

## ATTACHMENT A – MODIFICATIONS TO THE PROPOSED REGULATION ORDER

Amend sections 2023, 2023.1, 2023.2, 2023.3, and 2023.4, title 13, California Code of Regulations California Code of Regulations, to read as follows, add new sections 2023.5 – 2023.11, and codify under new Article 4.3:

(Note: The proposed amendments are shown in underline to indicate additions and ~~strikeout~~ to indicate deletions from the existing regulatory text. New deletions and additions to the proposed language are shown in ~~double strikethrough~~ and double underline format, respectively.)

### ~~13 CCR § 2023~~

#### ~~§ 2023. Fleet Rule for Transit Agencies.~~

~~(a) The definitions in section 2020 shall apply to sections 2023, 2023.1, 2023.2, 2023.3 and 2023.4. In addition, the following definitions apply only to sections 2023, 2023.1, 2023.2, 2023.3 and 2023.4.~~

~~(1) "Active fleet" means the total number of urban buses operated by a transit agency or under contract to a transit agency, including spare buses, but not emergency contingency vehicles or non-revenue producing vehicles.~~

~~(2) "Commuter Service Bus" means a passenger-carrying vehicle powered by a heavy heavy-duty diesel engine or of a type normally powered by a heavy heavy-duty diesel engine that is not otherwise an urban bus and which operates on a fixed route primarily during peak commute hours and that has no more than ten scheduled stops per day, excluding park-and-ride lots. A commuter service bus is a transit fleet vehicle.~~

~~(3) "Diesel PM emission total," for the purposes of sections 2023.1 and~~

~~2023.2, means the sum of the particulate matter (PM) value, based on the engine certification standard, of each diesel fuel, dual-fuel, bi-fuel (except for heavy-duty pilot ignition engines), and diesel hybrid-electric engine in a transit agency's active fleet or transit fleet vehicle fleet in g/bhp-hr. For 1987 and earlier engines, the PM exhaust emission value shall be presumed to be 1.0 g/bhp-hr.~~

~~(4) "Emergency contingency vehicle" means an urban bus placed in an inactive contingency fleet for energy or other local emergencies, after the urban bus has reached the end of its normal minimum useful life.~~

~~(5) "Hybrid electric bus" (HEB) means an urban bus equipped with at least two sources of energy on board; this energy is converted to motive power using electric drive motors and an auxiliary power unit, which converts consumable fuel energy into mechanical or electrical energy. The electric drive motors must be used partially or fully to drive the vehicle's wheels.~~

~~(6) "Low Usage Vehicle" means a non-revenue-generating transit fleet vehicle that operates for no more than 1000 miles per year.~~

~~(7) "New Transit Agency" means,~~

~~(A) For the purposes of section 2023.1, a transit agency formed after January 1, 2002;~~

~~(B) For the purposes of section 2023.2, a transit agency formed after January 1, 2005.~~

~~(8) "NOx Fleet Average" for the purposes of sections 2023.1 and 2023.2 means the average of the oxides of nitrogen (NOx) emissions for all transit fleet vehicles or urban buses, owned, operated, or leased by a transit agency, based on the engine certification standard of each engine. The NOx fleet average is calculated by summing the NOx engine certification standards in g/bhp-hr, of each engine in an active fleet or transit fleet vehicle fleet, and dividing by the total number of vehicles in that fleet.~~

~~(9) "Retirement" or "Retire" means an engine will be withdrawn from a transit vehicle fleet in California. The engine may be sold outside of California,~~

~~scrapped or used in an emergency contingency vehicle or low usage vehicle.~~

~~(10) "Spare bus" means an urban bus that is used to accommodate routine maintenance and repair operations, and to replace a bus in scheduled service that breaks down or is involved in an accident.~~

~~(11) "Transit Fleet" means a transit agency's urban buses and transit fleet vehicles, excluding emergency contingency vehicles and low usage vehicles.~~

~~(12) "Transit Fleet Vehicle" means an on-road vehicle greater than 8,500 pounds gross vehicle weight rating (GVWR) powered by a heavy-duty engine fueled by diesel or alternative fuel, owned or operated by a transit agency, and which is not an urban bus.~~

~~(13) "Urban bus" means a passenger-carrying vehicle powered by a heavy heavy-duty diesel engine, or of a type normally powered by a heavy heavy-duty diesel engine, with a load capacity of fifteen (15) or more passengers and intended primarily for intra-city operation, i.e., within the confines of a city or greater metropolitan area. Urban bus operation is characterized by short rides and frequent stops. To facilitate this type of operation, more than one set of quick-operating entrance and exit doors would normally be installed. Since fares are usually paid in cash or token, rather than purchased in advance in the form of tickets, urban buses would normally have equipment installed for the collection of fares. Urban buses are also typically characterized by the absence of equipment and facilities for long distance travel, e.g., restrooms, large luggage compartments, and facilities for stowing carry-on luggage.~~

~~(b) A new transit agency shall:~~

~~(1) Notify the Executive Officer in writing of its existence and submit reports to the Executive Officer as required in section 2023.4(j);~~

~~(2) Choose a compliance path for its active fleet and notify the Executive Officer within 120 days of formation of its intent to follow either the diesel path or alternative path, as described in section 2023.1(a), except that a new transit agency that is a successor to an existing transit agency shall follow the compliance path of the transit agency out of which it has been formed;~~

~~(3) Meet the NO<sub>x</sub> fleet average and the diesel PM total of the urban buses or transit fleet vehicles~~

~~(A) used in the transit operations of the existing transit agency out of which the new transit agency is formed or,~~

~~(B) if not formed from an existing transit agency, meet the requirements set forth in 2023.1(d)(4), 2023.1(e)(5) for urban buses and 2023.2(a)(1)(B), 2023.2(a)(2)(B) 2023.2(b)(3) for transit fleet vehicles; and,~~

~~(4) Comply with all applicable requirements of section 2023, section 2023.1, 2023.2 and 2023.4.~~

~~(c) A transit agency that installs a diesel emission control strategy to reduce diesel PM shall use a diesel emission control strategy that is verified by the Executive Officer in accordance with section 2700 et seq., title 13, CCR, or an urban bus retrofit device that has been exempted under Vehicle Code section 27156 as an engine rebuild kit and that reduces PM to 0.10 g/bhp-hr when used on an engine model 6V92TA DDEC for the model years specified for that engine.~~

~~(d) A transit agency that installs a diesel emission control strategy on an engine shall use the following percentage reductions from the engine certification standard value when calculating its total diesel PM emissions: 25 percent for a Level 1, 50 percent for a Level 2, and 85 percent for a Level 3 diesel emission control strategy.~~

~~(e) A transit agency with fewer than 30 buses in its transit fleet may apply for an extension to comply with the provisions of section 2023.1 and section 2023.2 by submitting documentation of financial hardship to the Executive Officer, in writing, at least thirty (30) days before the requirement becomes applicable for approval by the Executive Officer. Documentation of financial hardship shall include, but is not limited to, an analysis of the cost of compliance, the sources of available funds, and the shortfall between funds available and the cost of compliance. The transit agency must also specify the date and means by which compliance will be achieved in the request for a delay.~~

~~(f) A transit agency that is unable to comply with an implementation deadline specified~~

~~in section 2023.1 paragraph (e)(1), (2), (3), or (4) or section 2023.2(b)(1) or (2) because of the unavailability of technology may apply in writing to the Executive Officer for an extension of the compliance deadline. The application to the Executive Officer must be made in writing and at least ninety (90) days before the applicable implementation deadline. The Executive Officer may grant an extension of up to one year, provided that the applicant:~~

- ~~(1) Demonstrates that the technology is unavailable;~~
- ~~(2) Explains why the transit agency cannot comply by retiring older buses; and~~
- ~~(3) Provides a schedule for compliance.~~

~~(g) A transit agency that owns, operates, or leases fewer than 20 diesel-fueled, dual-fuel, bi-fuel, or diesel hybrid-electric buses in its transit fleet and that operates in a federal one-hour ozone attainment area may delay implementation of the intermediate total diesel PM emission reduction requirements provided the transit agency complies with the implementation deadlines set forth in Section 2023.1 paragraphs (e)(3)(A) or (e)(4) and section 2023.2 paragraph (b)(2).~~

~~(h) Non-Compliance. Any violations of sections 2023, 2023.1, 2023.2, 2023.3, or 2023.4 may be subject to civil penalties as specified in state law and regulations.~~

Note: Authority cited: Sections 39600, 39601, 39667, 43013, 43018 and 43701(b), Health and Safety Code.

Reference: Sections 39002, 39003, 39017, 39500, 39650, 39667, 40000, 43000, 43000.5, 43013, 43018, 43701(b), 43801 and 43806, Health and Safety Code; and Sections 233 and 28114, Vehicle Code.

