APPENDIX A
PROPOSED REGULATION ORDER

Amendments to the Zero Emission Vehicle Regulation 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 proposed amendments to the California zero emission vehicle (ZEV) regulation. The amendments to existing sections proposed and subject to comment in this rulemaking are shown in <u>underline</u> to indicate additions and ~~strikeout~~ to indicate deletions. 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-Duty Vehicles.

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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.*** 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~~ the initial 12 month period following vehicle placement in California 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~~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~~initial 12 month period following vehicle placement in California.

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 during the initial 12 month period following vehicle placement in California, 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.i. 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, during the initial 12 month period following vehicle placement in California, 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~~ during the initial 12 month period following vehicle placement in California.

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.

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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, 43205.5 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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(b) *Percentage ZEV Requirements.*

(1) *General ZEV Credit Percentage Requirement.*

(A) ***Basic Requirement***. The minimum ZEV credit percentage requirement for each manufacturer is listed in the table below as the percentage of the PCs and LDTs, produced by the manufacturer and delivered for sale in California that must be ZEVs, subject to the conditions in this subdivision 1962.2(b). The ZEV requirement will be based on the annual NMOG production report for the appropriate model year.

~~*Model Year*~~	~~*Credit Percentage Requirement*~~
~~2018~~	~~4.5%~~
~~2019~~	~~7.0%~~
~~2020~~	~~9.5%~~
~~2021~~	~~12.0%~~
~~2022~~	~~14.5%~~
~~2023~~	~~17.0%~~
~~2024~~	~~19.5%~~
~~2025 and subsequent~~	~~22.0%~~

Model Year	*Credit Percentage Requirement*	
	LVM	*IVM*
2018	4.5%	2.9%
2019	7.0%	3.8%
2020	9.5%	4.7%
2021	12.0%	5.6%
2022	14.5%	6.5%
2023	17.0%	7.4%
2024	19.5%	8.3%
2025	22.0%	9.2%
2026 and subsequent	22.0%	22.0%

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(7) *Changes in Small Volume and Intermediate Volume Manufacturer Status in 2018 and Subsequent Model Years*.

(A) ***Increases in California Production Volume.*** ~~In~~ For 2018 and subsequent 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 (i.e., total production volume exceeds 13,500 vehicles in a three-year period), for three consecutive averages, the manufacturer shall no longer be treated as a small volume manufacturer, and must comply with the ZEV requirements for intermediate volume manufacturers beginning with the next model year after the last model year of the third consecutive average. For example, if (a small volume) Manufacturer A exceeds 4,500 PCs, LDTs, and MDVs for their 2018 - 2020, 2019 - 2021, and 2020 - 2022 model year averages, Manufacturer A would be subject to intermediate volume requirements starting in 2023 model year.

For 2018 and subsequent model years, if~~If~~ an intermediate volume manufacturer's average California production volume exceeds 20,000 units of new PCs, LDTs, and MDVs in a given model year based on the average number of vehicles produced and delivered for sale ~~for~~ in the ~~three~~ five~~previous~~ consecutive sets of three model ~~years~~year averages immediately prior to that model year (i.e., total production volume exceeds 60,000 vehicles in ~~a~~ each of five consecutive three-year periods), ~~for three consecutive averages,~~ the manufacturer shall no longer be treated as an intermediate volume manufacturer and shall comply with the ZEV requirements for large volume manufacturers beginning with the next model year after the last model year of the ~~third~~fifth consecutive average. For example, if (an intermediate volume) Manufacturer B exceeds 20,000 PCs, LDTs, and MDVs for its 2016 - 2018, 2017 - 2019, 2018 - 2020, 2019 - 2021, and 2020 - 2022 averages, Manufacturer B would be subject to large volume manufacturer requirements starting in the 2023 model year.

If, in the 2018, 2019, or 2020 fiscal years, an intermediate volume manufacturer would otherwise be subject to the requirements for a large volume manufacturer based on California production volume, and if the intermediate volume manufacturer's average annual global revenues for that fiscal year, based upon the immediately prior and consecutive three fiscal years, is no greater than 40 billion dollars, then that manufacturer will continue to be considered an intermediate volume manufacturer conditional upon the manufacturer submitting to the Executive Officer, in writing, a report that demonstrates the types and numbers of ZEVs and TZEVs the manufacturer will deliver to California subsequent to the 2020 fiscal year to meet the requirements specified in subdivision 1962.2(b)(1)(A).

Any new requirement described in ~~the~~ this subdivision will begin with the next model year after the last model year of the third or fifth consecutive average when a manufacturer ceases to be a small or intermediate volume manufacturer respectively in 2018 or subsequent years due to the aggregation requirements in majority ownership situations.

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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)

1. ***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~~2. ***Optional Section 177 State Compliance Path.***

a. ***Additional ZEV Requirements for Intermediate Volume Manufacturers.*** Intermediate volume manufacturers that elect the optional Section 177 state compliance path must generate additional 2012 and subsequent model year ZEV credits, including no more than 50% Type 1.5x and Type IIx vehicle credits and excluding all NEV, Type 0 ZEV credits, and transportation system credits, in each Section 177 state to fulfill the following percentage requirements of their sales volume determined under subdivision 1962.2(b)(1)(B):

Intermediate Volume Manufacturers

Model Years	*Additional Section 177 State ZEV Requirements*
Two model years prior to transition to LVM status	0.75%
One model year prior to transition to LVM status	1.50%

