

Final Regulation Order – Part 1

Amendments to sections 1962.1 and 1962.2 title 13, California Code of Regulations

Amend title 13, California Code of Regulations, sections 1962.1, and 1962.2, to read as follows:

NOTE: Set forth below are the 2012 amendments to the California zero emission vehicle (ZEV) regulation. The text of the amendments is shown in underline to indicate additions and ~~strikeout~~ to indicate deletions, compared to the preexisting regulatory language. Subsections for which no changes are proposed in this rulemaking are indicated with “* * * * *”.

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

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(c) *Partial ZEV Allowance Vehicles (PZEVs).*

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(3) *Zero-Emission VMT PZEV Allowance.*

(A) *Calculation of Zero-Emission VMT Allowance.* A vehicle that meets the requirements of subdivision 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:

<i>Range</i>	<i>Zero-emission VMT Allowance</i>
EAER _u < 10 miles	0.0
EAER _u ≥ 10 to 40 miles	EAER _u x (1 – UF _{Rcda})/11.028
EAER _u > 40 miles	3.627 x (1 - UF _n) Where, n = 40 x (R _{cda} /EAER _u)

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

The urban equivalent all-electric range (EAER_U) and urban charge depletion range actual (R_{cda}) shall be determined in accordance with section G.11.4 and G.11.9, respectively, of the “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,” adopted December 17, 2008, and last amended ~~December 6, 2012~~ May 30, 2014, incorporated by reference in section 1962.1(h). The utility factor (UF) shall be determined according to SAE International’s Surface Vehicle Information Report J2841 SEP2010 (Revised September 2010), incorporated by reference herein, from the Fleet Utility Factors (FUF) Table in Appendix B or Using a polynomial curve fit with “FUF Fit” coefficients from Table 2 Utility Factor Equation Coefficients.

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(d) Qualification for ZEV Multipliers and Credits.

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(5) Credits for 2009 through 2017 Model Year ZEVs.

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(B) Fast Refueling. ~~The “fast refueling capability” requirement for a 2009 through 2017 model year Type III, IV, or V ZEV in subdivision 1962(d)(5)(A) will be considered met if the Type III ZEV has the capability to accumulate at least 95 miles of UDDS range in 10 minutes or less and the Type IV or V ZEV has the capability to accumulate at least 190 or 285 miles, respectively, in 15 minutes or less. For purposes of subdivision 1962.1(d)(5)(A), a Model Year 2009 through 2017 ZEV, inclusive, shall be deemed a Type III, Type IV or Type V ZEV if it has the capability to accumulate at least 95 miles of UDDS range in 10 minutes or less, at least 190 miles of UDDS range in 15 minutes or less, or 285 miles of UDDS range in 15 minutes or less, respectively. For ZEVs that utilize more than one ZEV fuel, such as plug-in fuel cell vehicles, the Executive Officer may choose to waive these subdivision 1962.1(d)(5)(B) fast refueling requirements and base the amount of credit earned on UDDS ZEV range, as specified in subdivision 1962.1(d)(5)(A).~~

For Model Years 2009 through 2014, inclusive, “capability to accumulate” means the ZEV’s refueling system has been demonstrated to the satisfaction of ARB’s Executive Officer as having the potential, with appropriate infrastructure or other equipment, to accumulate the miles required under this subdivision within the given time period for the claimed ZEV type. For Model Years 2015 through 2017, inclusive, “capability to accumulate” means the ZEV’s refueling system has been demonstrated to the

satisfaction of ARB's Executive Officer as actually accumulating the miles required under this subdivision within the given time period for the claimed ZEV type, based on actual fast refueling events. Examples of fast refueling events include any refueling of an electric vehicle that meets the time and mileage fueling criteria for a Type III, IV, or V ZEV, including the refueling of a hydrogen fuel cell vehicle or any swapping of the depleted battery pack in a battery electric vehicle with an equivalent or larger capacity, fully-charged battery pack. To receive fast refueling credits, manufacturers must apply to ARB with the information and documentation as specified below.

