# Appendix F-5

## Purpose and Rationale

## Section 1962.4. Zero-Emission Vehicle Requirements for 2026 and Subsequent Model Year Passenger Cars and Light-Duty Trucks.

### Subsection 1962.4(a). Applicability.

#### Purpose

The purpose of this subsection is to define that these requirements shall apply to manufacturers that produce and deliver for sale in California model year 2026 and subsequent passenger cars and light-duty trucks.

#### Rationale

This subsection is necessary to define to whom this section and its requirements apply, namely, manufacturers of passenger cars and light-duty trucks for model years 2026 and subsequent. As described in Section II of the ISOR, cars and light-duty trucks are significant contributors to criteria pollutant and greenhouse gas emissions, both of which CARB is directed to address to meet State and federal climate and air quality mandates.

### Subsection 1962.4(b). Zero Emission Vehicle Standard.

#### Purpose

The purpose of this subsection is to define the standard for a ZEV under this section—new 2026 and subsequent model year passenger cars and light-duty trucks that produce zero exhaust emissions (excluding air condition system emissions) under any possible operational circumstances. ZEVs may have emissions from air conditioning systems or other parts of the vehicle, such as off-gases from materials to make vehicle interiors, and qualify as ZEVs under CARB's regulations. Vehicles that do not have exhaust emissions and meet other certification requirements will be certified as ZEVs by the Executive Officer.

#### Rationale

This subsection is necessary to define the standard to which a car or truck will be held to be certified as a ZEV under this regulation, and to allow for emissions from other parts of the vehicle that are not associated with a combustion engine. Because ZEVs under this subsection will emit no criteria pollutant or greenhouse gas emissions from an engine exhaust (and excluding any emissions from other parts of the vehicle, like air conditioning systems) and because California's vehicle population has been and

continues to be one of the leading contributors to criteria and greenhouse gas emissions, this standard plays a critical role in reducing those emissions and meeting State and federal climate and air quality requirements. Certification is a requirement to sell vehicles in California as provided below.

**Subsection 1962.4(c). Annual ZEV Requirements.**

**Purpose**

The purpose of this subsection is to specify the annual ZEV requirement each manufacturer will have to comply with. An intermediate or large volume manufacturer's annual ZEV requirement will be calculated as the annual percentage requirement multiplied by the manufacturer's production volume, while small volume manufacturers must have 100 percent sales of new vehicles in California be ZEVs beginning with model year 2035.

**Rationale**

This subsection is necessary to specify how a manufacturer's ZEV requirement will be determined each year. Having intermediate and large volume manufacturers' annual ZEV requirement be equivalent to the required annual ZEV sales percentage of their production volume, rather than a specific number of vehicles, ensures that each manufacturer's compliance will be determined by their own production and sales, and not either dependent on other manufacturers' actions or via a set number that may be easy to meet by some and difficult to meet by others—while at the same time preserving an overall new vehicle sales trajectory needed to obtain critical emissions reductions, as evidenced by section II of the ISOR. Having requirements for small volume manufacturers that start in 2035 avoids unduly burdening those manufacturers and providing more flexibility in the near-term while ensuring they wind up in the same place in the end as larger manufacturers.

**Subsection 1962.4(c)(1). Requirements for Intermediate and Large Volume Manufacturers.**

**Purpose**

The purpose of this subsection is to describe the annual ZEV requirements for intermediate and large volume manufacturers. This subsection provides how these manufacturers shall calculate their annual ZEV sales requirement, including enumerating an annual ZEV sales percentage requirement and options for determining production volume.

**Rationale**

This subsection is necessary to specify how intermediate and large volume manufacturers shall determine their annual ZEV requirements.

**Subsection 1962.4(c)(1)(A). Calculating Annual ZEV Requirement.**

**Purpose**

The purpose of this subsection is to provide the formula for each intermediate and large volume manufacturer to calculate their annual ZEV requirement. The annual ZEV requirement for a given manufacturer is to be the annual percentage requirement for the given model year multiplied by the manufacturer's production volume for the given model year. This subsection also defines the terms of the formula.

**Rationale**

This subsection is necessary to provide intermediate and large volume manufacturers the means for determining their annual ZEV requirement and the meanings of the terms for calculating the annual requirement. Having intermediate and large volume manufacturers' annual ZEV requirement be equivalent to the required annual ZEV sales percentage of their production volume ensures that each manufacturer's compliance will be determined by its own production and sales, and not either dependent on other manufacturers' actions or via a set number that may be easy to meet by some and difficult to meet by others—while at the same time preserving an overall new vehicle sales trajectory needed to obtain critical emissions reductions.

**Subsection 1962.4(c)(1)(B). Percentage Requirement.**

**Purpose**

The purpose of these subsections is to enumerate the required percentage of ZEV sales that manufacturers must meet each model year from 2026 and beyond to reduce emissions from conventional vehicles. Model year 2026 begins with a percentage requirement of 35 percent, which increases by 8 percent year over year through the first five model years, then 6 percent year over year for the next five model years to ultimately reach 100 percent in 2035 and beyond.

**Rationale**

This subsection is necessary to provide a specific percentage requirement for manufacturers to use to determine their annual ZEV requirement. Moreover, the established model year percentage requirements are necessary to ensure California is securing the maximum emission reductions feasible over time to achieve needed reductions of criteria pollutant and greenhouse gas emissions. As explained in ISOR Chapter IV.A and C, ZEV technologies and the ZEV market have been and continue to markedly expand, and every manufacturer has committed to electrifying their vehicle fleets. The proposed trajectory for model years 2026 through 2030 (8 percent year over year) aligns with what manufacturers have stated in their own projections of ZEVs and PHEVs. The moderated trajectory for the final model years (6 percent year over year) up to 2035 reflects the expectation that the last 20 percent of the fleet (e.g.,

vehicles built on larger platforms with greater towing capacity) will be the most challenging to bring to zero emissions. Together, the whole percentage requirement trajectory timely provides the critical transition of the light-duty vehicle sector to zero-emission technologies in order to meet both near- and long-term ambient air quality and climate emission reduction requirements mandated by statute (see, e.g., ISOR Chapters III.A and IV.B).

**Subsection 1962.4(c)(1)(C). Calculating the Production Volume.**

**Purpose**

The purpose of this subsection, and its subsections 1. and 2., is to specify how intermediate and large volume manufacturers are to calculate their vehicle production volumes for a given model year in California. The production volume is determined from the total number of new passenger cars and light-duty trucks delivered for sale in California required to be reported in the annual non-methane organic plus oxides of nitrogen production report for the applicable model year. The default method for calculating the production volume for a given model year is the three-year average of the manufacturer's volume of cars and trucks produced and delivered for sale in California in the second, third, and fourth model years preceding the given model year. However, production volumes are susceptible to variation. In situations of extreme variation, the regulation allows a manufacturer to elect to use the total number of light-duty vehicles produced and delivered for sale in California for a given model year as that model year's production volume if its total number of light-duty vehicles in California for that given model year decreases by 30 percent or more from the previous model year. The production volume is determined using the non-methane organic plus oxides of nitrogen production report, which is a requirement under related regulations.

**Rationale**

This subsection is necessary to clearly prescribe how intermediate and large volume manufacturers are to determine their production volume for a given model year so that they can calculate their annual ZEV requirement. This subsection essentially carries over the same method CARB has required for determining production volumes under the current ZEV regulation (see 13 CCR 1962.2(b)(1)(B)). Basing the production volume on the already-reported non-methane organic gases plus oxides of nitrogen production number avoids duplicating and minimizes reporting requirements without sacrificing needed accuracy. It also aligns ZEV production volume determination with the related LEV production volume determination. The 30 percent threshold for the optional determination method was established in the previous rulemaking and represented a reasonable threshold of a significant change that provides relief due to unforeseen circumstances or disruptions to production.

**Subsection 1962.4(c)(2)(A)-(C). Requirements for Small Volume Manufacturers.**

**Purpose**

The purpose of these subsections is to describe the annual ZEV requirements for small volume manufacturers to reflect the potential for greater challenges to comply with the regulations than for large volume manufacturers. These manufacturers must comply with the annual ZEV requirement beginning with the 2035 model year; in other words, by 2035, these manufacturers' new vehicle sales in California must be all ZEVs. Small volume manufacturers may still earn, bank, and trade ZEV and PHEV values from those produced and delivered for sale in California during the 2026-2034 model years. Each small volume manufacturer must submit a compliance plan to the Executive Officer no later than December 31, 2032, or within one year of becoming a small volume manufacturer. This plan must demonstrate how the manufacturer will meet the 2035 model year annual ZEV requirement and must include specific information to that end. No plan approval is required.

**Rationale**

These subsections are necessary to specify the requirements for small volume manufacturers in complying with the annual ZEV requirement. Small volume manufacturers typically only certify one or two unique models in a model year. In total, they represent less than 2% of total new vehicle sales in California and therefore have a limited impact on California's emissions inventory. Having small volume manufacturers comply with the 100 percent annual ZEV requirement in 2035 avoids unduly burdens and provides flexibility to those manufacturers in the near-term while ensuring they wind up in the same place in the end as the larger manufacturers. Allowing small volume manufacturers to earn, bank, and trade ZEV and PHEV values in the meantime incentivizes earlier action to meet the 2035 requirement and can help support the intermediate and large volume manufacturers. The requirement to submit a compliance plan by December 31, 2032, ensures these manufacturers are planning ahead with a sufficient amount of time to shift their production to comply with the 2035 requirement. Subsection (C) further lists, for clarity, information that must be included in the compliance plan for demonstrating expected compliance. A compliance plan that contains the information listed in Subsection (C) fulfills the regulatory requirement. It is not necessary for CARB to approve the substantive content of the compliance plan because small volume manufacturers may achieve compliance with the applicable annual ZEV requirements through the means of their choosing. The compliance plan requirement is to ensure that small volume manufacturers begin to plan for their own compliance with the applicable annual ZEV requirements with adequate preparation time, and for CARB to be aware of the products coming for certification and infrastructure planning.

**Subsection 1962.4(c)(3). Changes in Manufacturer Volume Status in 2026 and Subsequent Model Years.**

**Purpose**

The purpose of this subsection is to detail how significant changes in production volume affect a manufacturer's annual ZEV requirements. This subsection addresses scenarios where a manufacturer becomes intermediate or large volume, becomes small volume, and where a volume status change is brought about by a change in ownership.

**Rationale**

This subsection is necessary to address circumstances when a manufacturer has a change in production volume significant enough to qualify as a different category of manufacturer. This can occur due to changes in production by a manufacturer or a change of ownership. These scenarios have arisen in the past, and these provisions are largely how CARB has required these scenarios to be handled in the previous ZEV regulation (13 CCR 1962.2, for model years 2018 through 2025); CARB is carrying these over for model years 2026 and beyond. This provision ensures consistent application of the regulation's requirements to manufacturers.

**Subsection 1962.4(c)(3)(A). Increases in California Production Volume.**

**Purpose**

The purpose of this subsection is to specify how an increase in production volume, such that a manufacturer becomes an intermediate or large volume manufacturer as defined in California Code of Regulations, title 13, section 1900, affects the manufacturer's annual ZEV requirement. In this scenario, the manufacturer becomes subject to the annual ZEV requirements in subsection (c)(1) starting with the third model year after the last model year of its three consecutive three-year rolling averages.

**Rationale**

This subsection is necessary to clarify when a small volume manufacturer becomes intermediate or large volume and when the requirements for intermediate and large volume manufacturers begin to apply to the transitioned manufacturer. This provision is a simplified version of the current ZEV regulation, CCR, title 13, section1962.2(b)(7)(A), adopted in 2009. Because intermediate and large volume manufacturers are subject to annual ZEV requirements, whereas small volume manufacturers are not, this subsection (following CARB's current and past practice) provides for a lead time of three model years for the transitioned manufacturer to come into compliance with these annual requirements. This gives the manufacturer adequate time to develop the technology to meet the regulatory requirements. This

subsection also (following CARB's current and past practice) assesses the manufacturer's production volumes over the past three consecutive three-year rolling averages to provide stability in concluding whether a manufacturer has actually become an intermediate or large volume manufacturer such that it is subject to the annual ZEV requirements and has not merely had a temporary uptick in production such that it shortly switches back. CARB has observed situations in the past where a manufacturer's production volume temporarily spiked, pushing it into the intermediate/large volume realm where it had to comply with annual requirements, only to return to levels of a small manufacturer, causing the manufacturer to become exempt from the annual requirements of a large manufacturer. To ease the costs and burdens to small volume manufacturers in such situations, CARB applies three consecutive three-year rolling averages.

**Subsection 1962.4(c)(3)(B). Decreases in California Production Volume.**

**Purpose**

The purpose of this subsection is to specify how a decrease in production volume, such that a manufacturer becomes a small volume manufacturer as defined in in CCR, title 13, section 1900, affects the manufacturer's annual ZEV requirement. In this scenario, the manufacturer becomes subject to the small volume manufacturer requirements of subsection (c)(2) the following model year after the last model year of its three consecutive three-year rolling averages.

**Rationale**

This subsection is necessary to clarify when an intermediate or large volume manufacturer becomes small volume and when the requirements for small volume manufacturers begin to apply to the transitioned manufacturer. This provision follows the current ZEV regulation, CCR, title 13, section 1962.2(b)(7)(B), adopted in 2009. As discussed above, the three consecutive three-year rolling averages require a degree of stability or permanence to the production volume change such that the application of annual ZEV requirements change. This provides additional certainty and reduced burdens to manufacturers without sacrificing emission reductions. Unlike subsection (c)(3)(A) above, though, the small volume requirements apply to the transitioned manufacturer immediately in the next model year, since small volume manufacturers do not have to comply with the percentage sales requirements until 2035.

**Subsection 1962.4(c)(3)(C). Calculating California Production Volume in Change of Ownership Situations.**

**Purpose**

The purpose of this subsection is to specify how a change in volume status from a change in ownership affects the manufacturer's annual ZEV requirement. This scenario

arises when a manufacturer's ownership changes such that the aggregation requirements in CCR, title 13, section 1900 applicable to the manufacture change (i.e., either two or more manufacturers must aggregate or disaggregate their production volumes). For purposes of this regulation, any changed aggregation requirements go into effect the next model year after the model year in which the ownership change occurs. If the manufacturer is simultaneously producing vehicles that are designed in two different model years, which is permissible under the definition of a model year that can encompass 1 day less than two calendar years, the earlier model year is treated as the model year in which the ownership change occurs. To determine whether the changed aggregation requirements change the manufacturer's production volume status, the manufacturer applies the average aggregated or disaggregated California production volumes of three previous model years. Any changed annual ZEV requirements from a changed volume status shall become effective according to the same lead times in subsections (c)(3)(A) and (B), as applicable.

