

Advanced Clean Cars II Regulations

Resolution 22-12

August 25, 2022

Agenda Item No.: 22-10-1

Whereas, sections 39600 and 39601 of the Health and Safety Code authorize the California Air Resources Board (CARB or Board) to adopt standards, rules and regulations and to do such acts as may be necessary for the proper execution of the powers and duties granted to and imposed upon the Board by law;

Global Warming is a Significant Threat

Whereas, the Legislature has enacted the California Global Warming Solutions Act of 2006 (Assembly Bill (AB) 32),¹ which declares that global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California;

Whereas, AB 32 added Division 25.5 to the Health and Safety Code, including section 38501, which expresses the Legislature's finding that global warming poses a serious threat and the Legislature's intent that the Board coordinate with State agencies and consult with the environmental justice community, industry sectors, business groups, academic institutions, environmental organizations, and other stakeholders in implementing AB 32; and design emissions reduction measures to meet the statewide emissions limits for greenhouse gases (GHG) in a manner that minimizes costs and maximizes benefits for California's economy, maximizes additional environmental and economic co-benefits for California, and complements the State's efforts to improve air quality;

Whereas, California experiences a wider range of the effects of climate change and suffers these effects to a greater degree than other states in the nation, including extreme and prolonged drought, dwindling supplies of fresh water from loss of snowpack, more extensive and severe wildfires, and rising storm surges and sea levels;²

Whereas, the increase in the size and severity of California wildfires is directly responsible for adding to the air thousands of tons of the criteria air pollutants designated under the federal

¹ Health & Saf. Code § 38500 et seq. (Nuñez, ch. 488, Stats. of 2006).

² See, e.g., discussion of evidence in 78 Fed. Reg. 2,112, 2,129 (Jan. 9, 2013); State of California Governor's Office of Planning and Research, California Energy Commission, California Natural Resources Agency, California's Fourth Climate Change Assessment Statewide Summary Report (hereinafter "Fourth Climate Change Assessment Statewide Summary"), Report # SUM-CCCA4-2018-013, August 27, 2018, available at: https://www.energy.ca.gov/sites/default/files/2019-11/Statewide_Reports-SUM-CCCA4-2018-013_Statewide_Summary_Report_ADA.pdf.

Clean Air Act,³ including particulate matter (PM), oxides of nitrogen (NOx), and volatile organic compounds, which threaten public health well beyond California's borders;⁴

Whereas, as the United States Environmental Protection Agency (U.S. EPA) has recognized, the effects of climate change and rising temperatures from GHG emissions make it more difficult to reduce ozone air pollution that threatens public health;⁵

Whereas, in recognition of the devastating impacts of climate-changing emissions on California, Governor Arnold Schwarzenegger issued Executive Order S-3-05 in 2005 to establish the following targets to reduce GHG emissions: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; and by 2050, reduce GHG emission to 80 percent below 1990 levels;

Whereas, Governor Edmund G. Brown, Jr. issued Executive Order B-16-12 in 2012, which reaffirms a 2050 GHG emission reduction target stipulating specifically that the transportation sector achieve an 80 percent reduction below 1990 levels;

Whereas, Governor Brown issued Executive Order B-30-15 in 2015, which establishes an interim GHG emission reduction target of 40 percent below 1990 levels by 2030 to ensure California achieves meaningful early emission reductions on a trajectory to meet the 2050 targets, which was subsequently adopted by the Legislature in Senate Bill 32;⁶

Whereas, section 38505 of the Health and Safety Code defines GHGs as including carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride;

Whereas, section 38510 of the Health and Safety Code designates CARB as the State agency charged with monitoring and regulating sources of GHG emissions in order to reduce these emissions;

Whereas, sections 38560, 38562, and 38566 of the Health and Safety Code direct the Board to adopt regulations in an open public process to achieve the maximum technologically feasible and cost-effective reductions in GHG emissions in furtherance of achieving the statewide limit and, to the extent feasible and in furtherance of achieving the statewide GHG emissions limit, to design its GHG regulations in a manner that is equitable, seeks to minimize costs and maximize the total benefits to California, and encourages early action to reduce GHG emissions;

Whereas, section 38580 of the Health and Safety Code charges CARB with monitoring compliance and enforcing its regulations under AB 32;

Motor Vehicle Pollution Threatens Public Health

Whereas, section 39003 of the Health and Safety Code directs the Board to systematically attack the serious air pollution problems caused by motor vehicles;

³ 42 U.S.C. § 7401, et seq.

⁴ See Fourth Climate Change Assessment Statewide Summary.

⁵ See 74 Fed. Reg. 32,744, 32,763 (July 8, 2009).

⁶ Health & Saf. Code § 38566 (Pavley, Chapter 249, Stats. of 2016).

Whereas, mobile sources in California are the greatest contributor to emissions of criteria pollutants under state and federal law, including fine particulate matter (PM_{2.5}) and the precursors for ground-level ozone of NO_x and hydrocarbons (HC), and to GHG emissions, accounting for about 80 percent of ozone precursor emissions and approximately 50 percent of statewide GHG emissions when accounting for transportation fuel production and delivery;

Whereas, exposure to PM_{2.5} increases the risk to individuals of developing cardiovascular and respiratory issues, especially if these individuals live closer to roadways and fuel distribution facilities;

Whereas, exposure to ground-level ozone can cause irritation of and damage to lung tissue, worsen asthma and chronic illnesses including obstructive pulmonary disease and reduced lung function, and lead to premature death;

Whereas, section 43000 of the Health and Safety Code states the Legislature's finding that dependence on petroleum-based fuels in motor vehicles substantially degrades air quality and threatens public health;

Whereas, motor vehicles are self-propelled devices by which persons or property may be propelled, moved, or drawn upon a highway, under Health and Safety Code section 39039 and Vehicle Code sections 415 and 670;

Whereas, sections 43013, 43100, 43101, 43102, and 43104 of the Health and Safety Code authorize the Board to adopt emission standards, in-use performance standards, and test procedures to control air pollution caused by motor vehicles and motor vehicle engines, including light- and medium-duty motor vehicles;

Whereas, section 43013(a) of the Health and Safety Code directs the Board to "adopt and implement motor vehicle emission standards, in-use performance standards, and motor vehicle fuel specifications for the control of air contaminants and sources of air pollution which the state board has found to be necessary, cost effective, and technologically feasible ... unless preempted by federal law";

Whereas, section 43018(a) of the Health and Safety Code directs the Board to achieve the maximum degree of emissions reductions possible from vehicular and other mobile sources to attain the State ambient air quality standards at the earliest practicable date;

