of 3.3 kilovolt amps.kilowatts, or, sufficient power to enable a complete charge in less than 4 hours.
- (2) A manufacturer may apply to the Executive Officer for approval to use an alternative to the AC inlet described in subsection (c)(1), provided that the following conditions are met:
- (A) each vehicle is supplied with a rigid adaptor that would enable the vehicle to meet all of the remaining system and on-board charger requirements described in subsection (c)(1); and
- (B) the rigid adaptor and alternative inlet must be tested and approved by a Nationally Recognized Testing Laboratory (NRTL).

Note: Authority cited: Sections 39600, 39601, 43013, 43018, 43101, 43104 and 43105, Health and Safety Code. Reference: Sections 39002, 39003, 39667, 43000, 43009.5, 43013, 43018, 43100, 43101, 43101.5, 43102, 43104, 43105, 43106, 43107, 43204 and 43205.5, Health and Safety Code. Authority cited: Sections 39600, 39601, 43013, 43018, 43101, 43104 and 43105, Health and Safety Code. Reference: Sections 38562, 39002, 39003, 39667, 43000, 43009.5, 43013, 43018, 43018.5, 43100, 43101, 43101.5, 43102, 43104, 43105, 43106, 43107, 43204 and 43205.5, Health and Safety Code.