**Rationale**

This subsection is necessary to clarify when applicable annual ZEV requirements apply in the event a manufacturer experiences an ownership change that changes its production volume status. These scenarios have occurred before and can be complex; having clear regulatory provisions for when and how to account for production volumes in these scenarios is essential to consistently apply the regulatory requirements. This provision tracks the current ZEV regulation, CCR, title 13, section 1962.2(b)(7)(C), adopted in 2009. Any changes to applicable annual ZEV requirements from changed ownership follow the applicable of the previous two subsections, for the reasons explained above.

**Subsection 1962.4(d). Requirements for ZEVs.**

**Purpose**

The purpose of this subsection is to specify the requirements ZEVs must meet in order to be certified for sale in California and ensure they meet those requirements at the time of certification.

**Rationale**

This subsection is necessary to clarify the provisions with which ZEVs must comply or satisfy before they may be certified for sale in California. Each of these provisions provides assurance that ZEVs will fully achieve their anticipated emissions reductions by providing minimum requirements for vehicle performance, durability, warranty, labeling, and access to information so that ZEVs reliably perform as needed to meet consumers' transportation needs, assure confidence in their capabilities, and ensure manufacturers are responsible for failure of components related to the functionality of

the vehicle as a replacement for a conventional vehicle to ensure they will fully replace internal combustion vehicles and displace the emissions from such vehicles. Making these requirements a condition of certification, which is a prerequisite to sale of a new vehicles in California, ensures that the requirements are met before vehicles are sold in the state. This minimizes the risk of having to retrofit, recall, or recover vehicles that are discovered after sale to not meet the requirements, or of assessing penalties for vehicles that have been sold without meeting the requirements.

**Subsection 1962.4(d)(1). Certification Range Value.**

**Purpose**

The purpose of this subsection is to specify the minimum range of travel on a charge or fueling for a ZEV to be certified for sale in California. ZEVs must have a range value equal to or greater than 200 miles, as determined according to the 2026 ZEV and PHEV Test Procedures (which are incorporated by reference).

**Rationale**

Establishing a minimum range helps provide consumer confidence in ZEVs, reliability of performance, and assurance that emissions will be reduced through replacement of a conventional vehicle. The current minimum range is 50 miles. As explained in ISOR Chapter IV.C.3., 200 miles was chosen based on consumer survey responses, meetings with community groups, data from Clean Cars 4 All, and analyzing daily driving patterns to ensure emissions would be effectively displaced. These data show that a majority of the general public would consider purchasing an electric vehicle if it could drive more than 200 miles on a single charge, and manufacturers are producing more ZEVs with a minimum range substantially higher than the current minimum. Of the 18 unique ZEV models that earned credit for the 2020 model year, all certified with more than a 120-mile electric range. And many manufacturers have announced 300-mile (or more) label range electric vehicles—though even if manufacturers were only to do what was minimally required, the minimum range would meet the average daily demand for most drivers, enabling the vehicles to displace conventional vehicles for average daily use.

**Subsection 1962.4(d)(2). ZEV Durability Requirement for Useful Life.**

**Purpose**

The purpose of this subsection is to specify the durability requirement for a ZEV to be certified for sale in California. ZEVs must be designed to maintain 80 percent or more of the certified range value for a useful life of 10 years or 150,000 miles, whichever is first. Manufacturers must also meet the data reporting requirements of CCR, title 13, 1962.7, which are geared at demonstrating in-use compliance with the ZEV requirements.

**Rationale**

This section is necessary to establish a durability requirement for the useful life of a ZEV and clarify which data reporting requirements a manufacturer must meet. Conventional vehicles have long been subject to durability requirements via certification standards in addition to emission standards. ZEVs previously have not been subject to such requirements because volumes had been low and the technologies quickly changing. However, ZEVs now comprise a significant portion of the market, and manufacturers have all stated their intent for that portion to grow substantially. To support the expansion of clean technologies in the light-duty fleet and significantly reduce emissions, it is necessary to now include ZEVs in a durability and monitoring paradigm similar to conventional vehicles. Not doing so would substantially undermine the benefits of this proposal and consumer confidence in ZEVs, which could reduce drivers willingness to use ZEVs over ICEVs, thereby potentially increasing emissions. The requirement to maintain 80 percent or more of certified range value for the useful life of 10 years or 150,000 miles, whichever is first, is based on available data of current electric vehicles showing their ability to meet these requirements and expected improvements in vehicle technology, as detailed in ISOR Chapter III.D.2.

**Subsection 1962.4(d)(3). Battery Labeling Requirements.**

**Purpose**

The purpose of this subsection is to specify that ZEVs must meet the battery labeling requirements set forth in proposed CCR, title 13, section 1962.6, in order to be certified for sale in California.

**Rationale**

Proper battery labeling ensures that consumers, aftermarket servicers, and end users are aware of a battery's contents for proper handling and are provided convenient access to more information. The subsection will also ensure that manufacturers are labeling their batteries consistently and uniformly. This will facilitate proper battery servicing and recycling, and support consumer confidence in ZEVs by assuring servicers have access to the information needed. Not doing so would substantially undermine the benefits of this proposal and consumer confidence in ZEVs, which could reduce drivers willingness to use ZEVs over ICEVs, thereby potentially increasing emissions.

**Subsection 1962.4(d)(4). Data Standardization.**

**Purpose**

The purpose of this subsection is to specify that ZEVs must meet the data standardization requirements set forth in proposed CCR, title 13, section 1962.5.

**Rationale**

This subsection is necessary to clarify that ZEVs must be able to properly communicate their operating data to appropriate tools in a readable and uniform format in order to be certified for sale in California. Proper communication and readable, standardized formatting are essential to enable service technicians and others to verify and ensure that ZEVs are functioning as intended and in compliance with regulatory requirements, thereby actually achieving the needed emission reductions.

**Subsection 1962.4(d)(5). Service Information Requirements.**

**Purpose**

The purpose of this subsection is to specify that ZEVs must meet the service information requirements set forth in CCR, title 13, section 1969.

**Rationale**

This subsection is necessary to clarify that ZEVs must have adequate service information available in order to be certified for sale in California. This information is already required to be made available for ICE vehicles. New dealers alone will not be able to handle all ZEV servicing in California. Therefore, service information and tools must be available to the aftermarket repair industry, the vehicle owners that rely on those independent service providers, and the training programs for service technicians. Such information availability is critical to ensure ZEVs are a viable transportation option that will displace emissions from ICE vehicles.

**Subsection 1962.4(d)(6). ZEV Warranty Requirements.**

**Purpose**

The purpose of this subsection is to specify that ZEVs must meet the warranty requirements set forth in proposed CCR, title 13, section 1962.8.

**Rationale**

This subsection is necessary to clarify that ZEVs must have minimum warranties in order to be certified for sale in California. Warranty requirements ensure that manufacturers are responsible for emission component failures on individual vehicles and supports consumer confidence. Manufacturers are currently required to provide a minimum warranty on the emission control systems for ICE vehicles, including PHEVs. This subsection (along with section 1962.8) serves to bring ZEVs under the warranty umbrella, which is particularly important given the need to bolster consumer confidence to enable continued expansion of ZEVs in the market and displacement of emissions from conventional vehicles.

**Subsection 1962.4(d)(7). Charging Requirements.**

**Purpose**

The purpose of this subsection is to specify that BEVs and plug-in FCEVs must meet the charging requirements set forth in CCR, title 13, section 1962.3.

**Rationale**

This subsection is necessary to clarify that BEVs and plug-in FCEVs must meet certain charging requirements in order to be certified for sale in California. Currently, BEVs must meet CCR, title 13, section 1962.3 charging requirements. This subsection makes explicit that in 2026 and subsequent model year BEVs and plug-in FCEVs would need to continue to meet these requirements, and the proposed requirements being added in this section. As further explained in ISOR section IV.C.3., ensuring that certified BEVs and plug-in FCEVs meet uniform minimum charging requirements and provide consumers with necessary charging equipment further supports consumer confidence in these vehicles, so that they can displace emissions.

**Subsection 1962.4(e). Additional Allowances to Count Toward Annual ZEV Requirement.**

**Purpose**

The purpose of this subsection is to provide flexibilities for manufacturers in meeting their annual ZEV requirement. These flexibilities are through PHEV, environmental justice, and early compliance vehicle values, which manufacturers may earn by satisfying certain enumerated conditions.

**Rationale**

This subsection is necessary to allow some alternate pathways to comply with annual ZEV requirements to better support ZEV expansion. In line with the 2017 ACC Midterm Review, CARB anticipates that PHEVs will still play an important role in expanding the ZEV market, particularly in reaching 100 percent new vehicle sales of ZEVs by 2035, because studies show vehicle model diversity and availability are key to driving consumer interest. CARB anticipates that PHEVs may also remain a critical choice for low-income drivers; data from the Clean Cars 4 All program show that participants swapped out older vehicles for a PHEV at four times the rate as for a BEV. Retaining an alternate PHEV compliance option (though amended to reflect the expanded ZEV requirements) likely ensures the success of the ZEV regulation. This can be found discussed further, including references to data in Section III.C.3 of the Staff Report.

Similarly, CARB anticipates that offering a limited alternate compliance pathway through environmental justice vehicle values will also help to expand the ZEV market

and the success of the ZEV regulation, particularly with respect to priority communities. Having discrete bankable and tradeable vehicle values aimed at providing manufacturers with incentive for targeted actions to help achieve more equitable outcomes further accelerates affordable ZEV access in these communities during the critical early years of the program and incentivizes emission reductions in communities that most need them sooner.

Similarly, CARB anticipates that offering a limited early compliance vehicle value option will reward manufactures to building a market in preparation for meeting the ACC II ZEV requirements that begin to ramp up in 2026 model year.

**Subsection 1962.4(e)(1). PHEV Flexibility.**

**Purpose**

The purpose of this subsection is to provide flexibilities for manufacturers in meeting their annual ZEV requirement through PHEV vehicle values, which manufacturers may earn by satisfying certain enumerated conditions. The current ZEV regulation allows for some compliance via PHEV vehicle values (e.g., CCR, title 13, 1962.2(c)); CARB is retaining this option, though with amendments to reflect the ZEV requirements for model years 2026 and beyond.

**Rationale**

This subsection is necessary to retain (as amended) a limited PHEV pathway to comply with annual ZEV requirements, which supports the ZEV market and regulation. In line with the 2017 ACC Midterm Review, CARB anticipates that PHEVs will still play an important role in expanding the ZEV market, particularly in reaching 100 percent new vehicle sales of ZEVs by 2035. Explained further in Section III.A of the Staff Report, studies show vehicle model diversity and availability are key to driving consumer interest. PHEVs may also remain a critical choice for low-income drivers—data from the Clean Cars 4 All program show that participants swapped out older vehicles for a PHEV at four times the rate as for a BEV. Retaining an alternate PHEV compliance option (though amended to reflect the expanded ZEV requirements) likely ensures the success of the ZEV regulation. in combination with minimum technical requirements, discussed in Section III of the Staff Report, PHEVs included in staff's ACC II proposal will have significant electric operation, and function primarily as ZEVs in most use cases.

**Subsection 1962.4(e)(1)(A)1. – 8.**

**Purpose**

The purpose of these subsections is to enumerate the criteria each PHEV for model years 2026 and subsequent must satisfy in order to be counted at a value of one toward a manufacturer's annual ZEV requirement. These PHEVs must: be certified to

SULEV30 or lower exhaust emission standards in CCR, title 13, 1961.4; extend the defects and performance warranty to 15 years or 150,000 miles, whichever occurs first; meet the battery labeling requirements of proposed CCR, title 13, 1962.6; meet the service information requirements of CCR, title 13, 1969; meet the battery warranty requirements in proposed CCR, title 13,1962.8; meet the charging requirements in CCR, title 13, 1962.3; have a minimum certification range value of 70 miles or more, as determined under the 2026 ZEV and PHEV Test Procedures; and have a minimum US06 all-electric range value of 40 miles or more, as determined under the 2026 ZEV and PHEV Test Procedures.

**Rationale**

These subsections are necessary to clearly list the requirements model year 2026 and subsequent PHEVs produced and delivered for sale in California must meet in order to be counted at a value of one toward a manufacturer's annual ZEV requirement. These requirements largely track those for ZEVs under subsection (d), and similarly serve to assure that any PHEV counting toward a manufacturer's annual ZEV requirement will fully achieve its anticipated emissions reductions.

As further explained in ISOR section III.C.4, these requirements also represent a balancing of the risks and emissions from gasoline usage in PHEVs with the need to keep PHEVs as an available option in the nearer term to achieve 100 percent of new car sales as ZEVs by 2035. To that end, these requirements functionally emphasize the ZEV capabilities of these vehicles. For instance, the expanded minimum certification ranges reflect the advancement of PHEVs since the ACC I rulemaking. PHEVs with longer electric ranges are anticipated to replace PHEVs with less range due in part to consumer demand for a more all-electric driving experience. These longer ranges are sufficient to cover most drivers' daily driving habits. Similarly, CARB is retaining the existing ZEV regulation's extended warranty requirement and slightly increasing the stringency of the SULEV emission certification requirement for the combustion engine to SULEV30 or lower (I.e., SULEV20 or 30), reflecting the advancement in technologies to better protect against emissions from gasoline usage.

**Subsection 1962.4(e)(1)(B)1. – 3.**

**Purpose**

The purpose of these subsections is to allow model years 2026 through 2028 PHEVs with a lower minimum certification range (43 miles or more) to count at a partial vehicle value, provided they meet the requirements of 1962.4(e)(1)(A)1. through 6. This allowance provides a bridge or phase-in between the current PHEV minimum certification range values (at least 10 all-electric miles) and the more stringent requirements under (e)(1)(A)7. and 8. To calculate such a PHEV's partial vehicle value, the certification range is divided by 100 and 0.20 is added to that result, with a cap at 0.85 in total. The PHEV can obtain an additional 0.15 partial vehicle value if it has a

US06 all-electric range of at least 10 miles, per the 2026 ZEV and PHEV Test Procedures. The maximum total partial vehicle value thus cannot exceed 1.00.