Subdivision 1962.2(d)(5)(E)1. and subdivision 1962.1(d)(5)(E) shall not apply to any ZEV credits used to meet an intermediate volume manufacturer's additional ZEV requirements for the appropriate model years as described in the table above under this subdivision 1962.2(d)(5)(E)2.a.

b. ZEV and TZEV Percentages for Intermediate Volume Manufacturers. Intermediate volume manufacturers that have fully complied with the optional Section 177 state compliance path requirements in subdvision 1962.1(d)(5)(E)3 or intend to comply or have fully complied with requirements in subdivision 1962.2(d)(5)(E)2.a. are allowed to meet their total ZEV percentage requirements specified in 1962.2(b) in each section 177 state by utilizing subdivisions 1962.2(d)(5)(E)2.a.i and ii, below.

i. ***Trading and Transferring ZEV and TZEV Credits within West Region Pool and East Region Pool.*** Intermediate volume manufacturers may trade or transfer 2012 and subsequent model year ZEV and TZEV credits within the West Region pool to meet the requirements in subdivision 1962.2(d)(5)(E)2.b, and will incur no premium on their credit values. For example, for a manufacturer to make up a 2020 model year shortfall of 100 credits in State X, the manufacturer may transfer 100 (2018 through 2020 model year) ZEV credits from State Y, within the West Region pool. Intermediate volume manufacturers that have fully complied with the optional Section 177 state compliance path requirements in subdivision 1962.1(d)(5)(E)3. or intend to comply or have fully complied with requirements in subdivision 1962.2(d)(5)(E)2.a. may trade or transfer 2018 and subsequent model year ZEV and TZEV credits within the East Region pool to meet the requirements in subdivision 1962.2(b), and will incur no premium on their credit values. For example, for a manufacturer to make up a 2020 model year shortfall of 100 credits in State W, the manufacturer may transfer 100 (2018 through 2020 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**.* Intermediate volume manufacturers may trade or transfer 2012 and subsequent model year ZEV and TZEV credits to meet the requirements in subdivision 1962.2(b). 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 2020 model year shortfall of 100 credits in the West Region Pool, the manufacturer may transfer 130 (2018 through 2020 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.

<u>c.</u> ***Reduced ZEV and TZEV Percentages <u>for Large Volume Manufacturers</u>.*** 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	3.50%	6.00%	8.75%	12.00%

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~~<u>c</u>, 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~~c, 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.

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 model year ZEV and TZEV credits to meet the same model year requirements in subdivision 1962.2(d)(5)(E)2.~~-a~~c. 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.

d~~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 demonstrates the manufacturer has met the requirements of this subdivision 1962.2(d)(5)(E)~~1~~2. 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, ~~,~~credit earned, and Section 177 state where delivery for sale of TZEVs and ZEVs occurred to meet manufacturer's requirements under subdivision 1962.2(d)(5)(E)~~1~~2.a.

e~~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)2.~~b~~d.

f~~d~~. ***Failure to Meet Optional Section 177 State Compliance Path Requirements.*** A large volume 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~~b. 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 all future model years in each Section 177 state, and the pooling provisions in subdivision 1962.2(d)(5)(E)~~1~~2.~~a~~b. shall not apply. Any future transfers of ZEV or TZEV credits between Section 177 states will be prohibited.

An intermediate volume manufacturer that elects the optional Section 177 state compliance path under subdivision 1962.1(d)(5)(E)3. or subdivision 1962.2(d)(5)(E)2. but delivers fewer ZEVs than required under subdivision 1962.2(d)(5)(E) 2.a. shall make up the deficit by the end of the second model year in which the manufacturer is complying as an large volume manufacturer. For example, an intermediate volume manufacturer that becomes subject to large volume manufacturer requirements in 2019 model year must deliver the number of ZEVs required by subdivision 1962.2(d)(5)(E)2.a. by June 30, 2021. The pooling provisions in subdivision 1962.2(d)(5)(E)2.a. shall not apply to an intermediate volume manufacturer that fails to provide the required amount of ZEVs under subdivision 1962.2(d)(5)(E)2.a. In that case, any future transfers of ZEV or TZEV credits within or between Section 177 states will be 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).

g~~f~~. 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)~~1~~2.

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

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(7) Requirement to Make Up a ZEV Deficit.
(A) ***General***. A manufacturer that produces and delivers for sale in California fewer ZEVs than required to meet their ZEV credit obligation, in a given model year shall submit a plan to the Executive Officer demonstrating how the manufacturer will make up

the deficit ~~by the next~~ ~~model year~~ ~~by submitting to the Executive Officer~~ with a commensurate amount of ZEV credits. The Executive Officer will approve a plan allowing up to three model years to make up the deficit. In the case where no ZEV was produced and delivered for sale in California in the model year, the Executive Officer will approve no more than one year to make up the deficit. The amount of ZEV credits required to be submitted shall be calculated by [i] adding the number of credits from ZEVs produced and delivered for sale in California by the manufacturer for the model year to the number of credits from TZEVs produced and delivered for sale in California by the manufacturer for the model year (for a LVM, not to exceed that permitted under subdivision 1962.2(b)(2)), and [ii] subtracting that total from the number of credits required to be produced and delivered for sale in California by the manufacturer for the model year. BEVx, TZEV, NEV, or converted AT PZEV and PZEV credits are not allowed to be used to fulfill a manufacturer's ZEV deficit; only credits from ZEVs may be used to fulfill a large volume manufacturer's ZEV deficit. Intermediate volume manufacturers may only use ZEV and TZEV credits to fulfill a manufacturer’s ZEV deficit.

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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, 43107, 43204 and 43205.5, Health and Safety Code.