13 CCR § 2023.1

~~§ 2023.1. Fleet Rule for Transit Agencies—Urban Bus Requirements.~~

~~(a) To encourage transit agencies that operate urban bus fleets to purchase or lease lower emission alternative fuel buses, while also providing flexibility to such fleet operators to determine their optimal fleet mix in consideration of such factors as air quality benefits, service availability, cost, efficiency, safety, and convenience, two paths to compliance with this fleet rule are available: the alternative fuel path and the diesel path.~~

~~(1) Transit agencies must choose their compliance path, and shall notify ARB of their intent to follow either the diesel or the alternative fuel path, by January 31, 2001. Reporting requirements for that notification are set forth in subdivisions (a) and (b) of section 2023.4, title 13, CCR.~~

~~(2) A transit agency within the jurisdiction of the South Coast Air Quality Management District may elect to change its compliance path from the diesel path to the alternative fuel path, provided that the transit agency notifies the Executive Officer of the change by January 31, 2004, and provided that the transit agency is in compliance with all requirements of section 2023.1, including specific requirements of the diesel path, on or before January 1, 2004. Reporting requirements for this notification are set forth in paragraph (b)(3) of section 2023.4, title 13, CCR.~~

~~(3) A new transit agency that is a successor to an existing transit agency or that has been created from a merger of two or more transit agencies or parts of two or more transit agencies must have the same compliance path as the transit agency or agencies out of which it is formed.~~

~~(4) A transit agency within the jurisdiction of the South Coast Air Quality Management District shall follow the alternative fuel path. If the transit agency had previously stated its intent to follow the diesel path, the change to the alternative fuel path shall be effective on October 7, 2006.~~

~~(5) Transit agencies on the diesel path with more than 30 buses in their~~

fleets purchasing model year 2007 through 2009 urban buses that are not certified at or below 0.2 g/bhp-hr NO<sub>x</sub> emission level shall:

~~(A) Mitigate the increased NO<sub>x</sub> emissions for each urban bus purchased by retrofitting an existing urban bus or transit fleet vehicle within the fleet with a level 3 particulate matter (PM) verified diesel emission control strategy with an oxides of nitrogen (NO<sub>x</sub>) reduction efficiency of at least 40 percent, if available, otherwise, with a NO<sub>x</sub> reduction efficiency of at least 25 percent. This retrofit requirement applies on a one-to-one basis until all diesel urban buses and transit fleet vehicles within the transit agency's fleet are either retrofitted or are determined to be unable to be retrofitted as specified in (B) below.~~

~~(B) Obtain Executive Officer approval for purchasing a 2007 through 2009 model year urban bus not subject to (A) above by submitting to the Executive Officer a report 90 days prior to the delivery of the urban bus. The report shall provide information that demonstrates that all vehicles in the transit agency's fleet have been retrofitted or are determined to be unable to be retrofitted including when the inability to retrofit occurs for reasons other than a device not verified for the specific urban bus or transit fleet vehicle engine family.~~

~~(C) Submit annual reports that meet the requirements in section 2023.4(b)(4).~~

~~(b) Transit agencies on the alternative-fuel path shall meet the following requirements:~~

~~(1) Upon approval of the regulation, and through Model Year 2015, at least 85 percent of all urban buses purchased or leased each year must be alternative-fuel buses or buses with engines purchased under paragraph (b)(9).~~

~~(2) NO<sub>x</sub> fleet average requirements as set forth in subdivision (d), below.~~

~~(3) Beginning October 1, 2002, only engines certified to an optional PM standard of 0.03 g/bhp-hr or lower shall be purchased when making new bus purchases.~~

~~(4) Total diesel PM emission reduction requirements and use of low-sulfur or other allowed fuel as set forth in subdivision (e), below.~~

~~(5) Transit agencies on the alternative-fuel path shall not purchase any diesel-fueled, dual-fuel, or bi-fuel buses with 2004-2006 model year engines certified to emissions levels in excess of those specified in paragraph (a)(11) of section 1956.1, title 13, CCR, except as provided in paragraph (b)(8) or (b)(9) of this section.~~

~~(6) Zero-emission bus purchase requirements beginning in model year 2012, in accordance with the requirements set forth in subdivision (c) of section 2023.3, title 13, CCR.~~

~~(7) Reporting requirements as set forth in section 2023.4, title 13, CCR.~~

~~(8) The Executive Officer may exempt transit agencies on the alternative-fuel path from the requirements of paragraph (b)(5) of section 2023.1, title 13, CCR, provided that:~~

~~(A) A transit agency applies to the Executive Officer for such exemption by June 30, 2001;~~

~~(B) A transit agency demonstrates to the Executive Officer that it will achieve NOx emissions benefits through 2015 greater than what would have been achieved through compliance with paragraph (b)(5); and~~

~~(C) The Executive Officer finds that transit agencies, after consulting with the Engine Manufacturers Association, have demonstrated, or are contractually committed to demonstrate, advanced NOx aftertreatment technology.~~

~~(9) A transit agency on the alternative-fuel path may purchase a bus operated with a heavy-duty pilot ignition engine provided the engine meets the standards set forth in subdivision (b) of section 1956.1, title 13, CCR.~~

~~(c) Transit agencies on the diesel path shall meet the following requirements:~~

~~(1) NOx fleet average requirements as set forth in subdivision (d), below.~~

~~(2) Total diesel PM emission reduction requirements and use of low-sulfur or other allowed fuel as set forth in subdivision (e), below.~~



~~(3) Zero-emission bus demonstration as required in subdivision (b) of section 2023.3, title 13, CCR.~~

~~(4) Transit agencies on the diesel path shall not purchase any diesel-fueled, dual-fuel, or bi-fuel buses with 2004-2006 model year engines certified to emissions levels in excess of those specified in paragraph (a)(11) of section 1956.1, title 13, CCR, except as provided in paragraph (c)(7) or (c)(8) of this section. Beginning July 1, 2003, a transit agency may not purchase alternative fuel buses certified to a PM emission level in excess of the optional standard of 0.03 g/bhp-hr when making new bus purchases.~~

~~(5) Zero-emission bus purchase requirements beginning in model year 2011, in accordance with the requirements set forth in subdivision (c) of section 2023.3, title 13, CCR.~~

~~(6) Reporting requirements as set forth in section 2023.4, title 13, CCR.~~

~~(7) The Executive Officer may exempt transit agencies on the diesel path from the requirements of paragraph (c)(4) of section 2023.1, title 13, CCR, provided that:~~

~~(A) A transit agency applies to the Executive Officer for such exemption by June 30, 2001;~~

~~(B) A transit agency demonstrates to the Executive Officer that it will achieve NOx emissions benefits through 2015 greater than what would have been achieved through compliance with paragraph (c)(4); and~~

~~(C) The Executive Officer finds that transit agencies, after consulting with the Engine Manufacturers Association, have demonstrated, or are contractually committed to demonstrate, advanced NOx aftertreatment technology.~~

~~(8) A transit agency on the diesel-fuel path may purchase a bus operated with a heavy-duty pilot ignition engine provided the engine meets the standards set forth in subdivision (b) of section 1956.1.~~

~~(9) The Executive Officer shall authorize, in writing, a transit agency on the diesel path to purchase one or more diesel-fueled hybrid-electric bus~~

~~certified under title 13, CCR, section 1956.1(a)(11)(B) provided that:~~

~~(A) The transit agency shall submit a mitigation plan and letter requesting approval by January 31, 2005, to the Executive Officer that demonstrates that the transit agency will provide surplus emission reductions from urban buses in its fleet that will offset the NO<sub>x</sub> emission difference between the certified NO<sub>x</sub> emission standard of the hybrid-electric bus and 0.5 g/bhp-hr. The transit agency may not use NO<sub>x</sub> emission reductions that are otherwise required by any statute, regulation, or order or the emission reductions that will accrue from the retirement of an urban bus to be replaced by a hybrid-electric bus for the offset;~~

~~(B) The transit agency shall complete implementation of all mitigation measures set forth in the approved plan to offset NO<sub>x</sub> emissions prior to the receipt of the last diesel-fueled hybrid-electric bus; and~~

~~(C) The transit agency shall submit the reports required by section 2023.4(g).~~

~~(d) Beginning October 1, 2002, no transit agency shall own, operate, or lease an active fleet of urban buses with average NO<sub>x</sub> emissions in excess of 4.8 g/bhp-hr, based on the engine certification standards of the engines in the active fleet.~~

~~(1) This active fleet average requirement shall be based on urban buses owned, operated, or leased by the transit agency, including diesel buses, alternative-fuel buses, all heavy-duty zero-emission buses, electric trolley buses, and articulated buses, in each transit agency's active fleet. The Executive Officer may allow zero-emission buses that do not meet the definition of an urban bus to be included in the calculation of the fleet average standard upon written request to the ARB by January 31, 2002, and upon approval by the Executive Officer. The request shall include a description of the zero-emission buses, the zero-emission technology utilized, and the number of zero-emission buses to be used in calculating the NO<sub>x</sub> fleet~~

~~average standard. Zero-emission buses not meeting the definition of an urban bus may not be used to satisfy the requirements of the Zero-emission Bus Demonstration Project set forth in subdivision (b) of section 2023.3, title 13, CCR.~~

~~(2) Transit agencies may use ARB-certified NOx retrofit systems to comply with the fleet average requirement (in addition to bus purchases, repowerings, and retirements).~~

~~(3) Transit agencies have the option of retiring all 1987 and earlier model year diesel urban buses by October 1, 2002, to comply with the fleet average standard requirement.~~

~~(4) A transit agency established after January 1, 2005, shall not operate an active fleet of urban buses with an average NOx emission in excess of:~~

~~(A) 4.0 g/bhp-hr, or~~

~~(B) The NOx average of the active fleet of the transit agency from which it was formed, whichever is lower, or~~

~~(C) In the case of a merger of two or more transit agencies or parts of two or more transit agencies, the average of the NOx fleet averages, whichever is lower.~~

~~(e) To reduce public exposure to diesel particulate matter, each transit agency shall reduce the diesel PM emissions total of the diesel buses in its active fleet relative to its diesel PM emission total as of January 1, 2002, according to the schedule below, and shall operate its diesel buses on diesel fuel with a maximum sulfur content of 15 parts per million by weight. Documentation of compliance with these requirements must be provided in accordance with the provisions of subdivision (d) of section 2023.4, title 13, CCR.~~

~~(1) No later than January 1, 2004:~~

~~(A) The diesel PM emission total for a transit agency on the diesel path shall be no more than 60 percent of its diesel PM emission total on January 1, 2002.~~

~~(B) The diesel PM emission total for a transit agency on the alternative~~

~~fuel path shall be no more than 80 percent of its diesel PM emission total on January 1, 2002.~~

~~(2) No later than January 1, 2005:~~

~~(A) The diesel PM emission total for a transit agency on the diesel path shall be no more than 40 percent of its diesel PM emission total on January 1, 2002.~~

~~(B) The diesel PM emission total for a transit agency on the alternative fuel path shall be no more than 60 percent of its diesel PM emission total on January 1, 2002.~~

~~(3) No later than January 1, 2007:~~

~~(A) The diesel PM emission total for a transit agency on the diesel path shall be no more than 15 percent of its diesel PM emission total on January 1, 2002 or equal to 0.01 g/bhp-hr times the total number of current diesel-fueled active fleet buses, whichever is greater.~~