**Rationale**

These subsections are necessary to provide for a transition period and limited partial vehicle values for PHEVs during the first three model years under this regulation. During development of staff's proposal, manufacturers expressed concerns about PHEVs currently certified or on the cusp of being certified but that are slightly beyond the minimum range values in (e)(1)(A)6. and 7. Because most vehicles follow a 5-year design cycle, PHEVs that have just been introduced or are soon to be introduced will likely be produced through the first few model years of the new proposed requirements (no later than 2028). The three-year phase in for partial vehicle value credits thus addresses manufacturers' concerns while incentivizing higher all-electric ranges and factoring in that manufacturers are continuing to produce PHEVs with greater electric capability.

The changes to the partial vehicle value calculation are necessary to align with the future PHEV requirement—i.e., a PHEV satisfying the range in (e)(1)(A)6. and with US06 capability represents the maximum value of one vehicle.

**Subsection 1962.4(e)(1)(C). PHEV Allowance.**

**Purpose**

The purpose of this subsection is to specify the maximum amount of PHEV vehicle values that a manufacturer can use for its annual ZEV requirement. A manufacturer can use PHEVs to apply to 20 percent of its annual ZEV requirement. In other words, the annual PHEV allowance a manufacturer can apply to its annual ZEV requirement is its annual ZEV requirement performance calculated under subsection (f) multiplied by 20 percent.

**Rationale**

This subsection is necessary to provide a clear cap on PHEVs' use to satisfy the annual ZEV requirement. This cap serves as another important balance between the risks and emissions from gasoline usage in PHEVs with the need to keep PHEVs as an available option in the nearer term to achieve 100 percent of new car sales as ZEVs by 2035. The use and benefits of PHEVs are highly dependent on driver behavior. CARB staff modeled the effect of high shares of PHEVs with varying eVMT percentages and concluded there is a risk of increasing emissions if drivers do not have high eVMT because they do not recharge their vehicles. A cap at 20 percent, in addition to the requirements and provisions of subsections (e)(1)(A) and (B), serves as an adequate limit to ensure emissions will substantially decrease and new vehicle sales will reach 100 percent ZEVs by 2035.

**Section 1962.4 (e)(2). Environmental Justice Vehicle Values.**

**Purpose**

The purpose of this proposed subsection is to identify and describe the three types of Environmental Justice vehicle values that may be generated and the conditions that must be met to generate them.

**Rationale**

This subsection is necessary to describe the different types of Environmental Justice vehicle values that CARB staff have identified to improve access to clean transportation and mobility for priority communities, including disadvantaged communities, low-income communities, and tribal communities. As California's transportation system transitions to zero-emission, staff want to expand access to zero-emission transportation, including new and used electric vehicles. Having discrete bankable and tradeable vehicle values aimed at providing manufacturers with incentive for targeted actions to help achieve more equitable outcomes further accelerates affordable ZEV access in front-line communities that face a disproportionate pollution burden during the critical early years of the program and incentivizes earlier emission reductions in the communities that most need them. These provisions support environmental justice goals highlighted in California's statues, such as AB 617 and AB 32.

**Section 1962.4 (e)(2)(A). New ZEVs and PHEVs Provided for Use in Qualifying Community-based Clean Mobility Programs.**

**Purpose**

The purpose of this subsection is to identify the additional vehicle values that manufacturers can earn for new ZEVs and PHEVs in model years 2026 through 2031 when provided for use in a community-based clean mobility program.

**Rationale**

This subsection is necessary to introduce qualifying community-based clean mobility programs. One of the major benefits of this environmental justice provision is that the ZEVs and PHEVs are provided at the community level to fulfill assessed transportation needs. Two existing CARB programs, the Clean Mobility Options Pilot Program and the Sustainable Transportation Equity Project, have implemented targeted action with community-based clean mobility programs. To help make funds for these community programs or similar programs stretch further, staff is proposing a way for manufacturers to participate in these programs, and an additional path for future similar programs, by providing discounted vehicles. This is intended to accelerate ZEV access and use—and emission reductions—in these communities.
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**Section 1962.4 (e)(2)(A)(1). Vehicle Value.**

**Purpose**

The purpose of this subsection is to identify the additional vehicle values as .5 and .4 respectively that manufacturers can earn for new ZEVs and PHEVs provided at a discount for use in a qualifying community-based clean mobility program. Additionally, this subsection provides additional criteria for PHEVs, as these vehicles must have a minimum 6-seat capacity.

**Rationale**

This subsection is necessary to specify the vehicle values that can be earned and indicate PHEVs are only eligible for vehicle models with a 6-seat capacity or more. Currently, there are over 20 models of BEVs and FCEVs that provide various options to meet community program needs. Yet, there are not many options for pure ZEVs with more than 5 seats. By allowing PHEVs at this vehicle size, community programs have a few more options, such as today's Chrysler Pacifica and Mitsubishi Outlander PHEVs. However, if plug-in hybrids are allowed more extensively, the vehicles would likely need to operate using the internal combustion engine since the battery range is limited and the vehicles are for shared use where drivers would be unlikely to stop to charge frequently.

The additional vehicle values of 0.5 and 0.4 for ZEV and PHEVs, respectively, are set based on an assumed penalty of $20,000 per vehicle, which is the expected penalty under Health and Safety Code section 43211, subdivision (b), for a failure to deliver for sale a required ZEV. With this assumed penalty amount, each 0.1 vehicle value amounts to an estimated $2,000 incentive. The 0.5 vehicle value for ZEVs was set based on the average percent discount of $10,000 that manufacturers would need to provide off the MSRP as specified in section 1962.4(e)(2)(A)(2). With a required 25 percent discount, vehicles originally priced between $20,000 and $60,000 would be provided a manufacturer discount of $10,000 off, on average. The 0.5 vehicle value therefore incentivizes manufacturers at the average equivalent discount amount for ZEVs. PHEVs are awarded less vehicle value because they are likely to have fewer electric miles than ZEVs.

**Section 1962.4 (e)(2)(A)(2). Required Discount.**

**Purpose**

The purpose of this subsection is to specify the 25 percent discount for new ZEVs and PHEVs to earn additional vehicle value for use in a qualifying community-based clean mobility program.

**Rationale**

This subsection is necessary to specify the required discount. Based on feedback from stakeholders, all new vehicles eligible under this community program category must be offered at a minimum 25 percent discount off the base manufacturer's suggested retail price (MSRP) to earn additional vehicle value. An alternative to this percent discount threshold was considered where the percent discount would increase as the MSRP of the vehicle increased. For vehicles above an MSRP of $20,000, the percent discount would start at 10 percent. This discount would increase 1 percent for each additional bin of $2,500 MSRP, resulting in a vehicle with an MSRP value of $60,000 needing to be offered at a 25 percent discount. However, stakeholders provided feedback that a flat 25 percent discount helps reduce confusion over needing a discount table, provides more clarity to potential recipients of the discounted vehicles, and ensures that a sufficient discount is provided to warrant granting additional vehicle values. This discount percent amounts to approximately $10,000 off on average for vehicles originally priced between $20,000 and $60,000.

**Section 1962.4 (e)(2)(A)(3)a. through g. Qualifying Community-based Clean Mobility Programs.**

**Purpose**

The purpose of this subsection is to describe what qualifies as a community-based clean mobility program, to outline steps manufacturers can take to apply for an Executive Order for a qualifying community-based clean mobility program and the information needed in an application to the Executive Officer, and the process for program renewal, auditing, and revocation.

**Rationale**

This subsection is necessary to describe what qualifies as a community-based clean mobility program for manufacturers to provide with discounted vehicles. Subsection (3)(a) specifies that a community-based clean mobility program that is a grant recipient of two of CARB's existing clean mobility programs – the Clean Mobility Options Pilot program and the Sustainable Transportation Equity Project – would qualify, plus other programs that meet the community-based clean mobility program definition. Manufacturers earn vehicle values by selling or leasing vehicles to the programs, so it is important to ensure that the programs will use the vehicles to meet the emission reduction goals, including in front-line communities.

This subsection also provides a process to determine other programs (run by a variety of entities) that meet the community-based clean mobility program definition. This process allows manufacturers to request Executive Officer approval for programs that provide community mobility services, but that have not received a grant from CARB's competitive grant programs. This subsection describes the information that the

manufacturer shall provide, including program specific details about the program implementer and program service area, as well as an attestation from a responsible official of the entity that administers the program. The attestation should include certification that the vehicles will be put into service exclusively for the purposes of operating the community-based clean mobility program with a minimum of 4 years of service operation. The requirement for four years of service operation aligns with CARB's Clean Mobility Options Pilot program, whose implementation manual and voucher agreement stipulates that clean mobility projects funded by the program be fully operating for at least four years from when participants starting using the service. This ensures that the discounted vehicle(s) are serving the intended community and for the purposed goal of increasing access to ZEV technologies for priority communities. If the necessary documentation is submitted and the program meets the definition of a community-based clean mobility program, then the Executive Officer will issue an Executive Order for the approved program. The manufacturer will be notified of the Executive Officer decision within 60 days of their request for determination. This timeframe allows CARB enough time to verify program information and write up an executive order, while being responsive to the manufacturer and allowing them to get vehicles into programs quickly.

Subsection (3)e. limits to 4 years the amount of time an Executive Order for an approved community-based clean mobility program remains valid. This subsection is also necessary to specify how a manufacturer can apply for program renewal. Program renewals ensure that future discounted vehicles continue to be used in a qualifying community program. Since approved programs must attest to a 4-year service operation, the Executive Order lasts for 4 years and renewal for such programs occurs every 4 years.

Subsections (3)f. and (3)g. provide CARB the ability to audit a community program or applicable manufacturer earning additional vehicle values and the ability to revoke an Executive Order for a program. These provisions ensure that the approved programs continue to meet the community-based clean mobility program definition and serve the needs of their communities using the discounted vehicles.

**Section 1962.4 (e)(2)(B)(1) through (2). Vehicles in California Sold At the End of Lease to Participating Dealerships.**

**Purpose**

The purpose of this subsection is to describe the additional vehicle value of 0.10 that manufacturers can earn for ZEVs and PHEVs initially leased in California and sold at the end of lease to a California dealership participating in a financial assistance program. Additionally, this subsection sets an MSRP maximum of $40,000 for qualifying vehicles which is adjusted each model year by a new car specific consumer price index (CPI) for future model years..

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**Rationale**

This subsection is necessary to specify that manufacturers can earn additional vehicle value for ZEVs and PHEVs initially leased in California and sold at the end of lease to a California dealership participating in a financial assistance program, meaning a vehicle purchase incentive program where approved dealerships accept a point-of-sale incentive for used ZEVs and PHEVs for lower-income consumers.

Vehicles enter the used market in various ways, including vehicles coming off of a lease (i.e., returned to the leasing company when the lease term ends). Because leasing companies often are a financing arm of the vehicle manufacturer, manufacturers often can control where the formerly leased vehicles end up through their off-lease auctioning process. At the end of a lease term, the original lessee typically has the right of first refusal to purchase the vehicle. If not or if the lessee declines, then the leasing dealership is able to retain the vehicle; otherwise, the vehicle is set up for auction to other dealerships.

CARB has two existing financial assistance programs where dealerships are approved for participation: Clean Cars 4 All and the Financing Assistance for Lower-Income Consumers Program. This provision aims to increase the volume of vehicles available within these programs, thereby increasing access to more affordable used ZEVs for lower-income consumers.

The off-lease ZEVs and PHEVs must have an MSRP value equal to or lower than $40,000 when it is new. This captures the intent of increasing access to more affordable ZEVs and PHEVs. Most BEVs and PHEVs available on the market today including SUVs and vans would be eligible, while vehicles excluded will largely be more luxury class vehicles, such as those from BMW, Jaguar, and Mercedes Benz, and the Tesla Model S/X. The $40,000 MSRP cap is appropriate to provide potential lower-income consumers with a broad range of available vehicles at a variety of range options and price points, while placing an emphasis on more economical options. Based on program data from Clean Cars 4 All, only approximately one percent of vehicles purchased using program funds through 2020 had a sale price of greater than $40,000. Furthermore, the average total purchase price for all vehicles in the program across all air districts from 2015 through June 2021 was $23,282, indicating that a new vehicle MSRP cap of $40,000 (with an assumed depreciation of 40 percent over three years) could result in used vehicles near this average purchase price. The MSRP cap ensures that additional vehicle values are not going to luxury vehicles and that the additional value is provided for vehicles likely to be purchased by lower-income consumers through financial assistance programs. The MSRP cap further encourages vehicle manufacturers to produce more affordable ZEVs and PHEVs. It is also necessary and appropriate to use a CPI adjustment of the MSRP cap each year to ensure the MSRP cap remains effectively equivalent for each subsequent model year.

The United States Bureau of Labor Statistics tracks an index specific to new car sales[1] and the proposed adjustment uses this index to modify the MSRP cap from a $40,000 value originally derived from 2021 model year data to an appropriately equivalent level for future model years.

In addition, these off-lease ZEVs and PHEVs must be 2026 through 2031 model year vehicles to earn additional vehicle values. The off-lease vehicles being at least model year 2026 or newer is important because starting in the 2026 model year and beyond, ZEVs and PHEVs will need to meet a suite of ZEV assurance requirements and technical requirements, which means greater certainty of used ZEVs and PHEVs that will meet drivers' needs. As specified in subsection 1962.4(f)(3)(D), environmental justice vehicle values can only be earned and used through model year 2031, so only model year vehicles through 2031 can earn vehicle values under this subsection.

**Section 1962.4 (e)(2)(C). New ZEVs and PHEVs below MSRP threshold.**

**Purpose**

The purpose of this subsection is to specify the 0.10 additional vehicle value manufacturers can earn for model year 2026 through 2028 ZEVs and PHEVs that are below specific MSRP thresholds: $20,275 for passenger cars and $26,670 for light-duty trucks, with both of these MSRP numbers adjusted for future model year vehicles by a CPI adjustment.