Whereas, section 43018(c) of the Health and Safety Code provides that in carrying out section 43018, the Board shall adopt standards and regulations that will result in the most cost-effective combination of control measures on all classes of motor vehicles and motor vehicle fuels, including, but not limited to, reductions in motor vehicle exhaust and evaporative emissions, and reductions in in-use vehicular emissions through durability, performance improvements, and specification of vehicular fuel composition;

Whereas, section 43104 of the Health and Safety Code directs the Board to adopt testing and other procedures necessary to determine whether vehicles are in compliance with the Board's emissions standards;

Whereas, section 43105 of the Health and Safety Code provides that no new motor vehicle or engine required to meet the Board's vehicle emission standards shall be sold to the ultimate purchaser, ordered or delivered for sale to the ultimate purchaser, or registered in

this State if the manufacturer has violated emission standards or test procedures and has failed to take corrective action, which may include recall of vehicles or engines, specified by the Board in accordance with its regulations; and provides that the Board shall establish procedures for determining, and the facts constituting, compliance or failure of compliance;

Whereas, section 43106 of the Health and Safety Code requires each new motor vehicle or new motor vehicle engine required to meet the Board's emission standards to be, in all material respects, substantially the same in construction as the test motor vehicle or engine that has been certified by the Board to be sold or offered for sale in California;

The National Ambient Air Quality Standards Require Action to Protect Public Health

Whereas, sections 39602 and 39602.5 of the Health and Safety Code designate the Board as the air pollution control agency for the State of California for all purposes under federal law, including as the agency responsible for preparing the state implementation plan (SIP) required by the Clean Air Act, and direct the Board to adopt regulations to attain and maintain the National Ambient Air Quality Standards (NAAQS) for criteria air pollutants established under the Clean Air Act;

Whereas, section 39602 of the Health and Safety Code also provides that the SIP shall include only those provisions necessary to meet the requirements of the Clean Air Act;

Whereas, in March 2017, CARB approved the 2016 State Strategy for the California State Implementation Plan, which included a commitment to propose the Advanced Clean Cars II (ACC II) program as a proposed measure to support attainment and maintenance of the NAAQS in California;⁷

Whereas, to attain the NAAQS of 70 parts per billion (ppb), the Draft 2022 State SIP Strategy recognizes that additional emission reductions, beyond the 2016 State SIP Strategy commitment and ACC II, will be needed to meet this standard;⁸

All Californians Deserve Equitable Access to Clean Air and the Benefits of Zero-Emission Technology

Whereas, CARB and California have greatly improved air quality in the State over the past half century. Smog alerts, which peaked at one almost every other day during the 1960s, have been eliminated, while during this time the State has grown its economy while becoming a world leader in environmental policies and clean technologies;

Whereas, despite California's great progress reducing air pollution, more than half (21 million out of nearly 40 million) of all Californians live in urban and rural downwind areas that exceed the most stringent NAAQS for ozone of 70 ppb and California has the only two areas in the nation that are designated in extreme nonattainment of this standard;

⁷ CARB, 2016 State Strategy for the State Implementation Plan for Federal Ozone and PM_{2.5} Standards, <https://ww2.arb.ca.gov/resources/documents/2016-state-strategy-state-implementation-plan-federal-ozone-and-pm25-standards>.

⁸ CARB, 2022 State Strategy for the State Implementation Plan, <https://ww2.arb.ca.gov/resources/documents/2022-state-strategy-state-implementation-plan-2022-state-sip-strategy>.

Whereas, despite the significant public health improvements produced by CARB's air quality programs, California's disadvantaged communities, low-income communities, and communities of color continue to experience disproportionate impacts from air pollutants and GHGs, among other inequities that increase residents' health vulnerabilities;

Whereas, section 44391.2 of the Health and Safety Code requires CARB to develop a statewide strategy to reduce emissions of toxic air contaminants and criteria air pollutants in communities affected by a high cumulative exposure burden, including from mobile sources;

Whereas, CARB's statewide strategy to address these goals, known as the Community Air Protection Program Blueprint, identifies ACC II in helping to reduce exposure to criteria pollution and toxic air contaminants in burdened communities;⁹

Whereas, the Legislature enacted AB 197,¹⁰ which declares that continuing to reduce GHG emissions is critical for protecting all areas of the State, but especially for the State's most disadvantaged communities, as those communities are affected first and most frequently by adverse impacts of climate change, including increased frequency of extreme weather events such as drought, heat waves, and flooding;

Whereas, AB 32 added section 38565 to the Health and Safety Code, directing CARB to ensure, where applicable and to the extent feasible, that CARB's GHG emission reduction regulations and programs direct public and private investment toward the most disadvantaged communities in California and provide an opportunity for community institutions to benefit from statewide efforts to reduce GHG emissions;

Whereas, improving access to clean transportation and mobility options for low-income households and communities most impacted by pollution supports equity and environmental justice and is key in reducing emissions;

Whereas, CARB recognizes the imperative to meaningfully integrate equity and environmental justice considerations into programs and policies in partnership with affected communities;

Whereas, new zero-emission vehicles (ZEVs) commonly are resold as used ZEVs, which generally cost significantly less than new models and can provide affordable mobility and increased access to the cleanest technologies for low-income households and communities when used vehicles are reliable, durable, and serviceable;

Whereas, Health and Safety Code sections 44124.5 and 44258.4 create or direct CARB to create several incentive programs to increase low-income Californians' access to ZEVs, including Clean Cars 4 All, the Clean Mobility Options Voucher Pilot Project, the Sustainable Transportation Equity Project, and the Financing Assistance for Lower-Income Consumers Project;

⁹ CARB, Community Air Protection Blueprint, <https://ww2.arb.ca.gov/capp-blueprint>.

¹⁰ Gov. Code § Article 7.6 (commencing with section 9147.10) to Chapter 1.5 of Part 1 of Division 2 of Title 2 and to amend Health & Saf. Code §§ 39510 and 39607 and add 38506, 38531, 38562.5, and 38562.7 (E. Garcia, ch. 250, Stats. of 2016).