~~(B) The diesel PM emission total for a transit agency on the alternative fuel path shall be no more than 40 percent of its diesel PM fleet average on January 1, 2002.~~

~~(4) No later than January 1, 2009, the diesel PM emission total for a transit agency on the alternative fuel path shall be no more than 15 percent of its diesel PM emission total on January 1, 2002 or equal to 0.01 g/bhp-hr times the total number of current diesel-fueled active fleet buses, whichever is greater.~~

~~(5) Beginning on January 1, 2005, a new transit agency may not have a diesel PM emission total exceeding the following values:~~

~~(A) As of January 1, 2005 through December 31, 2009, 0.05 g/bhp-hr (exhaust emission value) times the total number of diesel-fueled buses in the active fleet;~~

~~(B) As of January 1, 2010, 0.01 g/bhp-hr (exhaust emission value) times the total number of diesel-fueled buses in the active fleet.~~

~~(6) Beginning July 1, 2002, a transit agency shall not operate its diesel urban buses on diesel fuel with a sulfur content in excess of 15 parts per million by weight, except that a transit agency may operate its diesel buses on a fuel that is verified by the Executive Officer as a diesel emission control strategy that reduces PM in accordance with section 2700 et seq., title 13, CCR. A transit agency with fewer than 20 buses in its active fleet, and that operates in a federal one-hour ozone attainment area, is not subject to this low-sulfur fuel requirement until July 1, 2006. In areas redesignated as one-hour ozone non-attainment areas prior to July 1, 2006, a transit agency initially exempt from the low-sulfur fuel requirement shall submit a plan to the Executive Officer within 30 days of redesignation for achieving compliance with this requirement.~~

~~Note: Authority cited: Sections 39600, 39601, 39667, 43013, 43018 and 43701(b), Health and Safety Code.~~

~~Reference: Sections 39002, 39003, 39017, 39500, 39650, 39667, 40000, 43000, 43000.5, 43013, 43018, 43701(b), 43801 and 43806, Health and Safety Code; and Sections 233 and 28114, Vehicle Code.~~

13 CCR § 2023.2

~~§ 2023.2. Fleet Rule for Transit Agencies - Transit Fleet Vehicle Requirements.~~

~~(a) A transit agency shall not operate transit fleet vehicles with a NO<sub>x</sub> fleet average exceeding the following values as of the specified dates. A transit agency shall provide documentation of compliance with the requirements in accordance with the provisions of subdivision (e)(2) of section 2023.4, title 13, CCR.~~

~~(1) Beginning December 31, 2007 through December 30, 2010, 3.2 g/bhp-hr;~~

~~(A) A transit agency may retire all 1997 and earlier model year engines in transit fleet vehicles by December 31, 2007, to comply with the NO<sub>x</sub> fleet average requirement.~~

~~(B) For a new transit agency established after December 31, 2007 and through December 31, 2009, either 3.2 g/bhp-hr or no higher than the NO<sub>x</sub> average of the transit fleet vehicles of the transit agency from which the new transit agency has been formed, whichever is lower.~~

~~(2) Beginning December 31, 2010, 2.4 g/bhp-hr;~~

~~(A) A transit agency may retire all 2001 and earlier model year engines in transit fleet vehicles by December 31, 2010, to comply with the NO<sub>x</sub> fleet average requirement.~~

~~(B) For a new transit agency established after December 31, 2010, either 2.4 g/bhp-hr or no higher than the NO<sub>x</sub> average of the transit fleet vehicles of the transit agency from which the new transit agency has been formed, whichever is lower.~~

~~(3) Zero-emission buses used to satisfy the requirements set forth in subdivision (d) of section 2023.1 may not be used to meet the requirements of this subdivision.~~

~~(4) A transit agency may claim NO<sub>x</sub> reductions by application of a system~~

~~that has been verified by the Executive Officer in accordance with section 2700 et seq., title 13, CCR to comply with the fleet average requirement, in addition to transit fleet vehicle purchases, retirements, or engine repowering.~~

~~(b) A transit agency shall reduce the total diesel particulate matter (PM) emissions of its diesel transit fleet vehicles relative to its total diesel PM emissions from diesel transit fleet vehicles as of January 1, 2005, according to the schedule below. "Diesel PM emission total" and how it is calculated are defined in 2023(a)(3). A transit agency shall provide documentation of compliance with these requirements in accordance with the provisions of subdivision (e)(3) of section 2023.4, title 13, CCR.~~

~~(1) No later than December 31, 2007, the diesel PM emission total for a transit agency's transit fleet vehicle fleet shall be no more than 60 percent of its diesel PM emission total on January 1, 2005.~~

~~(2) No later than December 31, 2010, the diesel PM emission total for a transit agency's transit fleet vehicle fleet shall be no more than 20 percent of its diesel PM emission total on January 1, 2005, or equal to 0.01 g/bhp-hr times the total number of transit fleet vehicles in the current fleet, whichever is greater.~~

~~(3) A new transit agency established after January 1, 2005, may not have a diesel PM emission total exceeding the following values:~~

~~(A) For a new transit agency established January 1, 2005 through December 31, 2006, 0.1 g/bhp-hr (exhaust emission value) times the number of diesel-fueled transit fleet vehicles in its fleet. This value will serve as the transit agency's PM baseline. The transit agency must meet the requirements set forth in section 2023.2(b)(1) and (2).~~

~~(B) For a new transit agency established January 1, 2007 through December 31, 2009, 0.1 g/bhp-hr (exhaust emission value) times the number of diesel-fueled transit fleet vehicles in its fleet. This value will serve as the transit agency's PM baseline and shall be reduced by 50~~

~~percent of its PM baseline value by December 31, 2010, and 80 percent by December 31, 2012.~~

~~(C) For a new transit agency established January 1, 2010 or later, 0.01 g/bhp-hr (exhaust emission value) times the total number of diesel transit fleet vehicles in its fleet.~~

~~(c) A transit agency may apply to the Executive Officer for a delay in meeting the provisions of section 2023.2(a) and 2023.2(b) for up to one year to allow for the termination of a vehicle lease, maintenance/lease, turnkey or vehicle/service contract as defined by the Federal Transit Administration (FTA). The transit agency shall apply to the Executive Officer no later than 90 days prior to the applicable deadlines and shall include a description of the reason the delay is required, the reason the contractor cannot provide a newer vehicle to replace an existing vehicle within the terms of the contract, and provide a schedule for compliance by the end of the compliance extension.~~

~~Note: Authority cited: Sections 39600, 39601, 39659, 39667 and 43018, Health and Safety Code.~~

~~Reference: Sections 39667, 39700, 39701, 43000, 43000.5, 43013, 43018, 43801 and 43806, Health and Safety Code.~~



13 CCR § 2023.3

~~§ 2023.3. Zero-Emission Bus Requirements~~

~~(a) "Zero-emission bus" means an Executive Officer certified urban bus that produces zero exhaust emissions of any criteria pollutant (or precursor pollutant) under any and all possible operational modes and conditions.~~

~~(1) A hydrogen-fuel cell bus shall qualify as a zero-emission bus.~~

~~(2) An electric trolley bus with overhead twin-wire power supply shall qualify as a zero-emission bus.~~

~~(3) A battery electric bus shall qualify as a zero-emission bus.~~

~~(4) Incorporation of a fuel-fired heater shall not preclude an urban bus from being certified as a zero-emission bus, provided the fuel-fired heater cannot be operated at ambient temperatures above 40(F) and the heater is demonstrated to have zero evaporative emissions under any and all possible operational modes and conditions.~~

~~(b) *Zero-Emission Bus Demonstration Projects.*~~

~~(1) *Initial Demonstration Project.*~~

~~(A) Except as provided in (D) below, the owner or operator of an urban bus fleet on the diesel path in accordance with the provisions of section 2023.1, with more than 200 urban transit buses in its active fleet on January 31, 2001, shall implement an Initial Demonstration Project in accordance with this subsection (b)(1). The owner or operator shall evaluate the operation of zero-emission buses in revenue service, and prepare and submit a report on the demonstration project to the Executive Officer for inclusion in a future review of zero-emission technology.~~

~~(B) This Initial Demonstration Project shall meet all of the following specifications and requirements:~~

- ~~1. Utilize a minimum of three zero-emission buses,~~
- ~~2. Include any necessary site improvements,~~
- ~~3. Locate fueling infrastructure onsite,~~
- ~~4. Provide appropriate maintenance and storage facilities,~~
- ~~5. Train bus operators and maintenance personnel,~~
- ~~6. Place the buses in revenue service for a minimum duration of 12 calendar months,~~
- ~~7. Retain operation and maintenance records, and~~
- ~~8. Report on the demonstration program as set forth in subdivision (f) of section 2023.4, title 13, CCR.~~

~~(C) When planning and implementing the Initial Demonstration Project, the operator or owner shall meet the following milestones:~~

- ~~1. No later than January 1, 2002, prepare and solicit bid proposals for materials and services necessary to implement the demonstration project, including but not limited to the zero-emission buses and the associated infrastructure;~~
- ~~2. No later than February 28, 2006, place at least three zero-emission buses in operation;~~
- ~~3. No later than July 31, 2005, submit a preliminary report on the demonstration project to the Executive Officer, in accordance with paragraph (f)(3) of section 2023.4, title 13, CCR;~~
- ~~4. No later than July 31, 2007, submit a report on the demonstration project to the Executive Officer, in accordance with paragraph (f)(4) of section 2023.4, title 13, CCR;~~
- ~~5. No later than January 31, 2003, initial documentation shall be submitted in accordance with paragraph (f)(1) of section 2023.4, title 13, CCR; and~~
- ~~6. No later than January 31, 2003, a financial plan shall be submitted in accordance with paragraph (f)(2) of section 2023.4, title 13, CCR.~~

