

**ZEV Regulation Modifications For Consideration
May 20, 2013 Workshop**

This handout shows the staff's proposed modifications to the California Zero Emission Vehicle (ZEV) Regulation for consideration at the May 20, 2013 Sacramento workshop. The proposed regulatory language is shown in underline to indicate additions and ~~strikeout~~ to indicate deletions. Shown below are only those portions of the originally proposed language that have been modified.

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

(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. Range accumulation through battery exchange is ineligible for meeting "fast refueling capability." 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).

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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):

Model Years	Additional Section 177 State ZEV Requirements
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:

Model Year	2015	2016	2017
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, ~~M~~manufacturers 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, manufacturers 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.e. 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 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 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

Years	Total ZEV Percent Requirement for Optional Compliance Path	Minimum ZEV Floor for Optional Compliance Path	TZEVs for Optional Compliance Path	AT PZEVs (no change)	PZEVs (no change)
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</u>	<u>Additional ZEV</u>	<u>Percent Requirement</u>
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	<u>Requirement for Optional Compliance Path</u>	<u>Percentage</u>	<u>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. California and each section 177 state reserves the right to request vehicle identification numbers for ZEVs or TZEVs delivered for sale in any section 177 state that are being reported for earning credits, or are being traded or transferred within or between the East Regional pool and the West Region Pool.

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 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 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.

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§ 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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(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

Model Year	2018	2019	2020	2021
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

Model Year	2018	2019	2020	2021
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

Model Year	2018	2019	2020	2021
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)21.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)21.a.

c. Right to Request Vehicle Identification Numbers. California and each section 177 state reserves the right to request vehicle identification numbers for ZEVs or TZEVs delivered for sale in any section 177 state that are being reported for earning credits, or are being traded or transferred within or between the East Regional pool and the West Region Pool.

de. 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)21.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 2024~~all future model years in each 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 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 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 177 state compliance path, except as specifically modified by this subdivision 1962.2(d)(5)(E)21.

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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)21.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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(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.

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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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