Whereas, promoting benefits for air quality, mobility, and access to clean transportation for disadvantaged and low-income communities in the context of the ACC II regulation is appropriate and essential in light of longstanding disparities in exposure to transportation pollution, transportation access, and the potential to improve public health and quality of life by expanding communities' access to cleaner technologies and broader transportation choices;

Whereas, higher priority must be placed on identifying all feasible actions CARB can take as soon as possible, regulatory and otherwise, and promoting environmental justice and equity in each action, consistent with statute;

The Advanced Clean Cars Program Has Effectively Reduced Air Pollution

Whereas, in March 2012, the Board approved the Advanced Clean Cars (ACC I) program, which includes: the Low-Emission Vehicle III (LEV III) regulations that reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles for model years 2015 through 2025, and amendments to the ZEV regulation, which acts as a focused technology-forcing piece of the ACC I program by requiring manufacturers to produce increasing numbers of ZEVs and plug-in hybrid electric vehicles (PHEV) in the 2018 through 2025 model years;¹¹

Whereas, through Section 177 of the Clean Air Act,¹² fifteen states, consisting of Colorado, Connecticut, Maine, Maryland, Massachusetts, Minnesota, Nevada, New Jersey, New York, New Mexico, Oregon, Rhode Island, Vermont, Virginia, and Washington, have adopted California's ZEV and LEV regulations, and two additional states, Pennsylvania and Delaware, have adopted California's LEV regulations and are considering adopting California's ZEV regulation, which, when combined with California, account for about 40 percent of both the population or people and new light-duty vehicle sales in the United States;¹³

Whereas, upon adopting ACC I, the Board directed the Executive Officer (in Resolution 12-11) to conduct a comprehensive midterm review (MTR) of three elements:

- (1) the ZEV regulation,
- (2) the 1 milligram per mile PM standard, and
- (3) the light-duty vehicle GHG standards for 2022 and later model years;

¹¹ CARB, Reso. No. 12-21, March 22, 2012, adopting amendments to Cal. Code Regs., tit. 13, §§ 1900, 1956.8, 1960.1, 1961, 1961.1, 1962.1, 1962.2 (renumbered to 1962.3), 1965, 1968.2, 1968.5, 1976, 1978, 2037, 2038, 2062, 2112, 2139, 2140, 2145, 2147, 2235, 2300, 2302, 2303, 2303.5, 2304, 2307 2308, 2309, 2311, 2311.5, 2312, 2313, 2314, 2315, 2317, and 2318; new §§ 1961.2, 1961.3, 1962.2, and 2306.1; and repealing §§ 2306, 2310, 2316, and 2317.

¹² 42 U.S.C. § 7507.

¹³ U.S. Census Bureau, Population Division, Annual Estimates of the Resident Population for the United States, Regions, States, District of Columbia, and Puerto Rico: April 1, 2020 to July 1, 2021, https://data.census.gov/cedsci/table?tid=PEPPPOP2021.NST_EST2021_POP, accessed May 18, 2022; CARB, States that have Adopted California's Vehicle Standards Under Section 177 of the Federal Clean Air Act, May 13, 2022, <https://ww2.arb.ca.gov/resources/documents/states-have-adopted-californias-vehicle-standards-under-section-177-federal>.

Whereas, Staff's MTR was conducted at the same time as staff also participated in a related midterm evaluation by the U.S. EPA of the federal light-duty vehicle GHG emission standards for the 2022 through 2025 model years;

Whereas, upon completion of staff's MTR and the presentation of findings in March 2017, the Board concluded in Resolution 17-3 the following:

- California's GHG vehicle standards remained appropriate and achievable for the 2022 through 2025 model years;
- California's ZEV requirements as adopted in 2012 are appropriate and will remain in place to develop the market;
- Complementary policies are needed and should be expanded to help support an expanding ZEV market; and
- California's PM standard is feasible but further action is needed to ensure robust control;

Whereas, upon completion of staff's MTR and the presentation of findings in March 2017, the Board in Resolution 17-3 directed staff to immediately begin rule development for more stringent standards for the 2026 and subsequent model years;

Whereas, the current ZEV regulation set annual credit requirements that can be fulfilled by manufacturers through the production of a ZEV or PHEV, which earns variable credit based on vehicle attributes, the most influential being electric range;

Whereas, manufacturers have been over-complying with California's ZEV regulations' requirements since the 2012 model year, resulting in significant ZEV regulation credit banks, under which manufacturers may carry forward surplus credits without expiration for complying with the ACC I ZEV regulation;

Zero-Emission Vehicle Advancements

Whereas, recognizing California's leadership in zero-emission transportation, in 2020 Governor Gavin Newsom issued Executive Order N-79-20, which establishes the State's goal that 100 percent of in-state sales of new passenger cars and trucks be zero emission by 2035; directs CARB to develop and propose regulations to accomplish this goal, acting consistently with technical feasibility and cost-effectiveness; advances strategies for a just economic transition away from fossil fuels; and declares that the State must prioritize clean transportation solutions that are accessible to all Californians, particularly those who are low-income or experience a disproportionate share of pollution;

Whereas, manufacturers continue to invest heavily in zero-emission technology in response to California's ZEV regulations and international regulations, leading to technology improvements that have resulted in lower cost batteries and other ZEV componentry, which has enabled nearly every manufacturer to accelerate plans to bring to market more long-range ZEVs in more market segments and highly capable PHEVs;

Whereas, manufacturers are moving to dedicated battery-electric vehicle platforms, which allow integration of the battery pack entirely within the vehicle floor structure to reduce vehicle weight, reduce manufacturing costs, and increase available passenger and cargo volume;

Whereas, manufacturers are increasing battery pack capacity and energy efficiency, which have led to an increase in range and a reduction in vehicle costs, with battery costs falling 87 percent by 2021 compared to 2008, and recent findings that indicate battery costs will continue to decline to 92 percent below 2008 levels by 2026;

Whereas, fuel cell electric vehicles have also significantly improved, with the United States Department of Energy (U.S. DOE) reporting that fuel cell stack costs have fallen 70 percent since 2008, and fuel cell systems have also increased total power over time while becoming more compact due to increasing system power density;

Whereas, nearly every light-duty vehicle manufacturer has made commitments to electrify their product line in a significant way, as demonstrated to CARB by confidential manufacturer projections received through mid-2021;

Whereas, surveys show 74 percent of California drivers report having some interest in the ZEV market, with 40 percent considering purchasing a ZEV for their next vehicle;

Whereas, by the end of 2021, California had 60 ZEV and PHEV models in the market and had surpassed 1 million cumulative ZEVs and PHEVs sold, leading the U.S. in ZEV sales;

Whereas, although the growth of the ZEV market and subsequent overcompliance with the current ZEV regulation provides manufacturers with compliance flexibility and resilience to unforeseen events, excess overcompliance brings uncertainty to future ZEV volumes and risks unnecessarily prolonging the elimination of combustion engines and their associated emissions because a manufacturer could over-use the overcompliance credits in lieu of producing ZEVs in a future year;