~~(D) Multiple transit agencies within the same air basin may, on a case-by-case basis, petition the Executive Officer to implement a joint zero-emission bus demonstration project. Electric trolley buses shall not qualify as zero-emission buses for purposes of this joint demonstration project. No more than three transit agencies can participate in any one joint project. Transit agencies that are participating in a joint demonstration project shall:~~

- ~~1. Designate the agency hosting the onsite demonstration,~~
- ~~2. Jointly fund the demonstration project, and~~
- ~~3. Place a minimum of three zero-emission buses per demonstration project in revenue service.~~

~~(2) *Advanced Demonstration Project.*~~

~~(A) Except as provided in (E) below, the owner or operator of an urban bus fleet on the diesel path in accordance with the provisions of section 2023.1, with more than 200 urban transit buses in its active fleet on January 1, 2007, for transit agencies on the diesel path shall implement an Advanced Demonstration Project. The owner or operator shall evaluate the operation of zero-emission buses in revenue service and prepare and submit a report on the demonstration project to the Executive Officer.~~

~~(B) Diesel fuel path transit agencies may choose to follow the single or joint path demonstration as described in 2023.3(b)(2)(D) or 2023.3(b)(2)(E).~~

~~(C) When planning and implementing the Advanced Demonstration Project for transit agencies on the diesel path, the operator or owner shall meet the following milestones:~~

- ~~1. No later than January 1, 2009, place all required zero-emission buses in operation,~~
- ~~2. No later than May 1, 2009, submit a preliminary report on the demonstration project to the Executive Officer, in accordance with paragraph (f)(3) of section 2023.4, title 13, CCR, and~~
- ~~3. No later than May 1, 2010, submit a final report on the~~

demonstration project to the Executive Officer, in accordance with paragraph (f)(4) of section 2023.4, title 13, CCR.

~~(D) Transit agencies choosing to participate in a single transit agency Advanced Demonstration Project shall meet all of the following specifications and requirements:~~

- ~~1. Utilize a minimum of six zero-emission buses,~~
- ~~2. Provide appropriate maintenance and storage facilities,~~
- ~~3. Train bus operators and maintenance personnel,~~
- ~~4. Place the buses in revenue service for a minimum duration of 12 calendar months after delivery of all demonstration buses,~~
- ~~5. Retain operation and maintenance records, and~~
- ~~6. Report on the demonstration program as set forth in subdivision (f) of section 2023.4, title 13, CCR.~~

~~(E) Multiple transit agencies may, on a case-by-case basis, petition the Executive Officer to implement a joint zero-emission bus demonstration project. Transit agencies that are participating in a joint demonstration project shall:~~

- ~~1. Jointly fund the demonstration project.~~
- ~~2. Utilize a minimum of 12 zero-emission buses in revenue service.~~
- ~~3. Operate the demonstration at a transit agency affected by the zero-emission bus regulation.~~
- ~~4. Purchase and put in revenue service a minimum of three zero-emission buses per transit agency.~~
- ~~5. Place the buses in revenue service for a minimum duration of 12 calendar months after delivery of all demonstration buses.~~
- ~~6. Provide appropriate maintenance and storage facilities.~~
- ~~7. Train bus operators and maintenance personnel from each participating transit agency.~~

~~(F) Zero-emission buses placed in service to meet the zero-emission bus initial demonstration projects as specified in subdivision (b)(1) are~~

~~not permitted to count towards the advanced demonstration requirements, unless upgraded with technology advancements to make the bus comparable to vehicles available for the advanced demonstration. One credit shall be earned for each bus.~~

~~(c) *Purchase Requirement for Zero-Emission Buses.* The number of urban buses in each transit agency's active urban bus fleet shall be reviewed annually, as described in sections 2023.4(a)(3) and (b)(2). The owner or operator of a transit agency with more than 200 urban buses in active service on January 1, 2007, for transit agencies on the diesel path, and January 1, 2009, for transit agencies on the alternative-fuel path, shall purchase and/or lease zero-emission buses, in accordance with the following paragraphs. In addition, the owner or operator of diesel path transit agencies whose active urban bus fleet initially exceeds 200 urban buses after January 1, 2007 shall have three years to comply with the Zero-Emission Bus Purchase Requirement starting January 1, of the year they exceed 200 urban buses through 2026. The owner or operator of alternative fuel path transit agencies whose active urban bus fleet initially exceeds 200 urban buses after January 1, 2009, shall have three years to comply with the Zero-Emission Bus Purchase Requirement starting January 1, of the year they exceed 200 urban buses through 2026.~~

~~(1) For transit agencies on the diesel path, in accordance with the requirements in section 2023.1, a minimum 15 percent of purchase and lease agreements, when aggregated annually, for model year 2011, or from the start model year of Zero-Emission Bus purchases, through model year 2026 urban buses shall be zero-emission buses.~~

~~(2) For transit agencies on the alternative-fuel path, in accordance with the requirements in section 2023.1, a minimum 15 percent of purchase and lease agreements, when aggregated annually, for model year 2012, or from the start model year of Zero-Emission Bus purchases, through model year 2026 urban buses shall be zero-emission buses.~~

~~(3) The provisions of paragraphs (1) and (2) shall not apply if the operator's urban bus fleet is composed of 15 percent or more zero-emission buses on~~

January 1, 2008, for transit agencies on the diesel path, and on January 1, 2010, for transit agencies on the alternative-fuel path, or at any time thereafter.

*(4) Earning Credits.*

(A) Transit agencies on either the diesel path or alternative-fuel path may earn credits for use in meeting the purchase requirements for zero-emission buses specified in paragraphs (c)(1) and (c)(2) by placing zero-emission buses in service prior to the dates specified in paragraphs (c)(1) and (c)(2). For each zero-emission bus placed into early service and above what is required by section 2023.3 in paragraphs (b)(2), (c)(1) and (c)(2), credits shall be accrued according to the following table. Each earned credit is equivalent to one zero-emission bus.

*Credits per Year Placed*

Path	2007	2008	2009	2010	2011
Diesel	2.5	2	1.5	1.5	-
Alternative-	2.5	2	2	1.5	1.5

(B) Zero-emission buses placed in service to meet the zero-emission bus initial demonstration projects as specified in subdivision (b)(1) are not permitted to accrue credits towards the zero-emission bus purchase requirements, unless upgraded with technology advancements to make them comparable to vehicles available for the advanced demonstration. One credit shall be earned for each bus.

(C) Zero-emission buses placed in service to meet the advanced demonstration projects as specified in subdivision (b)(2) can accrue purchase credit towards the zero-emission purchase requirements. For each zero-emission bus required by the advanced demonstration, credit shall be accrued according to the following table. Each earned credit is equivalent to one zero-emission bus.

	<i>Credits per Year Placed for Advanced Demonstration Zero-Emission Buses</i>		
<i>Path</i>	2007	2008	2009
Diesel	2	1.5	4

~~(d) The Air Resources Board shall review zero-emission bus technology and the feasibility of implementing the requirements of subdivision (c) above no later than July 2009. Based on that assessment, the Board shall decide whether to proceed with the implementation of subdivision (c) or adjust the requirements.~~

~~Note: Authority cited: Sections 39600, 39601, 43013, 43018, 43100, 43101, 43104, 43806 Health and Safety Code.~~

~~Reference: Sections 39002, 39003, 39017, 39018, 39500, 39701, 40000, 43000, 43000.5, 43009, 43013, 43018, 43102, 43801, and 43806 Health and Safety Code, and section 28114 Vehicle Code.~~

13 CCR § 2023.4

~~§ 2023.4. Reporting Requirements for Transit Agencies.~~

~~(a) The following reports on new urban bus purchases and/or leases by transit agencies on the alternative fuel path shall be submitted as described below:~~

- ~~(1) The initial report shall be submitted by January 31, 2001, and shall state the transit agency's intent to follow the alternative fuel path.~~
- ~~(2) Any requests for deviation from the requirement that 85 percent of buses purchased per year must be alternative fuel buses must be submitted in writing and approved by the Executive Officer of the Air Resources Board 90 days prior to purchase. The written request must include the reason for requesting the deviation from the 85 percent annual purchase requirement and the transit agency's future planned alternative fuel bus purchases.~~
- ~~(3) Each transit agency shall submit an annual report containing: the number, manufacturer, make, and model year of engines, and fuel used for each urban bus it currently owns or operates, urban bus purchases and/or leases beginning January 1, 2000, and annual average percentage of total urban bus purchases and/or leases that were alternative fuel buses. The first report shall be submitted by January 31, 2001. Subsequent reports shall be submitted annually by January 31 through the year 2016. For transit agencies operating 150 or more urban buses, reports shall be submitted annually by January 31 through the year 2027.~~

~~(b) The following reports on new urban bus purchases and/or leases by transit agencies on the diesel path shall be submitted as described below:~~

- ~~(1) The initial report shall be submitted by January 31, 2001, and shall state the transit agency's intent to follow the diesel path.~~
- ~~(2) Each transit agency shall submit an annual report containing the number, manufacturer, make, and model year of engines, and fuel used for each~~



~~urban bus it currently owns or operates, and urban bus purchases and/or leases beginning January 1, 2000. The first report shall be submitted by January 31, 2001. Subsequent reports shall be submitted annually by January 31 through the year 2016. For transit agencies operating 150 or more urban buses, reports shall be submitted annually by January 31 through the year 2027.~~

~~(3) A transit agency within the jurisdiction of the South Coast Air Quality Management District that chooses to change from the diesel path to the alternative fuel path in accordance with paragraph (a)(2) of section 2023.1, title 13, CCR, must submit to the Executive Officer a letter of intent to follow the alternative fuel path no later than January 31, 2004. The letter of intent shall contain a statement certifying that the transit agency is in compliance with all provisions of the fleet rule for transit agencies on or before January 1, 2004.~~

~~(4) As set forth in section 2023.1(a)(5), transit agencies with more than 30 buses in their fleet that purchase model years 2007 through 2009 urban buses not certified at or below 0.2 g/bhp-hr NO<sub>x</sub> emissions shall submit the following information for each urban bus purchased: the manufacturer, make, model year of the engine of the urban bus or transit fleet vehicle retrofitted and for each diesel emission control strategy applied, the date of installation, the device's product serial number, and its Diesel Emission Control Strategy Family Name in accordance with the requirements of section 2706(g)(2), title 13, CCR. The first report shall be submitted by January 31, 2007. Subsequent reports shall be submitted annually by January 31 through the year 2016.~~