**Rationale**

This subsection is necessary to specify that a 2026 through 2028 model-year ZEV or PHEV delivered for sale with a MSRP less than or equal to $20,275 for passenger cars and less than or equal to $26,670 for light-duty trucks can earn an environmental justice vehicle value of 0.10.

This provision aims to increase affordable access to ZEVs and PHEVs by providing an incentive for manufacturers to offer lower priced vehicles in the earlier years of the proposed ACC II program when battery prices are still high. Incremental vehicle costs of ZEVs and PHEVs are anticipated to remain above the cost of conventional vehicle technology in the near term and through the first few years of the ACC II program. These higher costs are likely to be passed onto consumers and reflected in part or in whole in the price of new vehicles. Affordability of ZEVs and PHEVs, particularly the upfront vehicle price, is one of the biggest barriers for consumers deciding on whether to purchase electric vehicle over an ICE vehicle. Cost reductions in new ZEVs could also lead to decreased used ZEV prices and cost parity for low-income households,

[1]BLS 2022. CPI for All Urban Consumers, new vehicles index, new vehicles in U.S. city average, all urban consumers, not seasonally adjusted, U.S. Bureau of Labor Statistics, https://data.bls.gov/timeseries/CUUR0000SETA01. Reference included in Section III.C.6 of Staff Report.

where the higher rates of depreciation for first owners will lead to larger benefits for second owners.

Staff analyzed the MSRP of model-year 2021 passenger cars and light-duty trucks currently registered in California with the Department of Motor Vehicles (DMV) to set the MSRP thresholds. The DMV information does not include MSRP for additional options or upgrades to the base model; however, it is possible to differentiate between the trim levels of a given vehicle model. Thresholds were set at the lowest 10th percentile MSRP of new model-year non-luxury 2021 vehicles for the two respective vehicle categories. The 10th percentile threshold provides manufacturers incentive to bring to the market the most affordable vehicles, but still offers a large volume of potential vehicles below or at the threshold. The MSRP thresholds set for this provision differ from those set for vehicles coming off a lease since the two provisions differ in purpose. The MSRP thresholds set for this section follow the intent of creating incentive for an early market of low-priced ZEVs and PHEVs, while the MSRP cap set for the off-leased vehicles is intended to ensure that the vehicles likely to be purchased by lower-income consumers through financial assistance programs earn the additional vehicle value.

It is necessary and appropriate to further adjust these MSRP values for future model years as new car prices rise (or fall). The MSRP values derived from this analysis were based on the 2021 model year and accordingly, may be inappropriate to achieve the same purpose in the 2026 and subsequent model years. By adjusting the values with a CPI published by the United States Bureau of Labor Statistics specific to new vehicle prices,[2] the MSRP value should better track the intended target of the lowest 10th percentile for the 2026 through 2028 model years.

Eligible vehicles must be model years 2026 through 2028 to ensure the vehicles meet the proposed minimum technical requirements and ZEV assurance measures.

**Section 1962.4 (e)(2)(D). Environmental Justice Vehicle Value Limitations.**

**Purpose**

The purpose of this proposed subsection is to not allow environmental justice vehicle values to be transferred to another section 177 ZEV state.

**Rationale**

This subsection is necessary to prohibit manufacturers from transferring environmental justice vehicle values to another section 177 ZEV state. These environmental justice

[2] BLS 2022. CPI for All Urban Consumers, new vehicles index, new vehicles in U.S. city average, all urban consumers, not seasonally adjusted, U.S. Bureau of Labor Statistics, https://data.bls.gov/timeseries/CUUR0000SETA01, Reference included in Section III.C.6 of Staff Report.

vehicle values are earned by improving access to ZEV technologies for priority communities in California and therefore should not be used for compliance in another state.

**Section 1962.4 (e)(2)(E). Environmental Justice Allowance.**

**Purpose**

The purpose of this proposed subsection is to specify the amount of environmental justice vehicle values a manufacturer can apply towards its ZEV requirement performance under subsection (f).

**Rationale**

This subsection is necessary to limit a manufacturer to meet no more than five percent of its ZEV requirement performance with environmental justice vehicle values. Five percent is appropriate to allow some vehicles to generate additional compliance value, particularly by serving priority communities, without sacrificing a significant portion of new ZEVs and PHEVs that would have otherwise been delivered for sale in order to meet the ZEV requirement performance. Assuming 2 million new light-duty vehicle sales in California annually, the 5 percent cap would amount to 35,000 additional vehicle values allowed in 2026 collectively across all manufacturers, ramping up to 76,000 additional vehicle values in 2031. Providing more than 5 percent in additional vehicle value is too high given that manufacturers are unlikely to be able to generate more than 5 percent in vehicle values from the focused environmental justice provisions. However, providing less than 5 percent would likely limit manufacturer participation in the environmental justice provisions in the early model years of the program. To balance the two goals of serving our priority communities and at the same time achieving high volumes of ZEV and PHEV sales, these environmental vehicle values are capped at 5 percent.

**Section 1962.4 (e)(2)(F). MSRP Consumer Price Index (CPI) Adjustment.**

**Purpose**

The purpose of this proposed subsection is to define a consumer price index adjustment formula to be used to adjust the MSRP caps used in subsections (e)(2)(B) and (e)(2)(C) from 2021 model year derived values to consumer price index (CPI) adjusted equivalent values for 2026 through 2028 model year vehicles.

**Rationale**

This subsection is necessary to ensure a consistent calculation of a CPI adjustment that can then be used to adjust the MSRP caps in subsections (e)(2)(B) and (e)(2)(C) for future model years as new car prices rise (or fall). The MSRP values derived from this

analysis were based on the 2021 model year and accordingly, may be inappropriate to achieve the same purpose in the 2026 and subsequent model years. By adjusting the values with a CPI published by the United States Bureau of Labor Statistics specific to new vehicle prices,[3] an equivalent MSRP value can be determined for the 2026 through 2028 model years. It is necessary for the proposed calculation to specify the particular index to be used and to define a calculation using the CPI value for the calendar year two years prior to the model year to provide manufacturers with sufficient leadtime in advance of the new model year introduction to know what the MSRP cap will be and, if desired, to adjust its MSRP accordingly.

**Subsection 1962.4(e)(3) Early Compliance Vehicle Values.**

**Purpose**

The purpose of this subsection is to allow manufacturer to fulfill a portion of their total annual ZEV requirement with early compliance vehicle values earned in the two model years prior to commencement of the annual ZEV requirements of this section.

**Rationale**

Explained further in Section III.C.2. of the Staff Report, staff's proposal requires 35% of new vehicles delivered to California to be ZEVs or PHEVs in 2026 model year. The Midterm Review showed manufacturers could deliver 7% in the Section 177 ZEV states, and at 8% in California, of new vehicles as ZEVs and PHEVs and still be in compliance with a significant bank of credits in 2026 model year. Current compliance after 2021 model year shows manufacturers to be on track with those 2017 predictions in the States, and far above that path in California. This proposal is necessary to incentivize manufacturers to deliver greater volumes of ZEVs and PHEVs as early as possible, to ensure a path toward proposed increased requirements starting in 2026 model year.

**Subsection 1962.4(e)(3)(A) and (e)(3)(A)1.**

**Purpose**

This purpose of this subsection is to specify how manufacturers are to earn early compliance vehicle values, which varies based on the total industry average of 2020 through 2022 ZEV and PHEVs produced and delivered for sale. This subsection explains that manufacturers may earn early compliance vehicle values for ZEVs and PHEVs delivered in excess of 20 percent of its total light-duty vehicles produced and delivered for sale in the two model years prior to the commencement of the annual ZEV requirements. It also allows manufacturers, if the 2020 through 2022 industry

[3] BLS 2022. CPI for All Urban Consumers, new vehicles index, new vehicles in U.S. city average, all urban consumers, not seasonally adjusted, U.S. Bureau of Labor Statistics, https://data.bls.gov/timeseries/CUUR0000SETA01. Reference included in Section III.C.6 of Staff Report.

average ZEVs and PHEVs delivered for sale is less than 7%, to generate early compliance vehicle values in excess of 7% of its total light-duty vehicles produced and delivered for sale in the two model years prior to the commencement of the annual ZEV requirements.

**Rationale**

These subsections are necessary to reward progress above current market shares. The proposed language is calibrated to award vehicle values depending on sales averages in states with greater or lesser current market development – thereby rewarding progress in states still coming up to speed, or accelerated progress in more developed markets, while not diluting overall regulatory requirements.

The 7% threshold is based on the 2017 Midterm Review, which showed manufacturers could deliver 7% in the Section 177 ZEV states, and at 8% in California, of new vehicles as ZEVs and PHEVs and still be in compliance with a significant bank of credits in the 2026 model year. Though it is expected California will remain on a steady path to 2026 compliance levels, which reflects the 20% threshold proposed, this subsection is necessary to keep manufacturers on track. Given the current state of car production and sales worldwide, there could be setbacks that may affect these projections. Additionally, as mentioned in Section III.A.2, supply shortages in critical minerals may have an effect in the near term. Staff is proposing a regulatory mechanism that incentivizes manufacturers to deliver on those projections, and a potential way to bring up sales in the worse-case scenario if setbacks materialize.

This subsection also is necessary to make clear that it only will give vehicle values for those vehicles beyond the 20% or 7% threshold, as applicable, as to incentivize production above and beyond current plans.

**Subsection 1962.4(e)(3)(A)2.**

**Purpose**

The purpose of this subsection is to make explicit the calculation for the 2020 through 2022 model year average combine market share, which will be based on the final number of ZEVs and PHEVs eligible for CCR, title 13, section 1962.2, divided by the total number of light duty vehicle produced and delivered for sale. A manufacturer is then to take an average of 2020 through 2022 model years to generate a combined average market share.

**Rationale**

This subsection is necessary to make explicit how to calculate the 2020 through 2022 model year average combined market share. This subsection is also necessary to ensure the average combine market share is calculated concisely and uniformly in

California, and in any state that may adopt these regulations. It is necessary to specify that only ZEVs and PHEVs eligible for credit under section 1962.2 are used to calculate average combined market share in order to ensure at minimum those vehicles are in compliance with the pre-2026 minimum requirements, as not all PHEVs currently are.

**Subsection 1962.4(e)(3)(A)3.**

**Purpose**

The purpose of this subsection is to require manufacturers exercising this subsection to designate which regulation will count the vehicle values for the excess ZEVs and PHEVs produced and delivered for sale in the two model years prior to the commencement of the annual ZEV requirements. Any vehicles designated to count under this subsection will be precluded from counting toward CCR, title 13, section 1962.2, which contains the current ZEV regulation requirements.

**Rationale**

This subsection is necessary to preclude manufacturers from counting the same vehicle toward compliance with both CCR, title 13, section 1962.2 and this section 1962.4.

**Subsection 1962.4(e)(3)(A)4.**

**Purpose**

The purpose of this subsection is to specify what ZEVs and PHEVs will be eligible to earn early compliance vehicle values. Only ZEVs with more than a 50-mile UDDS electric range and PHEVs meeting the following criteria shall be included:

- more than 10-mile all-electric UDDS range,
- equipped with a conductive charger inlet and charging system that meets AC Level 1 and Level 2 SAE J1772 standard (REV JAN 2010),
- equipped with an on-board charger with a minimum output of 3.3 kilowatts, or, sufficient power to enable a complete charge in less than 4 hours,
- meeting the applicable 150,000-mile SULEV30 or lower exhaust emission standards in CCR, title 13, section 1961.2(a)(1) or meeting the federal emission Bin 30 or lower of 40 CFR § 86.1811.17(b), as amended June 29, 2021,
- meeting the evaporative emission standards in section 1976(b)(1)(G) or 1976(b)(1)(E),
- meeting the applicable on-board diagnostic requirements in sections 1968.1 or 1968.2 for 150,000 miles, and
- providing a performance and defects warranty of 15 years or 150,000 miles, whichever occurs first, except that the time period is to be 10 years for a zero-emission energy storage device used for traction power.

**Rationale**

This subsection is necessary to ensure at minimum that vehicles earning early compliance values are at least in compliance with the pre-2026 minimum requirements, as not all PHEVs currently are. It is the intent to only award overcompliance with the current regulation, and not count all PHEVs in the overcompliance calculation.

**Subsection 1962.4(e)(3)(B) Early Compliance Vehicle Value Calculation.**

**Purpose**

The purpose of this subsection is to make explicit how these early compliance vehicle values will be counted in compliance with section 1962.4.

**Rationale**

This subsection is necessary to ensure it is explicit how early compliance ZEVs and PHEVs will be valued within section 1962.4 according to its currency and valuation mechanisms, as these vehicles would have earned variable credits under CCR, title 13, section 1962.2.

**Subsection 1962.4(e)(3)(C) Early Compliance Vehicle Value Limitation**

**Purpose**

The purpose of this subsection is to not allow manufacturers to transfer early compliance vehicle values among California or section 177 ZEV states.

**Rationale**
This subsection is necessary to prohibit manufacturers from transferring early compliance vehicle values to California or another section 177 ZEV state. These early compliance vehicle values are earned by manufacturers who are building markets and even over complying in an individual state, and therefore should not be used for compliance in another state.

**Subsection 1962.4(e)(3)(D) Early Compliance Vehicle Value Allowance**

**Purpose**

The purpose of this proposed subsection is to specify the amount of early compliance vehicle values a manufacturer can apply towards its ZEV requirement performance under subsection (f).

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**Rationale**

This subsection is necessary to limit a manufacturer to meet no more than fifteen percent of its ZEV requirement performance with early compliance vehicle values during the first three model years of annual ZEV requirements under this section. Fifteen percent is appropriate to appropriately incentivize manufacturers vehicles to progress above current market shares, ensuring successful compliance with the 2026 and subsequent model year ZEV requirements. Providing a cap higher than 15-percent is too high given the need to maintain some certainty around increasing vehicle volumes in the first three model years of the regulation. However, providing less than 15-percent would likely limit manufacturer participation in the early compliance provisions in the early model years of the program. The same is true for allowing use of early compliance vehicle values for more or less than the first three model years to which this section applies. To balance the two goals of ensuring progress in ZEV and PHEV sales prior to the start of the regulation and at the same time achieving certainty around higher volumes of ZEV and PHEV sales in the first three years after the regulation is implemented, these early compliance vehicle values are capped at 15-percent.