The Low Emission Vehicle Standards Should Continue Reducing Vehicle Emissions

Whereas, even under the ACC II regulations, remaining internal-combustion engine, or conventional, vehicles may continue to be used on California's roads well beyond 2035; and PHEVs that include combustion engines may continue to be sold and used after 2035;

Whereas, existing LEV III standards stipulate that each manufacturer's light-duty vehicle fleet must meet a fleet average standard for non-methane organic gas and oxides of nitrogen (NMOG+NO_x) that gradually decreases every model year to 0.030 grams per mile by the 2025 model year, which includes the calculation of the fleet average with ZEVs;

Whereas, according to staff's analysis of the existing LEV III standards and manufacturer performance, allowing ZEVs to remain in the fleet average standard calculation could result in the increase of emissions from conventional vehicles;

Whereas, cold-start conditions will generate the highest emissions during a trip when all of the key emission control components are cold and the formation of engine-out pollutants, or by-products of combustion, are the highest, and even with advances in modern vehicle technology, cold-start ignitions continue to represent the bulk of emissions during a trip for conventional vehicles;

Whereas, testing found that a large portion of the conventional vehicle fleet effectively had poor emission calibration of cold-start strategies and components outside the current test procedure requirements that results in higher real-world emissions;

Whereas, first studied during the MTR, and confirmed by continued testing during the development of the ACC II proposal, current test cycles do not capture PHEV high-powered cold-starts emissions, allowing for poor emission control during real-world driving conditions;

Whereas, staff tested various PHEVs to compare cold-start emission results between the current test cycles and other test cycles that would result in a high-power cold start, and found some of the worst-performing PHEVs required the use of the combustion engine on every high-power cycle, and the emissions were not well controlled; for instance, some of the heavier light-duty PHEV trucks had emissions that were almost 10 times higher on some of the high-power cycles compared to the Federal Test Procedure (FTP) certification test, which highlights the need to regulate PHEV high-power cold-start emissions to prevent the substantial emission impacts that were observed on some of the test vehicles;

Whereas, through the MTR, staff found current LEV III standards could allow for disproportionately higher PM emissions during more aggressive operation instead of protecting for robust PM emission control under the broadest set of in-use driving conditions;

Whereas, at the conclusion of the MTR, the Board, among other things, directed staff to develop additional regulatory requirements as appropriate to ensure PM emissions are adequately controlled over a broad range of driving conditions, including aggressive driving;

Whereas, staff found, based on manufacturers' 2021 model year certification data, 93 percent of vehicles were certified as emitting at or below 3 milligrams of PM per mile, well below the 6 milligrams per mile standard under the Supplemental Federal Test Procedure (SFTP), or US06 test procedure, for emissions when driving aggressively;

Whereas, the current running-loss evaporative emission standard of 0.05 grams per mile has not been changed since its introduction in the 1990s, and based on manufacturers' 2021 model year certification data, the vast majority of the vehicles (92 percent) were certified as emitting at or below 0.01 gram of hydrocarbons per mile;

Whereas, PHEVs require specialized evaporative emission canisters to accommodate long periods of driving without fuel combustion;

Whereas, medium-duty vehicles, due to the varied nature of how this vehicle class is assembled, are complicated to certify and subject to in-use testing, and in some cases have a duty cycle more similar to a heavy-duty vehicle than most passenger light-duty vehicles;

Whereas, medium-duty vehicles are rated at a higher gross vehicle weight rating than light-duty vehicles and consist mainly of pickup trucks and larger cargo or passenger vans, with many having significant towing capability;

Whereas, medium-duty vehicle pickup trucks are often rated for a very high gross combined weight rating, the maximum allowable combined weight of the full loaded vehicle and trailer, usually between 20,000 to 30,000 pounds;

Whereas, the preceding factors make medium-duty vehicle emission control systems highly variable;

Whereas, the Board's on-road medium-duty test data also show: (1) current chassis-certification test cycles such as the FTP and aggressive driving SFTP US06 test procedure will

cover only a portion of the actual engine operation that typically occurs on-road; and (2) emissions that occur while a medium-duty vehicle is towing can be over four times higher on road than emissions measured in the lab during test cycles, which do not typically include conditions representative of loaded or towing medium-duty vehicles;

Whereas, amendments to CARB's Heavy-Duty Low-NO_x Omnibus regulations, which affect medium and heavy duty class vehicles,¹⁴ established 2027 and subsequent model year engine standards under the Federal Test Procedure, requiring both gasoline- and diesel-fueled vehicles to meet a 0.02 grams per brake horsepower-hour (g/bhp-hr) NO_x standard, which is a reduction of 80 to 90 percent from the current 2007 through 2023 model year engine standards, and established corresponding Portable Emissions Measurement System in-use standards for engine certified on-road vehicle testing of medium-duty vehicles that includes towing operation;

Whereas, even with greater deployment of zero-emission technology in medium-duty vehicles due to requirements in the Advanced Clean Truck regulations,¹⁵ CARB's emission inventory of on-road sources developed to meet planning obligations under the Clean Air Act shows that although medium-duty vehicles are only about 3 percent of the light-duty population, they will account for 10 to 13 percent of the NO_x emissions from 2026 to 2050 as each individual conventional vehicle emits at a significantly higher level than conventional light-duty vehicles;

Whereas, if the medium-duty fleet average standards remain unchanged, then there will be no further improvements to the emissions from the conventional medium-duty vehicle fleet from the vehicles being certified and built today;

Whereas, additional actions by CARB beyond the ACC II Regulations will be necessary to achieve clean air and net-zero emissions by 2045;

The Proposed Advanced Clean Cars II Regulations Will Significantly Reduce Emissions and Protect Public Health

Whereas, staff has proposed the ACC II Regulations, as set forth in Appendices A and B to the Initial State of Reasons (ISOR) released to the public on April 12, 2022, and subsequently modified as proposed in Attachments A through N of the Notice of Public Availability of Modified Text and Availability of Additional Documents and Information (15-Day Notice) released to the public on July 12, 2022, and corrected on July 13, 2022;¹⁶

¹⁴ See Cal. Code Regs., tit. 13, § 1956.8; CARB, Heavy-Duty Engine and Vehicle Omnibus Regulation and Associated Amendments, Proposed Amendments to the Exhaust Emissions Standards and Test Procedures for 2024 and Subsequent Model Year Heavy-Duty Engines and Vehicles, Heavy-Duty On-Board Diagnostic System Requirements, Heavy-Duty In-Use Testing Program, Emissions Warranty Period and Useful Life Requirements, Emissions Warranty Information and Reporting Requirements, and Corrective Action Procedures, In-Use Emissions Data Reporting Requirements, and Phase 2 Heavy-Duty Greenhouse Gas Regulations, and Powertrain Test Procedures, Reso. 20-23, August 27, 2020.