~~(c) Each transit agency shall submit the following reports on the urban bus NO<sub>x</sub> fleet average requirement:~~

~~(1) Initial documentation shall be submitted by January 31, 2001, and contain, at a minimum, the active urban bus fleet NO<sub>x</sub> emission average, and if that number exceeds the average required in subdivision (d), section 2023.1, title 13, CCR, a schedule of actions planned to achieve that average by October 1, 2002, including numbers and model years of bus purchases, retirements,~~

~~retrofits, and/or repowerings, or shall indicate the intent of the transit agency to retire all model year 1987 and earlier buses in its active fleet by October 1, 2002.~~

~~(2) A final report shall be submitted by January 31, 2003, detailing the active urban bus fleet NOx emission average as of October 1, 2002, and actions, if any were needed, taken to achieve that standard, including numbers and model years of bus purchases, retirements, retrofits, and/or repowerings, or documenting the retirement of all model year 1987 and earlier buses.~~

~~(d) Each transit agency shall submit the following reports on the total diesel PM emission reduction requirements for urban buses:~~

~~(1) An initial annual report shall be submitted by January 31, 2003, and shall contain, at a minimum, the following information:~~

~~(A) number, manufacturer, make, and model year of diesel-fueled, dual-fuel, bi-fuel (except for heavy-duty pilot ignition engines), and diesel hybrid-electric engines in urban buses in the active fleet; the PM engine certification value of each of those bus engines; the diesel PM emission total for the diesel buses in the active fleet; and the diesel PM emission total for the baseline date of January 1, 2002.~~

~~(B) For each urban bus for which a diesel emission control strategy has been applied, the device's product serial number; its Diesel Emission Control Strategy Family Name in accordance with the requirements of section 2706(g)(2), title 13, CCR; and the date of installation.~~

~~(2) Annual reports shall be submitted each year beginning January 31, 2004 and each January 31 thereafter, through 2009, and shall contain the information required in paragraphs (d)(1)(A) and (B) above plus the total percentage reduction of PM achieved from the baseline diesel PM emission total as of January 1 of each applicable year.~~

~~(e) Each transit agency shall submit the following reports for its transit fleet vehicles:~~

~~(1) An annual report of the number, manufacturer, make, and model year of~~

~~engines and fuel used for each transit fleet vehicle it currently owns, leases, or operates as of January 1st of each year, beginning in 2006. The first report shall be submitted by January 31, 2006, and subsequent reports shall be submitted annually by January 31st through the year 2016.~~

~~(2) For the NOx fleet average reduction requirements set forth in section 2023.2(a):~~

~~(A) A report submitted by January 31, 2006, must contain at a minimum, the transit vehicle fleet NOx emission average. If that number exceeds the average required in section 2023.2(a)(1), the report must include a schedule of actions planned to achieve compliance by December 31, 2007.~~

~~1. If a change to the compliance schedule occurs that results in noncompliance, the transit agency must notify the Executive Officer within 30 days.~~

~~2. Notification to the Executive Officer must include a revised schedule showing how the agency will be in compliance within 90 days of the schedule change that caused noncompliance.~~

~~(B) A report submitted by January 31, 2008, must contain, details of the transit fleet vehicle fleet NOx emission average as of December 31, 2007, or must document the retirement of all model year 1997 and earlier transit fleet vehicle engines by December 31, 2007.~~

~~(C) A report submitted by January 31, 2009, must contain at a minimum, the transit vehicle fleet NOx emission average. If that number exceeds the average required in section 2023.2(a)(1), the report must include a schedule of actions planned to achieve compliance by December 31, 2010.~~

~~1. If a change to the compliance schedule occurs that results in noncompliance, the transit agency must notify the Executive Officer within 30 days.~~

~~2. Notification to the Executive Officer must include a revised~~

~~schedule showing how the agency will be in compliance within 90 days of the schedule change that caused noncompliance.~~

~~(D) A final report submitted by January 31, 2011 must contain details the transit fleet vehicle fleet NOx emission average as of December 31, 2010, or must document the retirement of all model year 2001 and earlier transit fleet vehicle engines by December 31, 2010.~~

~~(3) For the total diesel PM reduction requirements set forth in section 2023.2(b):~~

~~(A) An initial report submitted by January 31, 2006, must contain the PM engine certification value of each transit fleet vehicle engine and the transit fleet vehicle diesel PM total as of January 1, 2005.~~

~~(B) A report submitted by January 31, 2008, must contain the transit fleet vehicle diesel PM total as of December 31, 2007, and the percentage diesel PM reduced, documenting compliance with the requirement in section 2023.2(b)(1).~~

~~(C) A final report submitted by January 31, 2011, of the transit fleet vehicle diesel PM total as of December 31, 2010, and the percentage diesel PM reduced, documenting compliance with the requirement in section 2023.2(b)(2).~~

~~(D) For each transit fleet vehicle for which a diesel emission control strategy has been applied, each report specified above must include the strategy's product serial number; its Diesel Emission Control Strategy Family Name in accordance with the requirements of section 2705(g)(2), title 13, CCR; and the date of installation correlated to a specific transit fleet vehicle engine.~~

~~(f) The following reports on the zero-emission bus demonstration program shall be submitted by those transit agencies required to conduct such demonstrations, as described below:~~

~~(1) Initial documentation shall contain, at a minimum, the bus order and delivery schedule, fuel type, type of refueling station, any planned facility~~

~~modifications, and a revenue service demonstration plan;~~

~~(2) A financial plan shall contain, at a minimum, projected expenditures for capital costs for purchasing and/or leasing buses, refueling stations, any facility modifications, and projected annual operating costs;~~

~~(3) A preliminary report shall contain, at a minimum, the following information:~~

~~(A) A brief description of the zero-emission technology utilized, identification of the bus manufacturer, and the product specifications;~~

~~(B) A comparison with conventional buses on the following parameters: miles driven per bus in revenue and non-revenue service, miles between propulsion-related road calls, miles between road calls, availability of bus for pull out, fuel economy, fueling costs, infrastructure costs, initial cost of bus, maintenance costs of propulsion-related components, warranty of fuel cell and propulsion-related components, safety incidents, and maintenance (both scheduled and unscheduled);~~

~~(C) Qualitative transit personnel and passenger experience; and~~

~~(D) A financial summary of the capital costs of bus purchases and/or leases and fueling infrastructure.~~

~~(4) A final report shall contain, at a minimum, the following information:~~

~~(A) A brief description of the zero-emission technology utilized, identification of bus manufacturer and product specifications;~~

~~(B) A comparison with conventional buses on the following parameters: miles driven per bus in revenue service, miles between propulsion related road calls, miles between road calls, availability of bus for pull out, fuel economy, fueling costs, infrastructure costs, initial cost of bus, maintenance costs of propulsion-related components, warranty of fuel cell and propulsion-related components, bus down time (scheduled and unscheduled), safety incidents, driver and mechanic training conducted, and maintenance (both scheduled and unscheduled);~~

~~(C) Qualitative transit personnel and passenger experience, and~~

~~(D) A financial summary of capital costs of demonstration program, including bus purchases and/or leases, fueling infrastructure, any new facilities or modifications, and annual operating costs.~~

~~(5) Beginning 1 month after the start of a demonstration and monthly thereafter, an update on the demonstration shall be provided to Air Resources Board staff. These updates shall provide staff with zero-emission bus qualitative data on the following parameters: brief description of each bus's operation, number of days in operation (in-service and testing), bus down time (scheduled and unscheduled), reason for bus down time, outreach events, and requests for future participation in outreach events.~~

~~(6) Beginning 2 months after the delivery of the first bus and quarterly thereafter, an update on the demonstration shall be provided to Air Resources Board staff. These updates shall provide staff with zero-emission and conventional bus quantitative data on the following parameters: reliability (defined as miles between propulsion related road calls), operating and maintenance costs, maintenance conducted, warranty issues, availability of bus for pull out, fuel economy, technology performance, bus downtime (scheduled and unscheduled), safety incidents, issues with fueling equipment, outreach efforts, and driver and mechanic training conducted.~~

~~(g) The following reports on new zero-emission bus purchases and/or leases shall be submitted by transit agencies required to purchase zero-emission buses as described below:~~

~~(1) The initial report shall contain, at a minimum, the following information:~~

~~(A) A brief description of the zero-emission technology to be utilized and a plan for the implementation of the requirement,~~

~~(B) For an exemption from the purchase requirement, documentation that 15 percent or more of the transit agency's active urban bus fleet is composed of zero-emission buses.~~

~~(2) Any requests for deviation from the requirement that 15 percent of buses purchased per year must be zero-emission buses must be submitted in~~

~~writing and approved by the Executive Officer of the Air Resources Board 90 days prior to a transit agency submitting a purchase order(s) reflecting the purchase deviation. The written request shall include the reason for requesting the deviation and the transit agency's future planned zero-emission bus purchases.~~

~~(3) Transit agencies on the diesel path shall include in the annual reports required in paragraph (b)(2): zero-emission bus purchases and/or leases beginning with model year 2008 and through model year 2026, and the annual average percentage of total bus purchases and/or leases that were zero-emission buses.~~

~~(4) Transit agencies on the alternative-fuel path shall include in the annual reports required in paragraph (a)(3): zero-emission bus purchases and/or leases beginning with model year 2008 and through model year 2026, and the annual average percentage of total bus purchases and/or leases that were zero-emission buses.~~

~~(h) Transit agencies exempted from the requirements of paragraphs (b)(5) and (c)(4), section 2023.1, title 13, CCR, shall submit annual reports demonstrating that they are achieving NO<sub>x</sub> emission benefits required in paragraphs (b)(8)(B) and (c)(7)(B), section 2023.1, title 13, CCR. The first report shall be submitted by January 31, 2005. Subsequent reports shall be submitted annually by January 31 through the year 2016.~~