**Subsection 1962.4(f) Calculating ZEV Requirement Performance for the Model Year**

**Purpose**

The purpose of this proposed subsection is to introduce how manufacturers are to calculate their annual performance, relative to their annual ZEV requirement.

**Rationale**

This proposal is necessary to organize and enumerate requirements pertaining to manufacturers' calculations of their annual ZEV requirement performance, as well as to specify that manufacturers are to calculate their ZEV requirement performance at the end of each model year, which allows for an accurate accounting of vehicles delivered for sale in California for that model year.

**Subsection 1962.4(f)(1) through (f)(1)(D)**

**Purpose**

The propose of these subsections is to outline the steps manufacturers are to use when calculating their annual ZEV requirement performance. Subsection (f)(1) introduces the subsequent three subsections as the elements of the calculation of a manufacturer's ZEV requirement performance. Subsection (f)(1)(A) is the requirement for manufacturers include their annual ZEVs delivered for sale in California within the

model year, which each ZEV counting as a vehicle value of one. Subsection (f)(1)(B) expresses the requirements for manufacturers to include any PHEV values that were earned for the model year. It also describes that a manufacturer may bank PHEV values in excess of the 20-percent PHEV allowance, stated in subsection (e)(1)(C). Subsection (f)(1)(C) expresses the requirements for manufacturers to include any environmental justice vehicle values that were earned for the model year. It also describes that a manufacturer may bank environmental justice vehicle values in excess of the 5-percent environmental justice allowance, stated in subsection (e)(2)(E). Subsection (f)(1)(D) expresses the requirements for manufacturers to include any early compliance vehicle values that were earned for the model year. It also describes that a manufacturer may bank early compliance vehicle values in excess of the 15-percent early compliance allowance, stated in subsection (e)(3)(D).

**Rationale**

Previous versions of the ZEV regulation allowed banked values (referred to as credits in previously adopted versions of the ZEV regulation) and newly earned credits in the same model year to count toward compliance. Manufacturers are also allowed to carry forward credits earned without expiration. These two current regulatory mechanisms have led to large credit banks that cause uncertainty in future ZEV volumes. Caps are used to limit credit categories, but unlimited banking is allowed.

The proposed section sets new rules on how vehicle values (the currency for the proposed section 1962.4) can be spent to limit spending of banked credits, thereby addressing the uncertainty in future ZEV volumes of previous ZEV regulations, and to align with current spending rules of other light-duty regulations. Section 1962.4 allows manufacturers to hold various types of vehicle values: (1) ZEV, PHEVs, and environmental justice vehicle values earned within the model year; (2) excess ZEV, PHEVs, early compliance, and environmental justice values banked by the manufacturers themselves or from another manufacturer through purchase or trade; and (3) converted ZEV and PHEV values. The proposed subsection ensures manufacturers' compliance is based first on the current model year's performance before considering banked or converted vehicle values. Under the proposal, a manufacturer's current model year production of ZEVs and PHEVs will be accounted for first before the consideration of vehicle values that have been banked from previous model years. The proposal also allows manufacturers to bank excess values for use in a subsequent model year, giving manufactures some flexibility for complying with future ZEV requirements.

## Subsection 1962.4(f)(2) Determining Excess or Shortfall ZEV Values

### Purpose

The purposed subsection explains how manufacturers are to determine if they have an excess or shortfall of ZEV values at the end of a model year. The excess or shortfall is the product of their ZEV requirement performance, calculated in subsection (f)(1), minus their annual ZEV requirement, calculated in subsection (c)(1).

### Rationale

This section is needed to define the calculation used to determine if a manufacturer has an excess or a shortfall of ZEV values for a given model year. Different rules apply to manufacturers with excess ZEV values versus those with a ZEV shortfall. For instance, manufacturers with excess ZEV values may use those credits for 4 additional model years, and do not have any need to fulfill a ZEV shortfall with previously earned, pooled, or converted values. Manufacturers with a ZEV shortfall are allowed to access previously earned, pooled, or converted values under subsections (f)(1),(2), and (3).

The proposed subsection ensures manufacturers' compliance is based first on the current model year's performance before considering banked or converted vehicle values and limiting the ability to carry forward any credit or value for vehicles in excess of the annual ZEV requirement. This ensures greater certainty that needed ZEV volumes to displace ICE vehicles each model year, and the associated emissions reductions, are achieved.

## Subsection 1962.4(f)(3) and (f)(3)(A)

### Purpose

The purpose of these subsections is to specify rules around excess ZEV, PHEV, environmental justice, and early compliance vehicle values. Subsection (f)(3) introduces the following subsections (A), (B), (C), (D), and (E) which each describe the various rules for excess values. The purpose of subsection (f)(3)(A) is to explain what excess ZEV, PHEV, environmental justice, and early compliance vehicle values may be used for.

### Rationale

This subsection is necessary to indicate excess ZEV, PHEV, environmental justice, and early compliance vehicle values may only be used in years where manufacturers have a ZEV shortfall, calculated by the equation specified in subsection (f)(2), or in a case when a manufacturer has a deficit. The subsection is also necessary to specify that manufacturers may not carry forward excess ZEV, PHEV, environmental justice, and

early compliance vehicle values if they have an unfulfilled deficit. The proposed subsection is aimed at avoiding compliance manipulation and gaming. In the absence of such a provision, manufacturers could be spending old vehicle values (which have shorter life, limited by subsection (f)(3)(C)) and saving new vehicle values, likely for later model years. Because the proposed ZEV regulation is an annual requirement and manufacturers' actual performance for that model year is thus compared to the annual requirement first, excess credits are only to manage year-to-year fluctuations.

**Subsection 1962.4(f)(3)(B)**

**Purpose**

The purpose of this subsection is to allow excess ZEV, PHEV, environmental justice, and early compliance vehicle values to be traded with other manufacturers subject to section 1962.4.

**Rationale**

This subsection is necessary to allow manufacturers flexibility to trade excess ZEV, PHEV, environmental justice, and early compliance vehicle values. Banking and trading within regulatory compliance creates some flexibility to individual manufacturers while allowing fleetwide compliance with the requirements. The subsection is also necessary to specify that manufacturers may not trade excess ZEV, PHEV, environmental justice, and early compliance vehicle values if they have an unfulfilled deficit; a manufacturer's excess vehicle values must first go toward its unfulfilled deficit. The proposed subsection is aimed at avoiding compliance manipulation and gaming. In the absence of such a provision, manufacturers could be trading old values (which have shorter life, limited by subsection (f)(3)(C)) and saving new credits, likely for later model years. The proposed ZEV regulation is an annual requirement and manufacturers' actual performance is necessarily compared to the annual requirement first. Excess vehicle values are to manage year-to-year fluctuations, which can include trading such values to other manufacturers, provided the original manufacturer has satisfied its annual requirement and any deficit first.

**Subsection 1962.4(f)(3)(C)**

**Purpose**

The purpose of this subsection is to specify how long manufacturers may retain excess ZEV and PHEV values, which is for four additional model years. The subsection also provides an example of how this would work with 2026 model year ZEV and PHEV values.

**Rationale**

Previous versions of the ZEV regulation allowed banked values (referred to as credits in previously adopted versions of the ZEV regulation) and newly earned credits in the same model year to count toward compliance. Manufacturers are also allowed to carry forward credits earned without expiration. These two current regulatory mechanisms have led to large credit banks that cause uncertainty in future ZEV and PHEV volumes. This subsection is necessary to place a limit on the number of model years an excess ZEV and PHEV value can be applied to in order to increase certainty around expected and needed electric vehicle volumes. Current LEV III criteria and GHG regulations (and the proposed LEV regulation included in staff's proposal) allow credits to be carried forward for four additional model years. This proposed vehicle value life aligns with other light-duty regulations credit life structure.

**Subsection 1962.4(f)(3)(D)**

**Purpose**

The purpose of this subsection is to specify how long manufacturers may retain excess environmental justice vehicle values, which is through the 2031 model year. The subsection is also explicit that environmental vehicle values may not be used in manufacturers ZEV performance calculation in 2032 and subsequent model years.

**Rationale**

This subsection is necessary to limit how long manufacturers may apply environmental justice vehicle values toward their annual ZEV requirement. The environmental vehicle values are intended to award direct action in disadvantaged communities during the earlier years of the ACC II ZEV regulation when costs are higher. In order to be able to achieve 100% ZEV and PHEV sales by 2035, these environmental vehicle values will end, as these are additional values to the vehicles, and should not be used to delay meeting the 100% requirement. Additionally, flexibilities such as environmental justice values are appropriate in the first 6 years of the program while ZEV and PHEV costs remain high compares to ICEVs. The additional values can help offset those higher early costs. To ensure all sales of new light-duty vehicles are zero-emission by 2035, there can be no additional values; each new vehicle must be a ZEV with a vehicle value of one.

**Subsection 1962.4(f)(3)(E)**

**Purpose**

The purpose of this subsection is to only allow manufacturers to use early compliance vehicle values toward compliance through 2028 model year. The subsection is also explicit that early compliance values may not be used in manufacturers ZEV performance calculation in 2029 and subsequent model years.

**Rationale**

This subsection is necessary to limit how long manufacturers may apply early compliance vehicle values toward their annual ZEV requirement. In order to be able to achieve 100% ZEV and PHEV sales by 2035, these early compliance vehicle values will end, as these are values earned for vehicles delivered in 2024 and 2025 model year and should not be used to delay meeting the 100% requirement. These early compliance are intended to allow manufacturers flexibility in the early years of the regulation when cost of technology remains high.

**Subsection 1962.4(f)(4) and (f)(4)(A)**

**Purpose**

The purpose of this subsection is to specify the rules that apply to trading excess ZEV, PHEV, environmental justice, and early compliance vehicle values or converted ZEV and PHEV values in order to enable these values to provide their intended benefits to vehicle manufacturers. Subsection (f)(4) introduces the following subsections (A) through (F). Subsection (f)(4)(A) indicates only excess ZEV, PHEV, environmental justice, early compliance vehicle values or converted ZEV and PHEV values, or any of the aforementioned vehicle values that have been acquired from another party, are eligible for trades. Subsection (f)(4)(A) also prohibits trading vehicle values that are expired and can no longer be used to demonstrate compliance.

**Rationale**

Subsection (f)(4) is necessary to introduce the following subsections. Subsection (f)(4)(A) is necessary to specify what kind of vehicle values are eligible for trades to other manufacturers and those that are not. This subsection also serves to avoid potential gaming and carrying forward deficits and fulfilling such deficits with expired vehicle values that are acquired from a different manufacturer.

**Subsection 1962.4(f)(4)(B)**

**Purpose**

The purpose of subsection (f)(4)(B) is to specify that trading manufacturers must notify CARB of their trades through their annual ZEV reporting. The purpose is also to specify that the penalty for manufacturer failure to notify the agency of the trade occurring is rejection of the trade of vehicle values.

**Rationale**

Subsection (f)(4)(B) is necessary to ensure CARB is made aware of all trades of excess ZEV, PHEV, and environmental justice vehicle values or converted ZEV and PHEV values. This notice is necessary for CARB to ensure each party is in legal possession of the amount of excess vehicle values being traded, verify that such values are appropriate for trading, and confirm that the values are traded successfully. CARB, as the administrator of the ZEV regulation, needs to have record of all final values for all regulated parties for recordkeeping auditing to verify compliance with the requirements and confirm emission reductions. Rejection of the trade is a necessary penalty (and deterrent) for manufacturers' failure to notify CARB given the importance of the notice for successful program implementation and CARB's interest in preventing improper trades.

**Subsection 1962.4(f)(4)(C)**

**Purpose**

The purpose of subsection (f)(4)(C) is to preclude manufacturers from selling to other manufacturers after model year 2030 excess converted PHEV and ZEV values from vehicles produced before model year 2026 so that they are not used to fulfill a shortfall, per subsection (g).

**Rationale**

This subsection is necessary to preclude the sale of converted ZEV and PHEV values that have expired and cannot be used to fulfill a manufacturer's ZEV shortfall, under any circumstance. Converted ZEV and PHEV values may not be applied to fulfill a requirement after the 2030 model year Limiting the life of these values within the program ensures manufacturers reach future requirements rather than accumulating large compliance banks that can be used to stave off increasing deployment of ZEVs. This is further explained in the rationale for subsection (g)(1)(B) and ISOR Section III.C.7.

**Subsection 1962.4(f)(4)(D)**

**Purpose**

The purpose of subsection (f)(4)(D) is to specify that if a trade results in a deficit, the selling manufacturer will be liable for fulfilling that deficit per subsection (h)(2).

**Rationale**

Subsection (f)(4)(D) is necessary to specify the consequences for manufacturers who trade vehicle values in such a way that results in a deficit. Manufacturers report vehicle production and compliance information in a two-phase process under existing ZEV program requirements, and staff is proposing to keep a similar process for compliance reporting for section 1962.4. In the first phase, manufacturers submit their annual ZEV requirement performance. CARB staff examine production information to validate excess or shortfall ZEVs. In the second phase, manufacturers make any necessary corrections to their performance data and complete their compliance demonstration by fulfilling any shortfalls according to the requirements of subsection (h)(2). In this process, if a manufacturer's total requirement were to change due to a misreporting of the total number of vehicles delivered in California, and a deficit were to result from vehicle values that were traded in the interim process, this provision ensures the selling manufacturer is required to make up that deficit.

**Subsection 1962.4(f)(4)(F)**

**Purpose**

The purpose of this subsection is to forbid entities that are not manufacturers to participate in the ZEV regulation, including owning or trading any vehicle values.

**Rationale**

This subsection ensures the regulation does not establish an open market for vehicle values or enable parties that are not vehicle manufacturers to manipulate compliance by purchasing or selling vehicle values. The averaging, banking, and trading system proposed for the ZEV regulation is intended to be used to help facilitate compliance and reduce emissions by accommodating year-to-year variations in a manufacturer's fleet.

**Subsection 1962.4(g) Fulfilling a ZEV Requirement Shortfall**

**Purpose**

The purpose of subsection (g) is to title the subsection.

**Rationale**

This subsection (g) is needed to organize this subsection.