¹⁵ Cal. Code Regs., tit. 13 §§ 1963, et seq., 2012, et seq..

¹⁶ On August 8, 2022, CARB released for public comment, for a period of at least 15 days, a Second Notice of Public Availability of Additional Documents that it had added to the rulemaking record additional documents relied upon for the ACC II Regulations or that were incorporated by reference into the ACC II Regulations.

Whereas, federal law set forth in Clean Air Act section 110(l)¹⁷ and Title 40, Code of Federal Regulations (CFR), section 51.102, requires that one or more public hearings, preceded by at least 30 days' notice and opportunity for public review, must be conducted prior to the adoption and submittal to U.S. EPA of any SIP revision;

Whereas, on June 9, 2022, the Board conducted a public hearing on the proposed ACC II Regulations;

Whereas, as required by federal law, CARB made the proposed regulations available for public review beginning on April 12, 2022, at least 30 days prior to Board's hearing on the proposed regulations;

Whereas, CARB's regulatory program that involves the adoption, approval, amendment, or repeal of standards, rules, regulations, or plans has been certified by the Secretary for Natural Resources under Public Resources Code section 21080.5 of the California Environmental Quality Act (CEQA),¹⁸ and CARB conducts its CEQA review according to this certified program;¹⁹

Whereas, CARB prepared a draft environmental analysis under its certified regulatory program for the proposed ACC II Regulations entitled "*Draft Environmental Analysis Prepared for the Proposed ACC II Regulations (Draft EA)*," and circulated it as Appendices E-1, E-2, and E-3 to the Staff Report for over 45 days from April 12, 2022 through May 31, 2022;

Whereas, the Draft EA concluded that implementation of the proposed regulations has the potential to result in: beneficial impacts to air quality (long-term due to lower emissions from the operation of the vehicles) and GHG emissions; less than significant impacts, or no impacts, to energy, land use, mineral resources, population and housing, public services, recreation, and wildfire; and potentially significant adverse impacts to aesthetics, agricultural and forest resources, air quality (due to short-term, construction-related emissions), biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, noise and vibration, transportation, tribal cultural resources, and utilities and service systems;

Whereas, the Board hearing on June 9, 2022, on the proposed ACC II Regulations included a public hearing on the Draft EA prepared for the proposal;

Whereas, at the public hearing, the Chair of the Board directed the Deputy Executive Officer to consider the oral and written comments on the proposed ACC II Regulations and develop any appropriate related modifications and to make any such proposed modified regulatory language available for public comment, with any additional supporting documents and information, for a period of at least 15 days;

Whereas, the Chair of the Board further directed the Deputy Executive Officer to evaluate all comments received during the public comment periods, including comments on the Draft EA, and prepare written responses to EA comments as required by CARB's certified

¹⁷ 42 U.S.C. § 7410(l).

¹⁸ Pub. Res. Code, § 21000, et seq; Cal. Code of Regs., tit. 14, § 15251(d).

¹⁹ Cal. Code Regs., tit. 17, §§ 60000-60007.

regulations at California Code of Regulations, title 17, sections 60000-60007, and Government Code section 11346.9(a);

Whereas, the Chair directed the Deputy Executive Officer to present to the Board, at a subsequently scheduled public hearing, staff's written responses to any comments on the Draft EA, along with the Final EA, for consideration for approval, and the finalized regulations for consideration for adoption;

Whereas, the Chair directed the Deputy Executive Officer, when considering the public comments, to work with stakeholders to consider a more gradual phase-in for electric range durability standards and increase the likelihood of manufacturer participation in generating environmental justice vehicle values within the ZEV regulations, which staff proposed to include in the modified regulatory language and supporting documentation;

Whereas, following the Board hearing, the modified regulatory language and supporting documentation were circulated for a comment period of at least 15 days, with the changes to the originally proposed text clearly indicated, according to the provisions of California Code of Regulations, title 1, sections 44 and 46, and Government Code sections 11340.85, 11346.2, and 11346.8, from July 13, 2022 through July 28, 2022;

Whereas, staff reviewed written comments received on the Draft EA and prepared written responses to those comments in a document entitled *Response to Comments on the Draft Environmental Analysis Prepared for the Advanced Clean Cars II Program* (Response to EA Comments);

Whereas, on or about August 24, 2022, staff posted on the rulemaking page the Final EA, which includes minor revisions, and the Response to EA Comments;

Whereas, prior to the duly noticed public hearing held on August 25, 2022, staff presented the Final EA and the Response to EA Comments, as released to the public on or about August 24, 2022, to the Board for consideration;

Whereas, public hearings and other administrative proceedings have been held as required according to the provisions of Chapter 3.5 (commencing with section 11340), part 1, division 3, title 2, of the Government Code;

The Findings of the California Air Resources Board

Whereas, in consideration of the Notice of Proposed Rulemaking for these regulations, ISOR, 15-Day Notice, the documents and evidence referenced and incorporated in these documents, and written comments and public testimony on the proposed ACC II Regulations, the Board finds that:

California continues to face unique air quality goals and challenges;

Light-duty vehicles are significant sources of NO_x, and emitted approximately 8 percent of statewide NO_x emissions or 133 tons per day in 2017;

Reducing GHG emissions from light-duty vehicles is an important element of CARB's programs to reduce the GHG emissions that cause climate change;

The proposed ACC II Regulations will provide criteria and GHG emission reductions that help California meet SIP and AB 32 targets and do so in different ways, making

both the proposed LEV (now called LEV IV) and ZEV regulations independently necessary;

The proposed ACC II Regulations were developed using the best available economic and scientific information and will achieve technologically feasible and cost-effective criteria pollutant emission reductions from light-duty vehicles;

The proposed ACC II Regulations will establish revised LEV and ZEV standards for new 2026 and subsequent model year California light-duty vehicles;

The proposed ZEV regulations' annual stringency includes an annual ZEV requirement that aligns with industry projections of sales in 2026, and that rapidly increases to nearly 70 percent of new vehicles sales by 2030, further increasing to 100 percent by the 2035 model year;

To ensure success in achieving the proposed 100 percent sales mandate, the proposed regulations appropriately restructure the existing ZEV regulations for model years beginning in 2026;

ZEVs and PHEVs, meeting appropriate technical requirements, are to be counted as one vehicle value to be used toward manufacturers' annual ZEV requirement;