~~(i) A transit agency requesting approval for the purchase of diesel-fueled hybrid-electric buses pursuant to paragraph (c)(9), section 2023.1, title 13, CCR, shall:~~

~~(1) Submit an application for approval that meets the requirements of paragraphs (c)(9)(A) and (c)(9)(B), section 2023.1, title 13, CCR;~~

~~(2) Include in the application all of the following: the number, manufacturer, make and model year of diesel-fueled hybrid-electric buses to be purchased; the schedule for the purchase and delivery of the buses; a detailed description of all measures that will be used to offset the excess NO<sub>x</sub> emissions including identification of the specific buses to which the measures will be applied, and~~

~~the schedule for implementing those measures; and~~

~~(3) Submit a final report to the Executive Officer within 30 days of receipt of the last diesel-fueled hybrid-electric bus that documents the schedule of delivery of the diesel-fueled hybrid-electric buses, timing, and completion of all measures to achieve the NOx offset.~~

~~(j) A new transit agency shall submit the following information to the Executive Officer:~~

~~(1) Within 60 days of formation, the name of the new transit agency, its mailing address, name of a contact person and that person's e-mail address and phone number; a description of the service area and proposed routes; and the planned number of urban buses and transit fleet vehicles, including model years of engines;~~

~~(2) Within 120 days of formation, its NOx fleet average for its active fleet and, separately, its transit fleet vehicles, and its diesel PM emission total for its active fleet and, separately, its diesel PM emission total for its transit fleet vehicles.~~

~~(k) Failure to submit complete reports.~~

~~(1) A transit agency that fails to submit a complete report in accordance with this section is subject to civil penalties of not less than \$100 per day for every day past January 31 of each reporting year through 2016. For transit agencies with more than 150 urban buses civil penalties of not less than \$100 per day for every day past January 31 shall continue for each reporting year through 2027.~~

~~(2) A new transit agency that fails to submit its report or required information in accordance with this section is subject to civil penalties of not less than \$100 per day for every day past the required reporting dates in section 2023.4(j).~~

~~(3) A report that does not contain all required information will not be considered complete. A report will be considered to be complete as of the date that all required information is submitted.~~



~~Note: Authority cited: Sections 39600, 39601, 39659 and 39667, Health and Safety Code.~~

~~Reference: Sections 39667, 39700, 43000, 43000.5, 43013, 43018, 43801 and 43806, Health and Safety Code.~~

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**Article 4.3. Innovative Clean Transit.**

**§ 2023. Innovative Clean Transit Regulations Applicability and Scope.**

**(a) Applicability.**

(1) Except as provided in sections 2023(a)(2), these Innovative Clean Transit regulations, title 20, article 4.3, California Code of Regulations, apply to a transit agency that owns, operates, leases, rents, or contracts with another entity to operate buses in California.

(2) These regulations do not apply to any of the following:

(A) Vehicles that operate on rails, ~~or trolleybuses,~~ or school buses even if operated by a transit agency;

(B) Caltrans, Caltrain, Amtrak, or any local school district.

(b) **Definitions.** For the purposes of the regulations in this Article 4.3, the following definitions apply:

(1) “Active Bus” means a bus in a particular fleet at year-end that is available to operate in revenue service, including a spare bus and a bus temporarily out of service for routine maintenance and minor repairs. A bus in storage, an emergency contingency vehicle, a bus ~~pulled~~ removed from the active bus fleet ~~but~~ and awaiting sale, or a bus out of service for an extended period of time for major repairs is not considered an active bus.

(2) “Air Basin” has the same meaning as defined in section 39012 of the Health and Safety Code.

(3) “Annual Maximum Service” means the number of buses in revenue service that are operated during the peak season of the year, on the week and day that maximum service is provided, but excludes demand response buses. Annual maximum service excludes the following:

(A) An atypical day, on which the transit agency provides extra service to meet demands for special events such as conventions, parades, or public

celebrations, or operates significantly reduced service because of unusually bad weather (e.g., snowstorms, hurricanes, tornadoes, earthquakes) or major public disruptions (e.g., terrorism); or

(B) One-time special events.

~~(3)~~ (4) “Articulated Bus” is a 54-foot to 60-foot bus with two connected passenger compartments.

~~(4)~~ (5) “Battery Electric Bus” means a bus that is has an all-electric propulsion system and relies only on batteries to store electricity received from an external as the power source. It has no internal combustion engine in the powertrain for the vehicle. A battery electric bus can store electricity on board the vehicle in a battery and the battery can be recharged repetitively by an external source.

~~(5)~~ (6) “Bus” means a rubber-tire vehicle designed to transport passengers by road with gross vehicle weight rating (GVWR) greater than 14,000 pounds, but does not include a trolleybus as specified in section 2023(a)(2)(B)(A).

~~(6)~~ (7) “Bus Purchase” or “Purchase” means the transit agency has identified, committed and encumbered funds and executes one of the following:

(A) A written “Notice to Proceed” executed by a transit agency to a bus manufacturer to begin production of a bus either:

1. ~~under~~ Under a previously-entered purchase contract; or
2. ~~to~~ To execute a contract option;

(B) If no Notice to Proceed is issued, a written purchase agreement between a transit agency and a bus manufacturer for a bus that specifies the date when the bus manufacturer is to proceed with the work to manufacture the bus; or

(C) A signed written lease agreement between a transit agency and a bus manufacturer or sales representatives for a new bus to be placed in revenue service for a contract term of five years or more.

~~(7)~~(8) “Bus Testing Report” means the complete test report for a bus model required by title 49 of the Code of Federal Regulations (CFR) section 665.13. These bus tests are also commonly called “Altoona Testing”.

~~(8)~~(9) “Bus Type” means a bus body configuration form of bus used by transit agencies for revenue operations, including a bus, articulated bus, over-the-road bus, double-decker bus, and cutaway buses.

~~(9)~~(10) “CalEnviroScreen” means a mapping tool that is developed by the Office of Environmental Health Hazard Assessment (OEHHA) at the request of the California Environmental Protection Agency (CalEPA) to identify California’s most pollution-burdened and vulnerable communities based on geographic, socioeconomic, public health and environmental hazard criteria. The CalEnviroScreen is available for public use at <https://oehha.ca.gov/calenviroscreen> .

~~(10)~~(11) “CARB” is the same as California Air Resources Board.

~~(11) “Commercially Available” in reference to an engine means an engine on a bus that is certified by CARB’s On Road New Vehicle & Engine Certification Program for a specified application and is available for purchase or lease. The term “Commercially Available,” as used in this regulation, applies only to low-NOx engines certified to meet the lowest level of emissions on conventional internal combustion engine buses.~~

(12) “Compressed Natural Gas” or “CNG” has the same meaning as specified in the Low Carbon Fuel Standard Regulation, title 17, California Code of Regulations, section 95481(21).

- (13) “Conventional Internal Combustion Engine Bus” means a bus with an internal combustion engine (ICE) propulsion system or a combination of an internal combustion engine with an electric propulsion system commonly referred to as a hybrid powertrain.
- (14) “Conversion to a Zero-Emission Bus” means converting a conventional internal combustion engine bus, to a zero-emission bus as defined in section 2023(b)(54)(52).
- (15) “Criteria Pollutants” or “Criteria Air Pollutants” are air pollutants for which air quality criteria have been issued by the Administrator of the United States Environmental Protection Agency under title 42 of the United States Code, section 7408.
- (16) “Curb Weight” has the same meaning as defined in title 49 of Code of Federal Regulations, section 571.3.
- (17) “Cutaway Bus” means a vehicle in which a bus body designed to transport passengers is mounted on the chassis of a van or light- or medium-duty truck chassis, and that has a GVWR greater than 14,000 pounds but not more than 26,000 pounds. The original van or light- or medium- duty truck chassis may be reinforced or extended. A cutaway bus may accommodate some standing passengers.
- (18) “Date In-Service” means the date a purchased bus is brought into revenue service.
- (19) “Demand Response” has the same meaning as defined in title 49 of the Code of Federal Regulations, section 604.3(g).
- ~~(19)~~(20) “Diesel” has the same meaning as defined in title 13, California Code of Regulations, sections 2281 and 2282.
- ~~(20)~~(21) “Double-Decker” means a high-capacity bus that has two levels of seating, one over the other, connected by one or more stairways. Total bus

height is usually 13 to 14.5 feet, and typical passenger seating capacity ranges from 40 to 80 people.

~~(21)~~(22) “Emergency” has the same meaning as defined in title 49 of United States Code, section 5324(a)(2).

~~(22)~~(23) “Emergency Contingency Vehicle” is a revenue vehicle removed from an active, placed in an inactive fleet for local emergencies after this revenue vehicle has reached the end of its normal minimum useful life.

~~(23)~~(24) “Engine Family Name” or “EFN” is an identifier, which is unique to an engine of a specific model year, build, and manufacturer, and can be found on the emission control label located on the engine.

~~(24)~~(25) “Executive Officer” means the Executive Officer of the California Air Resources Board (CARB) or his/her designee.

~~(25) “Fleet Size” means the total number of active buses in a fleet as described in section 2023(b)(1) as of December 31, 2017, that are subject to requirements of this regulation as described in section 2023(a) and have GVWR greater than 14,000 pounds.~~

(26) “FTA” is the Federal Transit Administration.

(27) “Fuel Cell Electric Bus” or “FCEB” means an electric bus that includes uses both a hydrogen fuel cell stack and a battery for propulsion. The fuel cell stack generates electricity on board to charge the battery that powers the on board motor. It has no internal combustion engine in the powertrain. A fuel cell electric bus does not need to be equipped with a large battery for the energy storage purpose and relies on its hydrogen tank and fuel cell stack on board for its energy supply.

(28) “Gradeability” means a vehicle’s ability to climb slopes.

~~(28)~~(29) “Gross Vehicle Weight Rating” or “GVWR” has the same meaning as defined in California Vehicle Code, section 350, subdivision (a).