1. Issuance of Fast Refueling Credits for Model Year 2015, 2016, or 2017 Type III, IV, and V ZEVs.

a. To obtain fast refueling credits, the ZEV manufacturer must apply to ARB's Executive Officer for such credits. No credits shall be granted without Executive Officer approval of the application. Each application shall be specific to Type III, IV, or V ZEV vehicles of a single Model Year. Each application shall contain the documentation specified in subdivision 1962.1(d)(5)(B)2. No later than 15 days before submittal of the first application in a calendar year, the applicant shall provide written notice to the Executive officer of its intent to conduct fast refueling for its Type III, IV, or V ZEVs in that calendar year.

b. Fast refueling capability shall be assigned to the number of Type III, IV, and V ZEVs of a given model year that have been fueled by an actual fast refueling event during the year.

i. The total number of a manufacturer's Type III ZEVs assigned the fast refueling capability for a given model year, based on actual fast refueling events, shall not exceed the manufacturer's total number of Type III ZEVs sold in California for that model year that are capable of fast refueling (i.e., the sum of those Type III ZEVs that were fueled with an actual fast refueling event and those Type III ZEVs that are able to be fast refueled but were not actually fueled using any fast refueling).

ii. The provision in subdivision 1962.1(d)(5)(B)1.b.A. also applies to Type IV and V ZEVs in the same manner described for Type III ZEVs.

iii. Only the first 25 fast refueling events performed on any individual Type III, IV, or V ZEV shall count towards the total number of fast refueling events, respectively.

iv. The frequency at which fast refueling credits are issued shall be based on the frequency of records and documentation submitted to support a claim for fast refueling credits. For example, a manufacturer that submits records of fast refueling events on a monthly, quarterly, or yearly basis shall be issued fast refueling credits on the applicable monthly, quarterly, or yearly basis.

2. Documentation of Fast Refueling Events.

a. For each specific model-year ZEV type for which a manufacturer claims fast refueling credits, the manufacturer must submit documentation of the total number of fast refueling events used to refuel its Type III, IV, or V ZEVs in that model year.

b. To support a manufacturer's claimed number of fast refueling events, that manufacturer must provide documentation of each fast refueling event. For each claimed fast refueling event, the manufacturer shall document the date of the fast refueling event, street address of the fast refueling facility used, and the vehicle identification number of the vehicle that was fast refueled. Fast refueling credit applicants shall retain this documentation for a minimum of three years from the date it was created and provide the documentation to ARB staff upon request within 3 business days.

3. The fast refueling application and data submission requirements in this subdivision do not apply to manufacturers of fuel cell electric vehicles because such vehicles are already designed to be fast refueled at all times.

(C) Credits for 2009 through 2017 Model Year ZEVs. A 2009 through 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 through 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 a 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.

<i>Total Credit Earned by ZEV Type and Model Year for Production and Delivery for Sale and for Placement</i>		
<i>Tier</i>	<i>Calendar Year in Which ZEV is Placed in Service</i>	
	2009-2011	2012 - 2017
NEV	0.30	0.30
Type 0	1	1
Type I	2	2
Type I.5	2.5	2.5
Type I.5x	n/a	2.5
Type II	3	3
Type IIx	n/a	3
Type III	4	4
Type IV	5	5 ₋ *
Type V	7	2012-2014: 7 2015-2017: 9 ₋ *

* As specified in subdivision 1962.1(d)(5)(B)

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

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3. Optional Section 177 State Compliance Path. 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, and transportation system credits, in each Section 177 state equal to fulfill the following percentages requirements of their sales volume determined under subdivision 1962.1(b)(1)(B):

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

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.

i. Trading and Transferring ZEV Credits within the West Region Pool and East Region Pool. Starting in model year 2016, ~~Manufacturers~~ may trade or transfer specified 2012 through 2017 model year ZEV credits, used to meet the ~~same model year~~ requirements in subdivisions 1962.1(d)(5)(E)3.a. and 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 (2012 through 2016 model year) ZEV credits from State Y, within the West Region pool. Starting in model year 2016, ~~Manufacturers~~ may trade or transfer specific 2012 through 2017 model year ZEV credits, used to meet the ~~same model year~~ requirements in subdivisions 1962.1(d)(5)(E)3.a. and 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 (2012 through 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.** Starting in model year 2016, manufacturers may trade or transfer specified 2012 through 2017 model year ZEV credits used to meet the same model year requirements in subdivisions 1962.1(d)(5)(E)3.a. and 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 (2012 through 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:

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

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.** Starting in model year 2015, ~~M~~manufacturers may trade or transfer ~~specified~~2012 through 2017 model year TZEV credits, as applicable, used to meet the ~~same model year~~ subdivision 1962.1(d)(5)(E)3.c. ~~requirements~~percentages 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 (2012 through 2016 model year) TZEV credits from State Y, within the West Region pool. Starting in model year 2015, Mmanufacturers may trade or transfer 2012 through 2017 model year TZEV credits, as applicable, used to meet the subdivision 1962.1(d)(5)(E)3.c. percentages 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 (2012 through 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.** Starting in model year 2015, Mmanufacturers may trade or transfer ~~specified~~2012 through 2017 model year TZEV credits, as applicable, used to meet the subdivision 1962.1(d)(5)(E)3.c. ~~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 (2012 through 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 Ssection 177 state compliance path in each Ssection 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 tables 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.

Large Volume Manufacturer Annual Percentage Obligations under the Section 177 State Optional Compliance Path

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

Intermediate Volume Manufacturer Annual Percentage Obligations under the Section 177 State Optional Compliance Path

<u>Years</u>	<u>Total ZEV Percent Requirement for Optional Compliance Path</u>	<u>Additional ZEV Percentage</u>	<u>Percent Requirement that may be met with PZEVs</u>
<u>2015</u>	<u>11.25%</u>	<u>0%</u>	<u>11.25%</u>
<u>2016</u>	<u>12.15%</u>	<u>0.75%</u>	<u>11.40%</u>
<u>2017</u>	<u>13.05%</u>	<u>1.50%</u>	<u>11.55%</u>

d. Reporting Requirements. ~~On an annual basis~~ For 2015 to 2017 model year, 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 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:

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iii. Make, model, ~~vehicle identification number~~, credit earned, and Section 177 state where delivery for sale of each TZEVS occurred and Section 177 state where delivery for sale and placement in service of each ZEV occurred to meet manufacturer's requirements under subdivision 1962.1(d)(5)(E)3.c.

e. Right to Request Vehicle Identification Numbers. Upon request by the Executive Officer or a Section 177 state, each manufacturer that elects the optional Section 177 state compliance path under subdivision 1962.1(d)(5)(E)3. shall provide the vehicle identification numbers in the report required by subdivision 1962.1(d)(5)(E)3.d.iii.

f.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~~all future model years in each Section 177 state and the pooling provisions in subdivision 1962.1(d)(5)(E)3.a. shall not apply. Any future 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~~prohibited. 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~~all future model years in each Section 177 state and the pooling provisions in subdivision 1962.1(d)(5)(E)3.b. shall not apply. Any future transfers of TZEVS credits between Section 177 states will be null and void if a manufacturer fails to comply, and TZEVS credits will return to the ~~section 177 state in which the credits were earned~~prohibited. 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.

gf. 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.

(F) NEVs. Beginning in 2010 model year, to be eligible for the credit amount in subdivision 1962.1(d)(5)(C), NEVs must meet the following specifications and requirements in this subdivision 1962.1(d)(5)(F):

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5. NEV Charging Requirements. Model year 2014 through 2017 NEVs must meet charging connection standard portion of the requirements specified in subdivision 1962.3(c)(2).

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(h) Test Procedures.

(1) Determining Compliance. The certification requirements and test procedures for determining compliance with this section 1962.1 are set forth in "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," adopted December 17, 2008, and last amended ~~December 6, 2012~~ May 30, 2014, which is incorporated herein by reference.

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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, 43204, 43205, 43205.5 and 43206, Health and Safety Code.

§1962.2. Zero-Emission Vehicle Standards for 2018 and Subsequent Model Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles.

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(c) Transitional Zero Emission Vehicles (TZEV)

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(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," adopted March 22, 2012, last amended ~~December 6, 2012~~ May 30, 2014, which is incorporated herein by reference, and measured as equivalent all electric range (EAER) capability will generate an allowance according to the following equation:

<i>UDDS Test Cycle Range (AER)</i>	<i>Allowance</i>
<10 all electric miles	0.00
≥10 all electric miles	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 G.7.5 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," adopted March 22, 2012, last amended ~~December 6, 2012~~ May 30, 2014, which is incorporated herein by reference.

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(d) **Qualification for Credits From ZEVs.**

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(5) **Credits for 2018 and Subsequent Model Year ZEVs.**

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(E) Counting Specified ZEVs Placed in Service in a Section 177 State and in California. Large volume manufacturers and intermediate volume manufacturers with credits earned from hydrogen 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 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).