To ensure ZEVs remain the main goal of the ZEV regulations to maximize emission reductions, the proposed regulations limit the use of PHEVs to meet annual ZEV requirements;

In concert with staff's proposed ZEV stringency and to ensure broad and equitable access to reliable and durable new and used ZEVs, and to protect the air and climate benefits of the regulations, the proposal includes a suite of measures, called ZEV Assurance Measures, designed to ensure ZEVs and PHEVs function as expected over their lifetimes as replacements to vehicles that emit combustion pollution and that consumers are not deterred from purchasing them, both new and used, in order to ensure the emission benefits of the regulations are achieved;

In consideration of manufacturers' product development and cadence and need for flexibility, the proposed ZEV regulations continue to allow for appropriate banking, trading, and fulfillment of deficits in a ZEV fleet performance standard, with a limit on the life of excess vehicle values earned in the 2026 and subsequent model years;

To prevent the accumulation of vehicle values within the ZEV regulations that would hinder greater market deployment of ZEVs, the proposed regulations count a manufacturer's annual ZEV production first before considering converted historical, banked, or pooled values;

In recognition of past action and overcompliance with the ZEV regulations, the proposed regulations allow manufacturers to carry over pre-2026 model year ZEV regulation "credits," subject to annual or cumulative limitations, to achieve 100 percent new vehicle sales by the 2035 model year;

To minimize the compliance burden of the proposed ACC II Regulations by helping manufacturers manage year-to-year fluctuations in vehicle volumes in California, in light of the fact that other states may exercise their authority to choose to adopt

California's ZEV regulations, the proposed ACC II Regulations allow manufacturers to use pooled ZEV and PHEV values, meaning excess values accrued in one state that has adopted California's ZEV regulations and can be used for compliance in another, up to an allowed cap through the 2030 model year,

To further ensure disproportionate pollution burdens are mitigated and promote equitable access to clean transportation for disadvantaged and low-income communities, the proposed ACC II Regulations include three optional environmental justice vehicle values intended to incentivize manufacturers under the ZEV regulations to increase affordable access and exposure to ZEV technologies for priority communities: (1) Value for each new 2024 through 2031 model year ZEV or PHEV sold at a discount to a community-based clean mobility program, including grant recipients under the Sustainable Transportation Equity Project and the Clean Mobility Options Voucher Pilot Project and additional qualifying programs; (2) Value for ZEVs and PHEVs coming off-lease in California and delivered to a California dealership for purposes of participating in a low-income ZEV financial assistance program (such as the Clean Cars 4 All and the Financing Assistance for Lower-Income Consumers Project) and for placement with a low-income financial assistance program participant; and (3) Value for each new 2026 through 2028 model year ZEV or PHEV delivered for sale with an MSRP, adjusted for inflation, less than or equal to \$20,275 for passenger cars and less than or equal to \$26,670 for light-duty trucks;

To incentivize manufacturers' engagement in equitable outcomes of the transition to 100 percent ZEVs, the proposed regulations link the maximum cumulative use of pre-2026 model year ZEV regulation "credits" to participation in the use of environmental justice values;

To prevent any potential emission backsliding from light-duty conventional vehicles due to expected increases in future ZEV sales, the proposed regulations remove ZEVs from the proposed LEV IV non-methane organic gas and oxides of nitrogen (NMOG+NO_x) fleet average standard while maintaining a fleet average of 0.030 grams per mile (30 milligram per mile) beyond 2025;

To ensure robust emission calibration during aggressive driving for all light-duty conventional vehicles, the proposed regulations eliminate the composite-average option for certification and instead requires conventional vehicles to meet stand-alone aggressive driving US06 standards that are numerically equivalent to urban driving FTP emission standards;

To ensure robust PM emission control for all light-duty vehicles during high speeds and accelerations, the proposed regulations reduce the aggressive driving US06 PM standard from 6 milligrams per mile to 3 milligrams per mile;

To ensure all light-duty vehicles have good control of cold-start emissions following any cool-down duration, the proposed regulations require manufacturers to meet a new emission standard for a partial soak FTP test;

To control cold-start emissions from a quick-drive away that has shorter idling at the start of a trip, the proposed regulations require manufacturers to meet a new emission standard for a quick drive-away FTP test for all light-duty vehicles;

To ensure robust high-powered cold-start emission control for blended PHEVs, the proposed regulations require light-duty PHEVs to meet a new emission standard for a cold-start aggressive driving US06 test;

To reduce evaporative emissions, the proposed regulations reduce the running-loss standard from 0.05 grams per mile to 0.01 grams per mile of hydrocarbons and require PHEVs to demonstrate the capability to purge their evaporative canister(s) either through a test sequence or an engineering evaluation;

To reduce cold-start and urban driving emissions further for medium-duty vehicles, the proposed regulations progressively lower the NMOG+NO_x fleet average standards to a final target of 0.150 grams per mile and 0.175 grams per mile for class 2b and 3 vehicles, respectively, by the 2030 model year;

To prevent any potential emission backsliding from medium-duty conventional vehicles due to expected increases in future ZEV sales, the proposed regulations remove medium-duty ZEVs from the NMOG+NO_x fleet average for 2026 and subsequent model years for vehicles with gross vehicle weight ratings of 8,501 to 10,000 pounds (class 2b vehicles) and 10,001 to 14,000 pounds (class 3 vehicles);

To ensure robust emission calibration during aggressive driving for all medium-duty conventional vehicles, the proposed regulations eliminate the composite-average certification option and require all medium-duty vehicles to certify to a stand-alone SFTP standard that corresponds to the FTP standard to which the vehicle certifies;

To ensure all areas of engine operation are evaluated for medium-duty vehicles with towing capability, the proposed regulations require 2027 and subsequent model year chassis-certified class 2b and class 3 medium-duty vehicles with a gross combined weight rating over 14,000 pounds to meet a new in-use moving average window emission standard measured by a Portable Emissions Measurement System temporarily installed on the vehicle during on-road driving, which is effectively identical to requirements in the Heavy-Duty Low-NO_x Omnibus rulemaking; and

To ensure the effectiveness of CARB's in-use compliance program, the proposed regulations require manufacturers to perform in-use self-testing for their medium-duty vehicles and report results for test groups selected by CARB;

To prevent any potential emission backsliding and provide manufacturers with greater compliance flexibility following the removal of ZEVs from the NMOG+NO_x emissions fleet averages, the proposed regulations eliminate the dirtiest emission bins for light-duty and medium-duty vehicles and add lower emission bins to expand manufacturers' options to certify vehicles at lower emission levels;

The proposed ACC II Regulations ensure effective enforcement of the proposed ACC II Regulations in California such that real emission reductions can be verified and achieved;