**Subsection 1962.4(g)(1) Limitations on fulfilling a ZEV requirement shortfall.**

**Purpose**

The purpose of subsection (g)(1) is to introduce rules in subsection (A) through (D) that apply to manufacturers who have a shortfall to fulfill after calculating their ZEV requirement performance, per subsection (f)(1), and to allow manufacturers to fulfill a shortfall with excess ZEV, PHEV, and environmental justice vehicle values or converted ZEV and PHEV values or pooled ZEV and PHEV values.

**Rationale**

In the case where manufacturers have a shortfall in vehicle values after the calculation of their ZEV performance, rules are necessary to explain how a manufacturer is to fulfill such a shortfall. There are 3 types of vehicle values that may be used to fulfill a shortfall: excess values, converted values, and pooled values. These values may be applied in different ways to achieve the goals of the regulation.

**Subsection 1962.4(g)(1)(A)**

**Purpose**

The purpose of subsection (g)(1)(A) is to allow manufacturers to fulfill a shortfall with excess environmental justice vehicle values, up to the total amount they are allowed by subsection (e)(2)(E), which is 5% of a manufacturer's annual ZEV requirement for 2026 through 2031 model year.

**Rationale**

The proposed environmental justice vehicle values are allowed to fulfill 5 percent of a manufacturer's annual ZEV requirement, which is called its environmental justice vehicle value allowance. In the case where manufacturers have a shortfall and have not yet fulfilled their environmental vehicle justice vehicle value allowance with environmental justice vehicle values earned in the model (and therefore already counted in their ZEV performance calculation), manufacturers are allowed to fulfill the remaining allowance with excess environmental justice vehicle values. This subsection is necessary to prohibit fulfilling a shortfall beyond the allowance specified in subsection (e)(2)(E).

**Subsection 1962.4(g)(1)(B)**

**Purpose**

The purpose of subsection (g)(1)(B) is to allow manufacturers to fulfill a shortfall with excess early compliance vehicle values, up to the total amount they are allowed by subsection (e)(3)(D), which is 15% of a manufacturer's annual ZEV requirement for 2026 through 2028 model year.

**Rationale**

The proposed early compliance vehicle values are allowed to fulfill 15-percent of a manufacturer's annual ZEV requirement, which is called its early compliance vehicle value allowance. In the case where manufacturers have a shortfall and have not yet fulfilled their early compliance justice vehicle value allowance with early compliance values earned in the model (and therefore already counted in their ZEV performance calculation), manufacturers are allowed to fulfill the remaining allowance with excess early compliance vehicle values. This subsection is necessary to prohibit fulfilling a shortfall beyond the allowance specified in subsection (e)(3)(D).

**Subsection 1962.4(g)(1)(C)**

**Purpose**

The purpose of subsection (g)(1)(B) is to allow manufacturers to fulfill a shortfall with converted ZEV and PHEV values, up to 15 percent of a manufacturer's annual ZEV requirement for the 2026 through 2030 model years. The subsection also makes explicit that converted ZEV and PHEV values may no longer fulfill a manufacturer's shortfall in 2031 and subsequent model years.

**Rationale**

This subsection is necessary to prohibit fulfilling a shortfall with converted ZEV and PHEV values beyond the allowance of 15 percent. Manufacturers are projected to over-comply with current ZEV requirements (CCR, title 13, section 1962.2) through the 2025 model year. Even if the industry were to flatline at current sales levels, contrary to projections, most manufacturers would have excess vehicle credits after the 2025 model year available to offset future ZEV sales. If sales occur as projected by manufacturer survey responses, there will be millions of excess ZEV credits and over 100,000 PHEV credits under the existing standards after the 2025 model year. This is further explained in the ISOR Section III.C.7.

Allowing manufacturers to bank and use converted ZEV and PHEV values in subsequent model years would continue to help manage variation in annual vehicle

volumes and facilitate compliance. The fifteen-percent limit on use of these credits avoids significant erosion of the emission reductions from new ZEVs and PHEVs that would have otherwise been delivered for sale if there were no limits on the use of converted credits.

**Subsection 1962.4(g)(1)(D)**

**Purpose**

The purpose of subsection (g)(1)(C) is to allow manufacturers to fulfill a shortfall with pooled ZEV and PHEV values, up to specified percentages for 2026 through 2030 model year. The specified percentages are as follows: 25-percent for 2025 model year, 20-percent for 2027 model year, 15-percent for 2028 model year, 10-percent for 2029 model year, and 5-percent for 2030 model year. The subsection also makes explicit that pooled ZEV and PHEV values may no longer fulfill a manufacturer's shortfall or a deficit carried forward from a previous model year in 2031 and subsequent model years.

**Rationale**

The proposed subsection is necessary to allow manufacturer to use pooled ZEV and PHEV values to fulfill a shortfall or a deficit, and to place a limit on how much a manufacturer can fulfill its annual ZEV requirement with pooled values.

Allowing manufacturers to use pooled ZEV and PHEV values will help manage year to year fluctuations in annual vehicle volumes in the various states that elect to adopt California's standards under the federal Clean Air Act while achieving the intended emission reductions from the transportation sector. Limiting the model years and the total amount a manufacturer can use this flexibility with a "cap" helps ensure manufacturers make progress in each state toward the 100% ZEV requirement in the 2035 model year. The proposed percentages factor in the amount of overcompliance that could be theoretically expected within any state compared to the overall ZEV requirement generated by manufacturers. The phase down of the percentages ensures manufacturers do not accumulate an excessive gap between actual sales volumes of ZEVs and PHEVs and 2031 model year ZEV requirements.

**Subsection 1962.4(g)(1)(E)**

**Purpose**

The purpose of subsection (g)(1)(D) is to specify that if a manufacturer fulfills a shortfall with excess, early compliance, converted, and pooled PHEV values, combined, they may only do so up to the amount allowed by the PHEV allowance, which is 20% of a manufacturer's annual requirement, specified in subsection (e)(1)(C).

**Rationale**

This subsection is necessary to limit the total amount of a requirement that can be fulfilled with excess, early compliance, converted, and pooled PHEV values. PHEVs provide flexibility to manufacturers to fulfill their annual ZEV requirement through alternative technology to meet consumer demand under limited circumstances, with ZEVs being the main requirement. For reasons already stated, PHEVs can only be used to fulfill 20% of a manufacturer's annual ZEV requirement. Therefore, it is necessary to state that excess, early compliance, converted, and pooled PHEV values (and a combination of such PHEV values) may not exceed the 20% PHEV allowance.

**Subsection 1962.4(g)(2) Calculating Converted PHEV and ZEV Values.**

**Purpose**

The purpose of subsection (g)(2) is to specify how a manufacturer is to convert credit banked earned in CCR, title 13, section 1962.2 at the end of the 2025 model year to be used as converted ZEV and PHEV values in section 1962.4.

**Rationale**

Manufacturers are projected to over-comply with current ZEV requirements (CCR, title 13, section 1962.2) through the 2025 model year. Even if the industry were to flatline at current sales levels, contrary to projections, most manufacturers would carry over credits from the 2025 model year into a future program. If sales occur as projected by manufacturer survey responses, there will be millions of excess ZEV credits and over 100,000 PHEV credits under the existing standards after the 2025 model year.

Pre-2026 ZEV and extended range battery electric vehicle (BEVx) credit banks are proposed to be divided by 4, which represents the maximum number of credits earned by a ZEV under the existing regulation and would be most like a ZEV meeting the proposed minimum range requirement for model years 2026 and subsequent. Pre-2026 PHEV credit banks are proposed to be divided by 1.1, which represents the maximum number of credits earned by a PHEV under the existing regulation and most like a PHEV meeting the proposed minimum range requirement.

Discounted partial zero emission vehicle (PZEV) and advanced technology PZEV (AT PZEV) credits as well as neighborhood electric vehicle (NEV) credits will expire in 2025, per CCR, title 13, section 1962.2, and will not be allowed to be used toward compliance in 2026 and subsequent model years.

**Subsection 1962.4(g)(3) Pooled PHEV and ZEV Values.**

**Purpose**

The purpose of subsection (g)(3) is to allow manufacturers to transfer excess ZEV and PHEV values earned in California or a Section 177 State to fulfill shortfalls or deficits accrued in California or a Section 177 State in 2026 through 2030 model year. This subsection also specifies that manufacturers may only use this flexibility to meet a shortfall or deficit, and not to transfer excess ZEV or PHEV values to states where a manufacturer does not have a shortfall or deficit.

**Rationale**

The concept of pooling is to allow manufacturers to apply excess ZEV and PHEV values from one state to another state to accommodate variation in sales while meeting the requirements across states. Section 177 of the federal Clean Air Act allows other States to adopt California's regulations. At present, 13 states have adopted California's ZEV regulation: Colorado, Connecticut, Maine, Maryland, Massachusetts, Minnesota, Nevada, New Jersey, New York, Oregon, Rhode Island, Vermont, and Virginia. States are in varying stages of ZEV market development to support widespread sales. To accommodate this variation, staff propose to provide flexibility to manufacturers in the 2026 through 2030 model years, by allowing manufacturers to transfer or "pool" excess ZEVs and PHEVs between California and Section 177 States to meet a shortfall in any given model year or a deficit carried forward from a previous model year.

**Subsection 1962.4(h) Determining Compliance or Deficit with Annual ZEV Requirements.**

**Purpose**

The purpose of subsection (h) is to title the subsection.

**Rationale**

This subsection (h) is needed to organize this subsection.

**Subsection 1962.4(h)(1) Demonstrating Compliance.**

**Purpose**

The purpose of this subsection is to require manufacturers to report ZEV requirement performance, which is determined according to the calculation in subsection (f), and the resulting number of excess ZEV, PHEVs, early compliance, and environmental

justice vehicle values, if applicable, or the resulting deficit after the application of values allowed in the case where a manufacturer has a shortfall in their ZEV requirement performance.

**Rationale**

This provision is necessary to require manufacturers to report the results of their calculations of ZEV performance in any given model year to demonstrate compliance with section 1962.4 annual ZEV requirements.

**Subsection 1962.4(h)(2) Incur and Carry Forward a ZEV Deficit.**

**Purpose**

The purpose of this subsection is to specify how a manufacturer incurs a deficit, which occurs when a shortfall remains after a manufacturer calculates its current model year performance against its current model year requirement, and after it applies all available excess ZEV, PHEVs, environmental justice vehicle values, converted PHEV and ZEV values, early compliance vehicle values, and pooled PHEV and ZEV values. This subsection also allows manufacturers to carry forward its deficit for 3 model years. This subsection also specifies a deficit can be met with excess ZEV, PHEVs, early compliance vehicle values, environmental justice vehicle values and pooled PHEV and ZEV values.

**Rationale**

This subsection is necessary to explain how a manufacturer incurs a deficit for a given model year. Manufacturers are penalized for not fulfilling their ZEV requirement in subsection (m), and this occurs only in the case that a manufacturer does not fulfill a deficit, within the proposed 3-year period. Three years is being proposed to align with other light-duty regulations like the current LEV III regulation (CCR, title 13, section 1961.3) and the proposed LEV IV regulation (CCR, title 13, section 1961.4).

Allowing manufacturers to incur a ZEV deficit and carry forward the deficit for three model years will enable manufacturers to manage year to year fluctuations in annual vehicle volumes, and provide flexibilities for compliance. Using this method still results in the same number of ZEVs and PHEVs produced, reducing emissions as intended, over the proposed 3 model years.

## Subsection 1962.4(i) Certification Requirements

### Purpose

The purpose of this subsection is to state the requirement that all manufacturers must submit an application for certification for all new ZEVs and PHEVs.

### Rationale

This subsection is necessary to require such a certification application to be submitted. This is not a change from current requirements on manufacturers, and the existing requirement was specifically stated in the test procedures associated with CCR, title 13, section 1962.2, and section 1961.3. Additionally, Health and Safety Code sections 43100, 43102, 43104, 43152, and 43153 authorize CARB to certify new motor vehicles and impose requirements for certification to ensure they meet the requirements adopted by CARB to reduce emissions and require certification as a condition of offering vehicles for sale within the state. This subsection makes explicit that an application is required to obtain certification for ZEVs and PHEVs, which are vehicles included in CCR, title 13, section 1962.4.[4]

## Subsection 1962.4(i)(1) ZEV Test Group Certification

### Purpose

The purpose of this subsection (i)(1) is to require explain how manufacturers are to group ZEVs together to create a test group for certification. This subsection also states that manufacturers should use good engineering judgment when determining test groups and include together vehicles that have the same expected powertrain deterioration, battery configuration, motor configuration, and vehicle class.

### Rationale

When conventional vehicles are certified, manufacturers submit data on batches of vehicles grouped by defining emission characteristics. These batches of similar vehicles are called test groups. To reduce the burden of certification, multiple models may be certified within one test group if the vehicles have the same engines and emission control technologies. Due to the lack of tailpipe emissions, ZEVs have had minimal definition and guidance around test groups. This subsection is necessary to outline how manufacturers are to define test groups for ZEVs, especially as these vehicles become the dominant technology being certified by 2030. Powertrain deterioration, battery configuration, motor configuration, and vehicle class are defining characteristics of ZEVs and are linked to the vehicle's deterioration over the

[4] Certification applications will be processed in accordance with CCR, title 17, section 60030.

vehicle's useful life, which staff is proposing to be 10 years or 150,000 miles. These attributes determine the capability and efficacy of ZEVs in displacing emissions from the use of conventional vehicles.

**Subsection 1962.4(i)(2)**

**Purpose**

The purpose of this subsection is to define what must be included in an application for certification of PHEVs in addition to the requirements of a federal Part 1 certification application required under by Title 40 of the Code of Federal Regulations, Section 86.1843-01(c), which is the part required of the application at the time of certification, for PHEVs. This subsection is also necessary to introduce and organize the requirements of the PHEV certification application.

**Rationale**

Subsection (i)(2) is necessary to keep separate requirements for manufacturers submitting applications for certification on PHEVs from ZEVs, as those information requirements are different.

**Subsection 1962.4(i)(2)(A)1. through 7.**

**Purpose**

The purpose of these subsections are to state requirements for data and other information related to PHEV characteristics that must be included in Part 1 of a manufacturer's application, required by the Code of Federal Regulations (Part 40, Section 86.1843-01(c)), which is the part of the application required to be submitted to CARB at the time of certification.