~~(29)~~(30) “Large Transit Agency” means either:

(A) A transit agency that operates either in the South Coast or the San Joaquin Valley Air Basin and operates more than 65 buses in annual maximum service; or

(B) A transit agency with a fleet size of one hundred (100) or more buses A transit agency that does not operate in the South Coast or San Joaquin Valley Air Basin and has at least 100 buses in annual maximum service in an urbanized area with a population of at least 200,000 as last published by the Bureau of Census before December 31, 2017.

~~(30)~~(31) “Low-NOx Engine” has the same meaning as defined in title 13 of California Code of Regulations, section 2208(c)(18).

~~(31)~~(32) “Manufacture Year” means the year of original manufacture of the vehicle. It is not necessarily the same as the model year.

~~(32)~~(33) “Metropolitan Planning Organization” or “MPO” has the same meaning as defined in 49 U.S.C. section 5303(b)(2).

~~(33)~~(34) “Minimum Useful Life” means the minimum years of service or accumulations of miles at which a transit agency is allowed to retire its federally funded bus without penalty under the terms of federal funding requirements.

~~(34)~~(35) “New Bus” means a bus, the equitable or legal title to which has never been transferred to a first entity who in good faith purchases the bus for purposes other than resale.



~~(35)~~(36) “New Entrant” means a transit agency that is newly established or is created through a merger of two or more transit agencies on or after December 31, 2017.

~~(36)~~(37) “Notice to Proceed” means a written direction to a bus manufacturer to commence production of a bus as provided in a contract.

~~(37)~~(38) “NOx” means oxides of nitrogen.

~~(38)~~(39) “NOx Exempt Areas” means the following counties and air basins:  
Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, Eastern Kern (portion of Kern County within the Eastern Kern Air Pollution Control District), Glenn, Humboldt, Inyo, Lake, Lassen, Mariposa, Mendocino, Modoc, Mono, Monterey, Nevada, Northern Sonoma (as defined in title 17, California Code of Regulations, section 60100(e)), Plumas, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz, Shasta, Sierra, Siskiyou, Northern Sutter (portion of Sutter County that is north of the line that extends from the south east corner of Colusa County to the southwest corner of Yuba County), the portion of El Dorado that is within the Lake Tahoe Air Basin (as defined in title 17, California Code of Regulations, section 60113), the portion of Placer that is East of Highway 89 or within the Lake Tahoe Air Basin, Trinity, Tehama, Tuolumne, and Yuba.

~~(39)~~(40) “Orange County Bus Cycle” means a chassis dynamometer test developed by West Virginia University based on real bus operating data from the Orange County Transportation Authority. The test is based on Society of Automotive Engineers (SAE) International Recommended Practice for Measuring Fuel Economy and Emissions of Hybrid-Electric and Conventional Heavy-Duty Vehicles J2711\_200209 (September 20, 2002), available at: [https://www.sae.org/standards/content/j2711\\_200209/](https://www.sae.org/standards/content/j2711_200209/), which is incorporated by reference.

~~(40)~~(41) “Over-The-Road Bus” means a bus characterized by an elevated passenger deck located over a baggage compartment. They are customarily, generally used for long-distance bus services and or connecting outlying areas with central cities with limited stops. Over-The-Road buses are also commonly called Coaches or Motor Coaches.

~~(44)~~(42) “Regional Transportation Planning Organization” has the same meaning as defined in 49 U.S.C. section 5303(b)(5). It is an organization that identifies local transportation needs, conducts planning, assists local governments, and supports the statewide transportation planning process in non-metropolitan regions of the State with a population size less than 50,000, as determined by the U.S. Census.

~~(42)~~(43) “Renewable Diesel” or “Biomass-Based Diesel” has the same meaning as defined in title 17, California Code of Regulations, section 95481(18).

~~(43)~~(44) “Renewable Natural Gas” or “Biomethane” or “RNG” has the same meaning as defined in title 17, California Code of Regulations, section 95481(19).

~~(44)~~(45) “Repower” for the purpose of this regulation, only means to replace the engine in a vehicle with a newer engine. The term “repower,” as used in this regulation, refers to replacing an older engine with a newer model engine that has reduced emissions. meets the lowest level of NOx emissions standards.

~~(45)~~ “Revenue Vehicle” means a bus that is available to operate in revenue service carrying passengers.

~~(46)~~ “Revenue Service” means the time when status of a bus is being available to the general public for the purpose and there is an expectation of carrying passengers.

~~(47)~~ “Revenue Vehicle” means a bus that is available to operate in revenue service carrying passengers.

~~(47)~~(48) “School Bus” has the same meaning as defined in California Vehicle Code, section 545.

~~(49)~~ “Small Transit Agency” means a transit agency that is not a large transit agency.

~~(48)~~(50) “Spare Bus Vehicle” means a revenue vehicle that is maintained by the transit agency to preserve scheduled service operations during following occurrences periods of:

~~(A) Meet~~ routine and heavy unplanned maintenance requirements; or

~~(B) Meet~~ unexpected vehicle breakdowns or accidents.

~~(49)~~ “Small Transit Agency” means a transit agency with a fleet size of fewer than one hundred (100) buses.

~~(50)~~(51) “Transit Agency” has the same meaning as defined in title 13, California Code of Regulations, section 2020(b). A transit agency does not mean a correctional facility, airport, college or university, national park, tour bus service providers, or an entity that provide shuttle services solely for patrons of its organization.

~~(51)~~(52) “Trolleybus” means a rubber-tired, electrically powered passenger vehicle operated on city streets drawing power from overhead wires using trolley poles.

~~(53)~~ “Urbanized Area” has the same meaning as defined in 23 U.S.C. section 101(a)(34).

~~(52)~~(54) “Zero-Emission Bus” or “ZEB” means a bus with zero tailpipe emissions and is either a:

~~(A) A battery electric bus or a shall qualify as a zero emission bus, and~~

~~(B) A fuel cell electric bus shall qualify as a zero emission bus.~~

~~(53)(55) “Zero-Emission Passenger Miles” means the number of miles traveled by passengers determined by multiplying the number of passengers who board zero emission vehicles, other than buses with a GVWR greater than 14,000 pounds vehicle by the length of their trips. The term “Zero-Emission Passenger Miles,” as it used in this regulation, refers to passenger miles driven on a zero-emission vehicles other than buses with a GVWR of over 14,000 pounds.~~

NOTE: Authority cited: Sections 38501, 38510, 38560, 39002, 39003, 39012, 39017, 39018, 39027, 39500, 39600, 39601, 39606, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43100, 43101, 43102, 43104, 43105, 43106, 43701(b), 43801 and 43806, Health and Safety Code. Reference: Sections 38501, 38510, 38560, 39002, 39003, 39017, 39027, 39500, 39600, 39601, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43101, 43104, 43105, 43701(b), 43801 and 43806, Health and Safety Code; Sections 233, 350, 545, and 28114, Vehicle Code; sections 5303 and 5324, title 49, United States Code; Code of Federal Regulations, title 49, section 665.13.

## **§ 2023.1. Zero-Emission Bus Requirements.**

### **(a) Zero-Emission Bus Purchase Requirements.**

(1) In any given calendar year, transit agencies must purchase or operate a minimum number of zero-emission buses as determined by the following schedules:

(A) For a large transit agency:

a. Starting January 1, 2023, twenty-five percent of the total number of new bus purchases in each calendar year must be zero-emission buses;

- b. Starting January 1, 2026, fifty percent of the total number of new bus purchases in each calendar year must be zero-emission buses; and
- c. Starting January 1, 2029, all new bus purchases must be zero-emission buses.

(B) For a small transit agency:

- a. Starting January 1, 2026, twenty-five percent of the total number of new bus purchases in each calendar year must be zero-emission buses; and
- b. Starting January 1, 2029, all new bus purchases must be zero-emission buses.

(2) If the calculated required minimum number of zero-emission buses as set forth in section 2023.1(a) in a given calendar year does not result in a whole number, the number must be rounded to the nearest integer.

(3) The zero-emission bus purchase requirements set forth in section 2023.1(a) apply only to the total number of new bus purchases in a calendar year. The following purchases are not considered to be new bus purchases for the purposes of calculating the minimum number of zero-emission buses required in a given calendar year:

(A) Purchase of used buses;

(B) Conversion of ~~Zero-emission buses that are converted from conventional~~ internal combustion engine buses to zero emission buses; and

(C) Purchase of a cutaway bus, over-the-road bus, or articulated bus, until the latter of either January 1, 2026 or until the criteria specified in section 2023.1(c) have been met.

(4) The required minimum number of zero-emission buses in section 2023.1(a) can be achieved with any combination of new zero-emission bus purchases and number of zero-emission buses already present in the fleet, less any available zero-emission bus bonus or zero-emission mobility credits, as provided in sections 2023.3 and 2023.5. The number of zero-emission buses in the fleet include all of the following zero-emission buses regardless of how and when they are acquired:

(A) Any zero-emission bus from a previous purchase that has been delivered;

(B) Any leased zero-emission bus that has been delivered; and

(C) Any zero-emission bus that is converted from a conventional internal combustion engine bus and is an active bus.

(D) A zero-emission bus identified in section 2023.1(a)(4)(A) through (C) may only be used once in accounting for the required minimum number of zero-emission buses in section 2023.1(a)(1).