The reporting requirements applicable to manufacturers in the proposed regulations are necessary for the health, safety, and welfare of the people of the State;

The proposed ACC II Regulations are necessary, appropriate, and technologically feasible;

The economic and fiscal impacts of the proposed regulations have been analyzed as required by California law;

The emission reductions from the proposed ACC II Regulations are critical to achieving carbon neutrality by 2045, attaining the National Ambient Air Quality Standards in California, and reducing the burden of pollution throughout the State, by reducing emissions in California by 2040 by 30.4 tons per day of NO_x, 2.0 tons per day of PM_{2.5}, and 58.4 million metric tons per year of GHGs, which are estimated to lead to 4,057 fewer cardiopulmonary deaths, 677 fewer hospital admissions for cardiovascular illness, 808 fewer hospital admissions for respiratory illness, and 1990 fewer emergency room visits for asthma;

The significant public health and welfare benefits of the proposed regulations and the time needed by the regulated community to comply provide good cause for the regulations to become effective as expeditiously as possible;

The proposed ACC II Regulations are within the scope of CARB's authority and legislative direction to address the serious problem of air pollution in California, and in particular meet CARB's statutory obligations identified in the following sections of the Health and Safety Code as explained below:

- Section 38562, because the regulations are a part of the State's program to achieve the maximum technologically feasible and cost-effective reductions in motor vehicle emissions to achieve the statewide GHG emissions limit, are designed in a manner that is equitable, minimize costs and maximize total benefits, encourage and recognize early and volunteer action, do not disproportionately impact low-income communities, support attainment of federal and State ambient air quality standards and reduction of toxic emissions, consider overall societal benefits, minimize administrative burdens and leakage of emissions, and are appropriate given the significant contribution of motor vehicles and their fuels to GHG emissions in the State;
- Sections 38580, 43009.5, 43016, 43023, 43105, 43154, and 43212, because the regulations provide for civil penalties and fines for violations and provide for corrective actions to address vehicles that do not meet the requirements;
- Sections 39003, 39602.5, and 43018, because the regulations help attain federal and State ambient air quality standards, are premised on the best available research into the cause of air pollution, and attack air pollution from motor vehicles, which are a major source of air pollution in the State;
- Section 43000, because the regulations control and limit air pollution from motor vehicles, adopt uniform procedures for compliance with the regulations, and reduce the State's dependence on petroleum-based fuels;
- Sections 43013, 43018, 43101, and 43600, because the regulations are necessary, cost-effective, and technologically feasible, considering their impact on the economy of the State;
- Sections 43100, 43102, and 43104, because the regulations require certification that new motor vehicles sold in California meet the requirements to reduce emissions and provide test procedures to verify compliance; and

- Sections 43204 and 43205.5 because the regulations provide for warranties to ensure emissions are reduced;

The proposed ACC II Regulations are consistent with the Legislature's intent under the Administrative Procedure Act to promote performance standards, where the proposed regulations establish emission standards for conventional vehicles and requirements to produce and deliver for sale ZEVs that do not have exhaust emissions, require the ZEV Assurance Measures that provide criteria for meeting those production and sales requirements in a manner that ensures emissions are permanently reduced, and set requirements for the ZEV technologies that are in production for demonstrating compliance with the proposed regulations but do not prohibit the use of other technologies;

To the extent the proposed ACC II Regulations specify the sole means of compliance through specific actions, measures, or other quantifiable means, they apply to specific classes of vehicles and their inherent attributes, which is necessary to accurately confirm compliance with the requirements to ensure that motor vehicle emissions are permanently reduced;

The proposed ACC II Regulations do not contain a scientific basis or scientific portion subject to peer review, and thus no peer review as set forth in Health and Safety Code section 57004 needed to be performed;

The proposed ACC II Regulations were developed in an open public process, in consultation with affected parties, through numerous public workshops, individual meetings, and other outreach efforts, and these efforts are expected to continue;

No reasonable alternatives to the regulations considered to date, or that have otherwise been identified and brought to the attention of CARB, would be more effective at carrying out the purpose for which the regulations are proposed or would be as effective and less burdensome to affected entities than the proposed ACC II Regulations; and

The proposed ACC II Regulations are consistent with CARB's environmental justice policies and do not disproportionately impact people of any race, culture, or income.

The Resolutions of the California Air Resources Board

Now, therefore, be it resolved that the Board hereby certifies that the Final EA (including the Response to EA Comments), as released to the public on or about August 24, 2022, was completed in compliance with CARB's certified regulatory program to meet the requirements of CEQA, reflects the agency's independent judgment and analysis, and was presented to the Board, whose members reviewed and considered the information therein before taking action to approve the regulations.

Be it further resolved that in consideration of the Final EA, the Response to EA Comments, and the entirety of the record, the Board adopts the Findings and Statement of Overriding Considerations.

Be it further resolved that the Board hereby adopts:

the following new sections of Title 13, Division 3, of the California Code of Regulations:

- 1961.4, 1962.4, 1962.5, 1962.6, 1962.7, and 1962.8;

and be it further resolved that the Board hereby amends the following sections of Title 13, Division 3, of the California Code of Regulations:

- 1900, 1961.2, 1961.3, 1962.2, 1962.3, 1965, 1968.2, 1969, 1976, 1978, 2037, 2038, 2112, 2139, 2140, 2147, 2317, and 2903;

and be it further resolved that the Board hereby adopts the following incorporated test procedures:

- “California 2015 Through 2025 Model Criteria Pollutant Exhaust Emission Standards and Test Procedures And 2017 And Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures For Passenger Cars, Light-Duty Trucks, And Medium-Duty Vehicles”;
- “California 2026 And Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks, And Medium-Duty Vehicles”;
- “California Evaporative Emission Standards and Test Procedures For 2026 And Subsequent Model Year Passenger Cars, Light-Duty Trucks, Medium-Duty Vehicles, And Heavy-Duty Vehicles”;
- “California Refueling Emission Standards and Test Procedures For 2001 And Subsequent Model Motor Vehicles”;
- “California Non-Methane Organic Gas Test Procedures For 2017 And Subsequent Model Year Vehicles”;
- “California Test Procedures For Evaluating Substitute Fuels And New Clean Fuels In 2015 And Subsequent Years”;
- “California Exhaust Emission Standards and Test Procedures For 2018 Through 2025 Model Zero-Emission Vehicles and Hybrid Electric Vehicles, In The Passenger Car, Light-Duty Truck And Medium-Duty Vehicle Classes”; and
- “California Test Procedures for 2026 and Subsequent Model Zero-Emission Vehicles and Plug-In Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck and Medium-Duty Vehicle Classes;”

all as set forth in Appendices A and B to the ISOR and subsequently modified as proposed in Attachments A through N of the 15-Day Notice, and as subsequently modified with non-substantial changes that were released on or about August 22, 2022, for the public hearing on this proposal, collectively termed “ACC II.”