**Rationale**

These subsections are necessary to provide CARB with the information necessary to certify a PHEV in California, and to determine that it has met all the requirements outlined in this section 1962.4. Part 1 of the federal certification application is intended for ICEVs, and therefore additional information is needed at the time of certification for PHEVs to ensure the requirements are met. These are not new requirements, as manufacturers have been required to submit these data to CARB when seeking certification, as part of the test procedures incorporated by reference in CCR, title 13, section 1962.2. Staff is proposing that these certification requirements continue but be specified in section 1962.4 rather than the associated test procedure.

**Subsection 1962.4(i)(2)(B)1. through 4. and (i)(2)(C)**

**Purpose**

The purpose of subsection (i)(2)(B) and the subsequent subsections under it are to state requirements of all data and other information related to PHEV testing to be included in Part 1 of a manufacturer's application for certification, required under the Code of Federal Regulations (Title 40, Section 86.1843-01(c)), at the time of certification. The purpose of subsection (i)(2)(C) is to require the data and calculations necessary to determine the battery specific energy, including the weight of the battery, required to support certification.

**Rationale**

These subsections are necessary to provide CARB with the testing data necessary to certify a PHEV in California, and to determine that it has met all the requirements outlined in this section 1962.4, including the minimum range requirements and requirements to meet SULEV emission standards. Part 1 of the certification application is centered around ICEVs, and therefore additional information is needed at the time of certification for PHEVs to confirm they meet the regulatory requirements. These are not new requirements, as manufacturers have been required to submit these data to CARB when seeking certification, as part of the test procedures incorporated by reference in CCR, title 13, section 1962.2. Staff is proposing that these certification requirements continue but be specified remain unchanged and are now coded in section 1962.4 rather than the associated test procedure.

**Subsection 1962.4(i)(2)(D)**

**Purpose**

The purpose of this subsection is to state that data used to establish the battery state of health, and determine its correlation to usable battery energy, must be included in Part 1 of a manufacturers' application for a PHEV, required by the Code of Federal Regulations (Title 40, Section 86.1843-01(c)), which is the part of the application at the time of certification.

**Rationale**

These subsections are necessary to provide CARB with the data necessary to verify the manufacturer is meeting the battery health requirements under the regulations, the data accuracy requirements under proposed section 1962.5, and the battery warranty requirements in proposed section 1962.8.

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**Subsection 1962.4(i)(2)(E)**

**Purpose**

The purpose of this subsection is to require that manufacturers provide an explanation to the PHEV owner how to access the battery state of health parameter, the distance traveled since the battery state of health was reset, the actual rate of charge occurring, and maximum charge rate the vehicle can currently accept.

**Rationale**

This subsection is necessary to provide CARB at the time of certification verification that proposed section 1962.5 is met, which requires that the battery state of health parameter, the distance traveled since the battery state of health was reset, the actual rate of charge occurring, and maximum charge rate that the vehicle can currently accept, is accessible by the vehicle owner without a specialized tool.

**Subsection 1962.4(i)(2)(F)**

**Purpose**

The purpose of this subsection is to require manufacturers to provide the length and terms of the warranty for the propulsion-related parts and the batteries.

**Rationale**

This subsection ensures CARB is provided the information needed at the time of certification to verify the manufacturer has met the requirements of proposed section 1962.8, which requires manufacturers to provide a minimum warranty on the vehicle's battery for 8 years or 100,000 miles for up to 70% state of health. This requirement is necessary to ensure manufacturers are providing a sufficient battery warranty to meet the requirements of proposed section 1962.8 at the time of certification.

**Subsection 1962.4(i)(2)(G)**

**Purpose**

The purpose of this subsection is to require manufacturers provide a sample of the battery label that meets requirements in proposed section 1962.6.

**Rationale**

This subsection ensures CARB is provided the required information at the time of certification to verify the manufacturer has met the requirements of proposed section

1962.6, which requires labeling of batteries. These requirements are consistent with similar label requirements, such as the Vehicle Emission Control Information (VECI) label.

**Subsection 1962.4(i)(2)(H)**

**Purpose**

The purpose of this subsection is to require manufacturers provide to CARB information the manufacturer provides to the vehicle owner related to safe operation and handling of the vehicle's battery, including in emergency situations.

**Rationale**

This subsection is necessary to provide information to protect the safety of vehicle operators and vehicle testing laboratory personnel in the event the high-powered battery malfunctions. This continues existing requirements for submission of information about PHEVs at the time of applying for certification.

**Subsection 1962.4(i)(3)**

**Purpose**

The purpose of this subsection is to define what must be included with Part 1 of a manufacturer's application for certification, required under Title 40 of the Code of Federal Regulations, Section 86.1843-01(c), at the time of certification for BEVs and FCEVs. This subsection is also necessary to introduce and organize the requirements of the certification application.

**Rationale**

Subsection (i)(3) is necessary to establish requirements for manufacturers submitting applications for certification of BEVs and FCEVs, as distinguished from PHEVs, due to the attributes of those vehicles.

**Subsection 1962.4(i)(3)(A)**

**Purpose**

The purpose of this subsection is to require manufacturers to provide information needed for CARB staff to contact the manufacturer regarding its application for certification.

**Rationale**

This subsection is necessary to ensure CARB compliance staff have relevant and useful contact information for the manufacturer seeking certification. Often is the case that manufacturers are missing pieces of information in their certification application, and contact must be established between CARB compliance staff and manufacturers. These are not new requirements, as manufacturers have been required to submit these data at the time of certification. The requirements are currently in the test procedure incorporated by reference in CCR, title 13, section 1962.2 for ZEVs, but are not specifically in the corresponding federal exhaust emission test procedures because they do not apply to ZEVs, which lack exhaust emissions. Staff is proposing that these certification requirements continue in section 1962.4 rather than the associated test procedure.

**Subsection 1962.4(i)(3)(B)**

**Purpose**

The purpose of this subsection is to require manufacturers to include in their certification application a description and identification of the test group.

**Rationale**

This subsection is necessary to ensure manufacturer conform to the parameters in subsection (i)(1), which establish the parameters that must be followed when defining a test group for ZEVs.

**Subsection 1962.4(i)(3)(C)1. through 6.**

**Purpose**

The purpose of these subsections are to state requirements for all data related to BEV and FCEV characteristics that must be included along with Part 1 of a manufacturer's application for certification required under Title 40 of the Code of Federal Regulations, Section 86.1843-01(c).

**Rationale**

These subsections are necessary to provide CARB with the information necessary to certify a BEV or FCEV in California, and to determine that it has met all the requirements outlined in this section 1962.4 and CCR, title 13, section 1962.3. Part 1 of the federal certification application is centered around ICEVs, and therefore additional information is needed at the time of certification for BEVs and FCEVs. These are not new requirements, as manufacturers have been required to submit

these data at the time of certification under the existing standards for ZEVs in CCR, title 13, section 1962.2. Staff is proposing that these certification requirements continue but appear in section 1962.4 rather than the associated test procedure.

**Subsection 1962.4(i)(3)(D)1. through (i)(3)(E)**

**Purpose**

The purpose of subsection (i)(3)(D) and the subsequent subsections under it are to state requirements for the data related to BEV and FCEV testing that must be included along with Part 1 of a manufacturer's application for certification, required under Title 40 of the Code of Federal Regulations, Section 86.1843-01(c).

**Rationale**

These subsections are necessary to provide CARB with the testing data necessary to certify a BEV and FCEV in California, and to determine that it has met all the requirements outlined in this section 1962.4, including the minimum range requirements. Part 1 of the federal certification application is centered around ICEVs, and therefore additional information is needed at the time of certification in California for BEVs and FCEVs. These continue existing requirements in the test procedure incorporated by reference in CCR, title 13, section 1962.2 for ZEVs. Staff is proposing that these certification requirements continue and be included in section 1962.4 rather than the associated test procedure.

**Subsection 1962.4(i)(3)(F)**

**Purpose**

The purpose of this subsection is to obtain the data used by the manufacturer to establish the battery state of health, and its correlation to usable battery energy, along with Part 1 of a manufacturers' application for certification of a BEV and FCEV required by Title 40 of the Code of Federal Regulations, Section 86.1843-01(c).

**Rationale**

These subsections are necessary to provide CARB with the data necessary to verify the manufacturer is meeting the data requirements under proposed section 1962.5 and the related battery warranty requirements in proposed section 1962.8. Additionally, this subsection is necessary to provide CARB the information necessary to verify compliance with the requirements for degradation of the battery over the vehicle's useful life. This information is necessary to establish that the test group will meet the durability requirement of subsection (d)(2).

**Subsection 1962.4(i)(3)(G)**

**Purpose**

The purpose of this subsection is to have manufacturers provide an explanation of how the BEV owner is to access the battery state of health parameter, the distance traveled since the battery state of health was reset, the actual rate of charge occurring, and maximum charge rate the vehicle can currently accept. This subsection does not apply to FCEVs.

**Rationale**

This subsection is necessary to provide CARB the required information needed at the time certification is sought to verify the manufacturer has met the requirements of proposed section 1962.5, which requires the battery state of health parameter, the distance traveled since the battery state of health was reset, the actual rate of charge occurring, and maximum charge rate that the vehicle can currently accept to be accessible by the vehicle owner without a specialized tool.

**Subsection 1962.4(i)(3)(H)**

**Purpose**

The purpose of this subsection is to require manufacturers provide the length and duration of the warranty terms associated with propulsion-related parts and batteries.

**Rationale**

This subsection is necessary to provide CARB the required information needed at the time of an application for certification to verify the manufacturer has met the requirements of proposed section 1962.8, which requires a minimum warranty on propulsion related parts for 3 years or 50,000 miles, whichever occurs first, and 7 years or 70,00 miles, whichever occurs first. Proposed section 1962.8 also requires manufacturers to warranty the vehicle's battery for 8 years or 100,000 miles for up to 70% state of health.

**Subsection 1962.4(i)(3)(I)**

**Purpose**

The purpose of this subsection is to require manufacturers to provide a sample of the battery label that meets the requirements in proposed section 1962.6.

**Rationale**

This subsection is necessary to provide CARB the required information at the time of an application for certification to verify the manufacturer has met the requirements of proposed section 1962.6 to label of batteries. These requirements consistent with similar existing label requirements, such as the Vehicle Emission Control Information (VECI) label.

**Subsection 1962.4(i)(3)(J)**

**Purpose**

The purpose of this subsection is to require manufacturers provide the information given to the vehicle owner related to safe handling of the vehicle's battery in emergency situations.

**Rationale**

This subsection is necessary to ensure the safety of vehicle operators or vehicle testing laboratory personnel in the event that the high-powered battery malfunctions. This is currently required for BEVs at the time of certification under existing regulations.

**Subsection 1962.4(i)(3)(K)**

**Purpose**

The purpose of this subsection is to require manufacturers provide information given to vehicle owners related to the safe handling of the vehicle's fuel cell system, battery, and the on-board hydrogen storage tank in emergency situations.

**Rationale**

This subsection is necessary to ensure the safety of vehicle operators or vehicle testing laboratory personnel in the event that the fuel cell system, battery or on-board hydrogen storage tank malfunctions or there is hydrogen leakage. This is currently required under existing regulations for FCEVs at the time of certification.

**Subsections 1962.4(i)(3)(L) and (M)**

**Purpose**

The purpose of these subsections is to require manufacturers to provide CARB the necessary information to verify compliance with proposed CCR, title 13, section 1962.5. This includes a statement from manufacturers attesting to compliance and

identification of the communication protocol required under section 1962.5 as well as a list of certain requirements not yet met in accordance with section 1962.5(g).

**Rationale**

Subsection (i)(3)(L) and (M) is necessary to provide CARB the necessary information to confirm compliance with proposed CCR, title 13, section 1962.5 as a condition of certification. Because section 1962.5(g) provides additional flexibility to manufacturers that make good faith efforts to implement the requirements of this section 1962.5 in full but fall short of complete implementation in the first four years of the program, it is necessary for those manufacturers to include a list of the unmet or deficient requirements with their certification application so that CARB is aware of those deficient requirements and can assess the application accordingly.

**Subsection 1962.4(i)(4)**

**Purpose**

The purpose of this subsection is to define what must be included in addition to the requirements for Part 2 of a manufacturer's application for certification of ZEVs and PHEVs, required by Title 40 of the Code of Federal Regulations, Section 86.1843-01(d). This part of the application is submitted after certification. This subsection is also necessary to introduce and organize the requirements of the certification application.

**Rationale**

Subsection (i)(4) is necessary to provide CARB additional information along with Part 2 of the application for certification of ZEVs, meaning BEVs, FCEVs, and PHEVs.

**Subsection 1962.4(i)(4)(A) and (i)(4)(B)**

**Purpose**

The purpose of subsection (i)(4)(A) is to require manufacturers to submit a list of what would be identified as "high-priced" propulsion related parts, as well as the information of how that identification determination was made, including the estimated retail parts cost, labor rates (in dollars per hour) and the number of labor hours necessary to assess a malfunction and replace the part as required by the warranty provisions of proposed CCR, title 13, section 1962.8. Additionally, subsection (i)(4)(B) provides CARB with copies of the required warranty documents and maintenance instructions.

**Rationale**

Subsection (i)(4) is necessary to provide CARB with information to confirm the warranty requirements of proposed CCR, title 13, section 1962.8, are met. Currently, this kind of differentiation exists These requirements are consistent with those for conventional vehicle warranties in CCR, title 13, section 2037.

**Subsection 1962.4(i)(4)(C)**

**Purpose**

The purpose of these subsections is to require manufacturers to provide CARB the necessary information to verify compliance with proposed CCR, title 13, section 1962.5, which includes a pictorial representation of the connector port on the vehicle.

**Rationale**

Subsection (i)(4)(C) is necessary to provide CARB the necessary information to confirm compliance with proposed CCR, title 13, section 1962.5 as a condition of certification.

**Subsection 1962.4(i)(5) and (i)(5)(A) through (G). Application for Certification Requirements for Neighborhood Electric Vehicles.**

**Purpose**

The purpose of this subsection is to continue certification requirements for neighborhood electric vehicles. This subsection is also necessary to state neighborhood electric vehicles do not count toward a manufacturer's annual ZEV requirement. This subsection also introduces and organizes the following subsections, which state information necessary to be included in a manufacturer's certification application for a NEV.