1. **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

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

TZEVs

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

Total Percent Requirement

<i>Model Year</i>	<i>2018</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>
New Total Section 177 State Optional Requirements ¹	3.50%	6.00%	8.75%	12.00%

¹ Intermediate volume manufacturers may meet these new total Section 177 State optional requirements entirely with TZEV credits.

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 2012 and subsequent 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)21.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 (2012 through 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 2012 and subsequent 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)21.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 (2012 through 2019 model year) ZEV credits from State Z, within the East Region pool.

ii. **Trading and Transferring ZEV and TZEV Credits between 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 2012 and subsequent~~ model year ZEV and TZEV credits to meet the ~~same model year~~ requirements in subdivision 1962.2(d)(5)(E)~~2~~1.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 (~~2012 through~~ 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~~ demonstrates the manufacturer has met the requirements of this subdivision 1962.2(d)(5)(E)1 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~~ TZEVs and ZEVs occurred ~~and to meet manufacturer's requirements under subdivision 1962.2(d)(5)(E)2~~1.a.

c. Right to Request Vehicle Identification Numbers. Upon request by the Executive Officer or a Section 177 state, each manufacturer that elects the optional Section 177 state compliance path under subdivision 1962.1(d)(5)(E)3. shall provide the vehicle identification numbers in the report required by subdivision 1962.2 (d)(5)(E)3.b.

d. 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~~1.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~~ 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~~ all future model years in each ~~Section~~ Section 177 state, and the pooling provisions in subdivision 1962.2(d)(5)(E)~~21~~.a. shall not apply. Any future transfers of ZEV or TZEV credits between ~~Section~~ 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 prohibited. Penalties shall be calculated separately by each ~~Section~~ Section 177 state where a manufacturer fails to make up the ZEV deficits within the specified time and with the credits allowed by subdivision 1962.2(g)(7)(A) ~~by the end of the 2018 model year~~.

~~ed~~. The provisions of section 1962.2 shall apply to a manufacturer electing the optional ~~Section~~ Section 177 state compliance path, except as specifically modified by this subdivision 1962.2(d)(5)(E)~~21~~.

(F) NEVs. NEVs must meet the following to be eligible for 0.15 credits:

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4. NEV Charging Requirements. A NEV must meet charging requirements specific in subdivision 1962.3(c)~~(2)~~.

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

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(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)~~21~~.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.

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(4) ZEV Credits for Advanced Technology Demonstration Programs.

(A) [Reserved]

(B) ZEVs. ZEVs, including BEVxs, excluding NEVs, placed in a small or intermediate volume manufacturer's California advanced technology demonstration program for a period of two or more years, may earn ZEV credits even if the vehicle is not "delivered for sale" or registered with the California DMV. To earn such credits, the manufacturer must demonstrate to the reasonable satisfaction of the Executive Officer that the vehicles will be regularly used in applications appropriate to evaluate issues related to safety, infrastructure, fuel specifications or public education, and that for 50 percent or more of the first two years of placement the vehicle will be operated in California. Such a vehicle is eligible to receive the same credit that it would have earned if delivered for sale, and for fuel cell vehicles, placed in service. To determine vehicle credit, the model year designation for a demonstration vehicle shall be consistent with the model year designation for conventional vehicles placed in the same timeframe. Manufacturers may earn credit for up to 25 vehicles per model, per Section 177 state, per year under this subdivision 1962.2(g)(4). A manufacturer's vehicles in excess of the 25-vehicle cap will not be eligible for advanced technology demonstration program credits.

(5) ZEV Credits for Transportation Systems.

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(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..

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(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.

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(D) Cap on Use of Specified Credits.

For 2018 and subsequent model year, manufacturers may only meet up to 50% of the portion of their requirement that must be met with credits from ZEVs from a combination of credits earned under subsections 1962.1(d)(5)(G), 1962.2 (d)(5)(G), 1962.1(g)(5), or 1962.2(g)(6)(C). Individual caps for credits earned subsections 1962.1(d)(5)(G), 1962.2 (d)(5)(G), 1962.1(g)(5), or 1962.2(g)(6)(C) remain in effect in any given model year.

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(h) Test Procedures.

(1) Determining Compliance. The certification requirements and test procedures for determining compliance with this section 1962.2 are set forth in "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, last amended ~~December 6, 2012~~ May 30, 2014, which is incorporated herein by reference.

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.