Be it further resolved that the Board directs the Executive Officer²⁰ to determine if additional sufficiently-related modifications to the regulations are appropriate, and that if no additional modifications are appropriate, the Executive Officer shall take CARB’s final step for final

²⁰ On June 24, 2022, the Chair delegated her authority to fulfill the Executive Officer’s obligations under the Health and Safety Code, including as directed here, to CARB’s Chief Counsel and Deputy Executive Officers, until that authority is superseded or repealed. CARB. Executive Order G-22-276, June 24, 2022.

approval of such amendments through submittal of the Board-approved rulemaking package to the Office of Administrative Law. The Executive Officer may revise the adopted regulations with grammatical and other non-substantial changes, indicate them as such, and add them to the rulemaking record. If the Executive Officer determines that additional sufficiently-related substantial modifications are appropriate, the modified regulatory language shall be made available for public comment, with any additional supporting documents and information, for at least 15 days, and the Executive Officer shall consider written comments submitted during the public review period and make any further modifications that are appropriate available for public comment for at least 15 days. The Board delegates to the Executive Officer the authority to both (1) either approve or disapprove proposed changes in regulatory language under Government Code section 11346.8(c), and (2) conduct any appropriate further environmental review associated with such changes, consistent with the Board's Certified Regulatory Program regulations, at California Code of Regulations, title 17, sections 60000-60008, for those sufficiently-related substantial modifications. Alternatively, rather than taking action on the proposed modifications, the Executive Officer may instead present the modifications, and any appropriate further environmental review associated with the modifications, to the Board for further consideration, if the Executive Officer determines further Board consideration is warranted.

Be it further resolved that the Board directs the Executive Officer to transmit the Notice of Decision with the Response to EA Comments to the Secretary of the Natural Resources Agency for posting.

Be it further resolved that the Board directs the Executive Officer, upon finalization and implementation of the ACC II Regulations, to monitor and make publicly available on an annual basis vehicle manufacturers' compliance with the ACC II ZEV Regulation and deployment of ZEVs, including the generation and use of environmental justice values, as required and consistent with section 1962.4, subdivision (k), title 13, California Code of Regulations.

Be it further resolved that the Board directs the Executive Officer, after the completion of manufacturer reporting for the 2026 model year and no less frequently than triennially thereafter, to monitor and report deployment of ZEVs in low-income and disadvantaged communities and the extent to which the environmental justice values are resulting in the intended benefits, with the expectation that CARB will revisit the environmental justice measures if they are not utilized or effectively providing the intended benefits. Staff's assessment shall include, but is not limited to: environmental justice vehicle values earned by each manufacturer, by model year, and value type; and geographic distribution of new and used ZEVs and PHEVs by registration.

Be it further resolved that the Board directs the Executive Officer to work directly with manufacturers, public interest organizations, community-based organizations, environmental justice groups and equity groups, and other interested entities and persons to promote participation by manufacturers, including through agreements, if appropriate, in the ACC II Regulations' equity provisions, including by increasing the number of new and used ZEVs made available to Clean Cars 4 All and the Financing Assistance for Lower-Income Consumers Project, no later than July 1, 2025.

Be it further resolved that the Board directs the Executive Officer to identify or seek public comment on actions, mechanisms, or strategies to support public interest organization, community-based organization, and small business participation in these programs, including Clean Cars 4 All and the Financing Assistance for Lower-Income Consumers Project, that promote equitable access to new and used ZEVs.

Be it further resolved that the Board recognizes the ongoing need, in addition to the ACC II Regulations, for statewide action to target incentives and infrastructure development to disadvantaged and low-income communities, advance policies and tools that reduce the need for personal vehicles and bolster public transit and walkability, and encourage directed equity-enhancing actions from private industry.

Be it further resolved that the Board directs the Executive Officer to continue to work with vehicle manufacturers and equity and environmental justice advocates, starting no later than July 1, 2023, to develop and, where appropriate and by July 1, 2025, begin to implement strategies, including incentives, transportation-system-based, and regulatory strategies, to further expand low-income and disadvantaged communities' access to ZEVs and zero-emission mobility.

Be it further resolved that the Board directs the Executive Officer to monitor the implementation of the ACC II Regulations and to continue monitoring ZEV market conditions, and to report back to the Board starting in 2025 and no less frequently than triennially on the progress of the Regulations, compliance with them, and how the share of ZEVs and corresponding estimated GHG and criteria pollutant reductions compares to ACC II requirements and the assumptions in CARB's comprehensive strategic plans, including the Scoping Plan, State SIP Strategy, and Mobile Source Strategy, and to propose amendments to the Regulations as warranted to achieve reductions anticipated by the Regulations.

Be it further resolved that the Board directs the Executive Officer to continue coordination between the ACC II Regulations and the Heavy-Duty Low-NOx Omnibus Regulations and return to the Board if needed to ensure alignment between the two regulations on medium-duty vehicle in-use standards.

Be it further resolved that the Board hereby determines that the regulations adopted herein will not cause California motor vehicle emission standards, in the aggregate, to be less protective of public health and welfare than applicable federal standards.

Be it further resolved that the Executive Officer shall, upon adoption, forward the regulations to the U.S. EPA with a request for a waiver or confirmation that the regulations are within the scope of an existing waiver of federal preemption pursuant to section 209(b) of the Clean Air Act,²¹ as appropriate.

Be it further resolved that the Board hereby adopts the regulations as revisions to the California SIP.

Be it further resolved that the Board hereby directs the Executive Officer to submit the regulations, together with the appropriate supporting documentation, to the U.S. EPA for

²¹ 42 U.S.C. § 7543(b).

approval as a revision to the California SIP, to be effective, for purposes of federal law, upon approval by U.S. EPA.

Be it further resolved that the Board directs the Executive Officer to work with the U.S. EPA and take appropriate action to resolve any completeness or approvability issues that may arise regarding the SIP submission.

Be it further resolved that the Board authorizes the Executive Officer to include in the SIP submittal any technical corrections, clarifications, or additions that may be necessary to secure U.S. EPA approval.

Be it further resolved that the Board certifies pursuant to 40 C.F.R. section 51.102 that the proposed SIP revision was adopted after notice and public hearing as required by 40 C.F.R. section 51.102.