**Rationale**

This subsection is necessary to state explicitly what manufacturers must include in their certification application for neighborhood electric vehicles. The information included in subsections (i)(5)(A) through (G) are similar to what CARB collects from manufacturers seeking to certify neighborhood electric vehicles and electric golf carts under existing regulations. Additionally, staff is proposing preclude manufacturers from including neighborhood electric vehicles in determining compliance with the ZEV requirement because these types of vehicles are limited in their use. While these low speed vehicles can replace some combustion emissions, they do not constitute a full replacement for a gasoline vehicle and are not expected to significantly reduce emissions from conventional vehicles.

## Subsection 1962.4(j) and (j)(1) Reporting Requirements

### Purpose

The purpose of subsection (j) is to introduce and organize the manufacturer reporting requirements. Subsection (j)(1) and the subsequent subsections (A) through (C) state requirements for all data related to the projected number of ZEVs and PHEVs to be produced and delivered for sale in California for the next model year not yet currently being produced and delivered for sale in California, plus each of the subsequent four model years.

### Rationale

This subsection is necessary to provide CARB information needed to plan infrastructure, administer effective grant programs to encourage ZEV adoption, and to develop policies and programs that support ZEV market development. This is currently required of manufacturers through the test procedure associated with CCR, title 13, 1961.3, and is intended to give CARB sufficient lead time for planning and implementation of complementary programs and infrastructure. This does not reflect a change from what is currently required of manufacturers, but rather locates this requirement for 2026 and subsequent model years in the proposed section 1962.4.

## Subsection 1962.4(j)(1)(A) through (C)

### Purpose

The purpose of these subsections is to have manufacturers provide the model year specific data for each model name including: projected sales, for BEVs and PHEVs; vehicle certification weight category, all-electric range, battery pack energy capacity, onboard charger rating, direct current fast charge (if equipped) vehicle connector specification and maximum charge rate, and vehicle to grid capability, for battery specifications for model specific battery, and for FCEVs, certification weight category, vehicle fuel pressure rating, fuel tank capacity, and vehicle range.

### Rationale

This subsection is necessary to provide CARB the required information for infrastructure planning and is consistent with information currently required in manufacturers alternative fuel projections, through CCR, title 13, section 1961.3 and associated test procedures.

**Subsection 1962.4(j)(2)**

**Purpose**

The purpose of this subsection is to require manufacturers provide a ZEV Requirement Performance report to the Executive Officer with model year specific information prior to May 1 of the calendar year following the close of the model year. For example, a manufacturer would report by May 1, 2027, its ZEV requirement performance for the 2026 model year.

**Rationale**

This subsection is necessary to provide CARB the required information needed to verify the status of each manufacturer's ZEV Requirement Performance for a given model year. This reporting deadline is consistent with the current ZEV regulation reporting deadline of May 1.

**Subsection 1962.4(j)(2)(A)**

**Purpose**

The purpose of this subsection is to require manufacturers to provide the total number of light-duty vehicles produced and delivered for sale in California for the model year and each of the four prior model years.

**Rationale**

This subsection is necessary to allow CARB the required information needed to calculate for a given model year a manufacturer's Annual ZEV requirement, PHEV values, and environmental justice vehicle values. Currently, a manufacturer's ZEV requirement is based on an average of prior model year sales (2nd, 3rd and 4th year previous average). For instance, a manufacturer's 2022 model year requirement is applied to its average of 2018, 2019, and 2020 model year sales. The information required in this subsection is necessary for calculating this prior model year sales average.

**Subsection 1962.4(j)(2)(B)**

**Purpose**

The purpose of this subsection is to have manufacturers provide model-year specific data for each ZEV delivered for sale. This subsection also requires information for PHEVs meeting the minimum requirements of subsection (e)(1). Information that must

be submitted includes vehicle identification number (VIN), model year, Executive Order number, make, model, test group, and state.

**Rationale**

The proposed requirements are a function of the number of vehicles delivered for sale in California. Provisions within this proposed regulation allow manufacturers to transfer vehicle values from other states that have adopted California's regulation. This subsection is necessary to provide CARB the required information needed to verify that manufacturers for a given model year have delivered for sale ZEVs and PHEVs to a ZEV state, and ensure correct accounting and tracking, to determine compliance in California.

**Subsection 1962.4(j)(2)(C)1. through 3.**

**Purpose**

The purpose of these subsections is to require manufacturers provide specific data for each individual ZEV and PHEV qualifying for additional environmental justice vehicle values under subsection (e)(2) for each of the following three types of programs: new ZEVs and PHEVs in Qualifying Community-based Clean Mobility Programs, vehicles in California sold at the end of lease to participating dealerships, and new ZEVs and PHEVs sold below the specified MSRP threshold.

**Rationale**

This subsection is necessary to provide CARB the information needed to verify and calculate the manufacturer's environmental justice vehicle values for each of the three environmental justice values.

**Subsection 1962.4(j)(2)(D)**

**Purpose**

The purpose of this subsection is to require manufacturers provide model year ZEV requirement performance for the model year, including separate calculations of any PHEV or environmental justice vehicle values earned in the model year in excess of the respective allowances.

**Rationale**

This subsection is necessary to provide CARB with the manufacturer's calculations regarding its ZEV requirement performance, including PHEV values and environmental justice values, as allowed by subsection 1962.4(f). This is necessary to provide CARB

the necessary information to assess and verify the total excess values earned in the model year to verify compliance and track any trades of credits with other manufacturers or for compliance with programs in other states have adopted California's standards under Section 177 of the federal Clean Air Act.

**Subsection 1962.4(j)(3)**

**Purpose**

The purpose of this subsection is to require manufacturers to provide a final compliance report to the Executive Officer for the model year with specific information to confirm compliance, prior to September 1 of the calendar year following the close of the model year. For example, a manufacturer would provide this information by September 1, 2027, for 2026 model year compliance.

**Rationale**

This subsection is necessary to provide CARB the required information needed to verify the manufacturer's compliance or deficit to the Annual ZEV Requirement. The deadline provides manufacturers a reasonable time to prepare the report after the end of the model year, which typically ends in June.

**Subsection 1962.4(j)(3)(A) through (C)**

**Purpose**

The purpose of these subsections is to require manufacturers to provide model year usage quantities of vehicle values to fulfill a shortfall: excess vehicle values, vehicle values to resolve shortfalls, and starting and ending balances of vehicle values.

**Rationale**

This subsection is necessary to provide CARB the information needed to verify manufacturers' usage quantities of vehicle value for all vehicle value categories. The required information enables CARB to track compliance under each vehicle value category.

**Subsection 1962.4(j)(4)**

**Purpose**

The purpose of this subsection is to require manufacturer to report their election of early compliance vehicle values in their annual report, required per CCR, title 13, section 1962.2 and incorporated test procedure, section D.3.

**Rationale**

This subsection is necessary to ensure CARB has adequate information to award and designate vehicle values earned through early compliance, in the model year in which the vehicle was produced and delivered for sale. This information will ensure manufacturers cannot double count vehicles in CCR, title 13, section 1962.2 and this section 1962.4.

**Subsection 1962.4(k) through (k)(1)(B)2. Disclosure of Records**

**Purpose**

The purpose of this subsection is to notify regulated entities that certain records under these regulations are subject to disclosure, both to the public and U.S. EPA. This subsection makes clear that public disclosure only applies to those data not identified and validated as trade secrets or otherwise exempt from disclosure, per CCR, title 17, section 91011.

**Rationale**

The 2008 ZEV rulemaking[5] added public disclosure requirements of ZEV credit data to ensure the public has access to emission and compliance information and give notice to all interested parties that the information will be disclosed. This disclosure requirement has been in place since the 2009 model year. This proposed subsection continues this public disclosure of ZEV regulation records by providing notice to regulated entities. The data required is in line with the current requirements found in CCR, title 13, section 1962.2. The subsection also fulfills the requirements of CCR, title 17, section 91010, requiring CARB to notify any person from whom it requests information that the information is subject to disclosure to the public and to U.S. EPA, except as prohibited by law.

**Subsection 1962.4(k)(2)**

**Purpose**

The purpose of this section is to allow CARB to disclose all data gathered for compliance with proposed section 1962.4 to the United States Environmental Protection Agency. In the case that trade secret information is included in this disclosure, the United States Environmental Protection Agency will hold those data as such.

[5] For more information on the 2008 ZEV amendments: https://www.arb.ca.gov/regact/2008/zev2008/zev2008.htm

**Rationale**

Information submitted to CARB is a public record subject to disclosure unless protected under applicable law as confidential. Confidential information submitted to CARB may be release to the U.S. Environmental Protection Agency which similarly protects confidential information from public disclosure. Parties that submit information to CARB are entitled to notice that the information may be shared with U.S. EPA. This regulation is necessary to provide that notice, which is required under CCR, title 17, section 91010.

**Subsection 1962.4(l) Definitions**

**Purpose**

The purpose of this subsection is to define terms not already defined by the associated test procedure or by CCR, title 13, section 1900.

**Rationale**

A definition for "certification range value" is needed to explain the minimum range value ZEVs and PHEVs must meet to count towards a manufacturer's annual ZEV requirement, and that it defined by a calculation of urban and highway cycles, outlined in the associated test procedure.

A definition for "financial assistance program" is needed to explain the type of programs dealers must participate in, to receive environmental vehicle values under subsection (e)(2)(B), "Vehicles in California Sold At the End of Lease to Participating Dealerships".

A definition for "community-based clean mobility program" is needed to explain the type of program that qualifies for manufacturers to provide a discount to receive environmental vehicle values under subsection (e)(2)(A), "New ZEVs and PHEVs Provided for Use in Qualifying Community-based Clean Mobility Programs".

A definition for "manufacturer's suggested retail price (MSRP)" is needed to explain what is meant by the term as it applies to manufacturers qualifying for environmental justice vehicle values. The definition matches the federal labeling requirement at U.S. Code, title 15, section 1232(f)(1).

A definition for "NMOG + NOx production report" is needed to define the report that is linked to how manufacturers are to determine their annual ZEV requirement.

A definition for "Neighborhood Electric Vehicle (NEV)" is needed to define this term and explain that these types of vehicles do not count toward a manufacturer's annual ZEV requirement.

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A definition for "provided for use" is needed to define how this phrase applies to 1962.4, specifically for its use within how manufacturers earn environmental justice vehicle values.

A definition for "rounded to the nearest whole vehicle value" is needed to define the rounding convention for determining vehicle values and ZEV regulation compliance.

A definition for "Section 177 ZEV state" is needed to define this phrase as it relates to 1962.4.

A definition for "shortfall" is needed to describe how this word applies to 1962.4, as it is a common word but has a unique meaning for this section.

**Subsection 1962.4(m) Enforcement of ZEV Requirements**

**Purpose**

This subsection specifies that manufacturers may be audited to confirm compliance, violations remedies, and penalties assessed.

**Rationale**

This subsection is necessary to provide notice to manufacturers that CARB may act to verify compliance and remedy violations.

**Subsection 1962.4(m)(1)**

**Purpose**

This subsection provides notice to manufacturers that their records necessary to determine compliance with the proposed regulation are subject to audit to confirm their accuracy and that incorrect information is a violation of the regulation. The section explains that each incorrect statement, which would encompass a discrete item of incorrect information, constitutes a violation, and that any omitted information is also a violation.

**Rationale**

To ensure the requirements of the proposed regulation are met, and emissions reduced as intended, CARB must be able to inspect and audit records to determine compliance. This regulation provides notice to manufacturers that CARB may conduct audits and inspections of records to determine compliance. This regulation is also reasonably necessary to ensure manufacturers take reasonable measures to ensure the information they submit is accurate and complete.

**Subsection 1962.4(m)(2)(A)-(C)**

**Purpose**

This subsection provides remedies if CARB determines that a manufacturer has submitted incorrect information and the process for doing so.

**Rationale**

This subsection is necessary to provide a process for CARB to address incorrect information submitted under the proposed regulation. It provides a process for a manufacturer to demonstrate the information it submitted is not incorrect, and to appeal a determination that incorrect information was submitted by following established requirements for an administrative hearing.

**Subsection 1962.4(m)(3)**

**Purpose**

This subsection identifies the penalties for violations of the requirements of the proposed regulation under existing statutes, including Section 43211 of the Health and Safety Code that references existing regulations for ZEVs through model year 2025. It also identifies when violations begin to accrue.

**Rationale**

This subsection is necessary to provide notice to manufacturers and other interested persons of potential penalties for violations of the proposed regulation. Multiple statutes in the Health and Safety Code provide for penalties for violating regulations adopted by CARB. This subsection clarifies the potential penalties for violations of the proposed regulation.

**Subsection 1962.4(n) Address.**

**Purpose**

The purpose of this subsection is to provide manufacturers the location to submit reports, documents, and requests under the proposed regulations.

**Rationale**

This subsection is necessary to provide manufacturers with a designated address to send required or optional information, documentation, and requests (hereinafter, "information") under the proposed regulations. This subsection provides the mailing

address for information to be submitted to CARB, which is the default method of submission unless otherwise specified. It also provides an option for a manufacturer to agree with CARB to submit information electronically, as provided under Civil Code sections 1633.7 and 1633.8. Civil Code section 1633.2 defines electronic and electronic record to define how the information may be submitted. CARB intends to readily agree to receive information electronically and to provide details for optional electronic submittal as requested. CARB does not propose to prescribe specific procedures for electronic submissions because the optimal means of electronic submissions may change over the regulation's timeframe, as may particular email addresses or websites. It would be unduly burdensome and potentially confusing to regulated entities for CARB to identify specific contact information in the regulation that may then necessitate repeated regulatory amendments to update.

**Subsection 1962.4(o) Severability**

**Purpose**

The purpose of this subsection is to establish that if one or more of the provisions in the proposed regulation are deemed invalid or unenforceable, the remainder shall continue to be in effect.

**Rationale**

This subsection is necessary to preserve the intent of the proposed regulations to maximize emission reductions, even if unforeseen issues arise with enforcing any individual term of the proposed regulation.