~~(5) A purchased new bus must be delivered within two years from the initial date of a Notice to Proceed, unless a transit agency has been granted an extension by the Executive Officer as set forth in section 2023.4(c)(1) and (2).~~

~~(5)(6) If a transit agency cancels a Notice to Proceed at any time before the bus delivery date, the purchase will be considered invalid and will not count towards required total new bus purchases.~~

~~(6)(7) Starting January 1, 2023, a transit agency must retain a newly purchased zero-emission bus for at least five years starting from the date of being placed in the active bus fleet to satisfy a zero emission bus purchase requirement.~~

~~(7)(8) Annual compliance with the zero-emission bus purchase requirements is determined as of December 31 of each calendar year.~~

**(b) Discharge of the ~~Waiver of~~ Initial Zero-Emission Bus Purchase**

**Requirements.** The zero-emission bus purchase requirements in section 2023.1(a) for calendar year 2023 and 2024 are ~~discharged waived~~ if the following circumstances exist:

(1) The zero-emission bus purchase requirements for calendar year ending December 31, 2023, are ~~discharged waived~~ if California transit agencies collectively have at least ~~one thousand (1,000)~~ eight hundred and fifty (850) zero-emission buses purchased or in active bus fleets by December 31, 2020, ~~as determined by the Executive Officer~~ based on the reporting data for the ~~end of calendar year 2020 required by section 2023.8.~~

(2) If the 2023 zero-emission bus purchase requirement is ~~discharged waived~~ as a result of the implementation of section 2023.1(b)(1), then the zero-emission bus purchase requirements for calendar year ending December 31, 2024, are ~~discharged waived~~ if California transit agencies collectively have at least one-thousand and ~~two one hundred fifty (1,250-1,150)~~ zero-emission buses purchased or in active ~~service bus fleets~~ by December 31, 2021, ~~as determined by the Executive Officer~~ based on the reporting data for calendar year 2021 ~~required by section 2023.8.~~

(3) Zero-Emission Bus Bonus Credits as specified in section 2023.3 cannot be used to meet the bus-fleet requirements ~~discharge the purchase requirement of the waivers.~~

**(c) Zero-Emission Cutaway, Over-The-Road, Double Decker, and Articulated**

**Bus Purchase Requirements ~~Buses~~.** Purchases of cutaway, over-the-road, double decker, or articulated buses are subject to the zero-emission bus purchase requirements as specified in section 2023.1(a) on or after January 1, 2026, if the cutaway, over-the-road, double decker, or articulated bus type has a model that has passed the bus testing procedure and obtained a Bus Testing Report as described in section 2023(b)(8)(~~7~~) for a given weight class.

(d) Zero-Emission Bus Rollout Plan Requirements. A transit agency must submit a Zero-Emission Bus Rollout Plan (Rollout Plan) to the Executive Officer that meets the following requirements.

(1) Rollout Plans must include all of the following components:

(A) A goal of full transition to zero-emission buses by 2040 with careful planning that avoids early retirement of conventional internal combustion engine buses;

(B) Identification of the types of zero-emission bus technologies a transit agency is planning to deploy, such as battery electric or fuel cell electric bus;

(C) A schedule for construction of facilities and infrastructure modifications or upgrades, including charging, fueling, and maintenance facilities, to deploy and maintain zero-emission buses. This schedule must specify the general location of each facility, type of infrastructure, service capacity of an infrastructure, and a timeline for construction;

(D) A schedule for zero-emission and conventional internal combustion engine buses purchases and lease options. This schedule for bus purchases replacements must identify the bus types, fuel types, and number of buses;

(E) A schedule for conversion of conventional internal combustion engine buses to zero-emission buses, if any. This schedule for bus conversion must identify number of buses, bus types, the propulsion systems being removed and converted to;

(F) A description plan on how a transit agency plans to deploy zero-emission buses in disadvantaged communities as listed in the latest version of CalEnviroScreen (<https://oehha.ca.gov/calenviroscreen>) at the time of the Rollout Plan is submitted;



(G) A training plan and schedule for zero-emission bus operators and maintenance and repair staff; and

(H) Identification of potential funding sources.

(2) Each transit agency's governing board must approve the Rollout Plan through the adoption of a resolution, and submit the Rollout Plan and a copy of the resolution to the Executive Officer according to the following schedule:

(A) A large transit agency must submit its board approved Rollout Plan along with its approval to the Executive Officer by July 1, 2020;

(B) A small transit agency must submit its board approved Rollout Plan along with its approval to the Executive Officer by July 1, 2023.

(3) Transit agencies that are collectively complying with the requirements of Joint Zero-Emission Bus Groups as set forth in section 2023.2 may submit one joint Rollout Plan in lieu of an individual transit agency Rollout Plan along with board approval from each participating transit agencies. The joint Rollout Plan must be submitted to the Executive Officer based on the submittal date of the largest transit agency in the Joint Group, as set forth in section 2023.1(d)(2).

(e) **New Entrant.** A new entrant must meet the following requirements:

(1) It must submit a compliance report by ~~the first~~ March 31 ~~following after~~ its existence and every year thereafter as specified in section 2023.8; and

(2) It must submit a Rollout Plan within 18 months of its existence.

NOTE: Authority cited: Sections 38501, 38510, 38560, 39002, 39003, 39012, 39017, 39018, 39027, 39500, 39600, 39601, 39606, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43100, 43101, 43102, 43104, 43105, 43106, 43701(b), 43801 and 43806, Health and Safety Code. Reference: Sections 38501, 38510, 38560,

39002, 39003, 39017, 39027, 39500, 39600, 39601, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43101, 43104, 43105, 43701(b), 43801 and 43806, Health and Safety Code; Sections 233, 350, 545, and 28114, Vehicle Code; sections 5303 and 5324, title 49, United States Code; Code of Federal Regulations, title 49, section 665.13.

**§ 2023.2. Compliance Option for Joint Zero-Emission Bus Groups.**

(a) Two or more transit agencies may choose to form a Joint Zero-Emission Bus Group (Joint Group) to comply with the requirements of section 2023.1 collectively. A Joint Group must meet at least one of the following eligibility criteria:

- (1) All participating transit agencies are located within the same service area of a Metropolitan Planning Organization or Regional Transportation Planning Organization;
- (2) All participating transit agencies are located within the same Air Basin;
- (3) All participating transit agencies are located within the same Air Quality Management District, Air Pollution Control District, or Air Resources District;  
or
- (4) All participating transit agencies share infrastructure.

**(b) Procedure to form a Joint Group.**

- (1) A group of transit agencies forming a Joint Group must provide the Executive Officer a notice at least one year before the Joint Group takes effect. The notice must include all of the following information:
  - (A) A list of all participating transit agencies;
  - (B) A statement of intent to form the Joint Group from a responsible official for each participating transit agency;
  - (C) The proposed start year and if known the end date of the Joint Group;
  - (D) A description on which criteria specified in section 2023.2(a) are met to form a Joint Group.
- (2) The Executive Officer ~~may~~ will approve the joint agreement if.

(A) At least ~~provided~~ one of the criteria set forth in section 2023.2(a) has been met, and

(B) The notice required by section 2023.2(b)(1) has been provided.

(3) The Executive Officer will assign a Joint Group Number to the group to be used by each participating transit agency for the purpose of annual reporting as specified in section 2023.8.

**(c) Joint Group Compliance Requirements.**

(1) Members of a Joint Group collectively may submit one joint Rollout Plan in lieu of individual transit agency Rollout Plans, along with board approval from each transit agency's governing board as set forth in section 2023.1(d)(3).

(2) Members of a Joint Group must collectively purchase and operate at least the same total number of zero-emission buses annually as each transit agency would be required to purchase and operate individually as set forth in section 2023.1(a).

(3) A Joint Group that is requesting a deferral from zero-emission bus purchase requirements as described in section 2023.4 must explain why the compliance requirements cannot be met by ~~any~~ each member of the Joint Group.

(4) If a Joint Group fails to comply with the zero-emission bus requirements set forth in section 2023.1 in a given year, each transit agency will be evaluated for compliance individually.

(5) If the largest transit agency in a Joint Group, ~~based on fleet size,~~ is a large transit agency, ~~then in any given calendar year,~~ this transit agency must have the required minimum number of zero-emission buses as a percentage of its total new bus purchases in that calendar year as set forth in section 2023.1(a).

(d) **Changes to a Joint Group.** In case of a change in membership, all participating transit agencies, including the new or departing transit agency, must collectively submit a request to change membership to the Executive Officer explaining the change and its expected effective date. The member change request must be signed by the responsible official of each participating transit agency, including the new or departing transit agency, and must be submitted to the Executive Officer along with the board approvals for each participating transit agency, for such a change.

(e) All transit agencies participating in a Joint Group must individually meet the reporting and record-keeping requirements of sections 2023.8 and 2023.9.

NOTE: Authority cited: Sections 38501, 38510, 38560, 39002, 39003, 39012, 39017, 39018, 39027, 39500, 39600, 39601, 39606, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43100, 43101, 43102, 43104, 43105, 43106, 43701(b), 43801 and 43806, Health and Safety Code. Reference: Sections 38501, 38510, 38560, 39002, 39003, 39017, 39027, 39500, 39600, 39601, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43101, 43104, 43105, 43701(b), 43801 and 43806, Health and Safety Code; Sections 233, 350, 545, and 28114, Vehicle Code; sections 5303 and 5324, title 49, United States Code; Code of Federal Regulations, title 49, section 665.13.

**§ 2023.3. Zero-Emission Bus Bonus Credits.**

(a) A transit agency may earn Zero-Emission Bus Bonus Credits (Bonus Credits) for each early acquisition ~~adoption~~ of a zero-emission bus as determined based on the following criteria:

(1) Each fuel cell electric bus that was ~~purchased on or before December 31, 2017 and remained~~ in the fleet as of January 1, 2018 receives two Bonus Credits;

(2) Each fuel cell electric bus placed in service between January 1, 2018 and December 31, 2022 receives one Bonus Credit;

(3) Each battery electric bus that was ~~purchased on or before December 31, 2017 and remained in service~~ in the fleet as of January 1, 2018 receives one Bonus Credit;

(4) Each electric trolleybus ~~is~~ placed in service between January 1, 2018, and December 31, 2019, receives one-tenth of a Bonus Credit that will expire by December 31, 2024.

(b) Unless as specified in section 2023.3(a)(4), ~~Transit agencies that have Bonus Credits can use them in any subsequent years until December 31, 2028 to meet the required minimum number of zero-emission buses as set forth in section 2023.1(a)(4).~~

(1) Each Bonus Credit may only be used once to meet the zero-emission bus purchase requirements set forth in section 2023.1(a)(4);

(2) All Bonus Credits will expire on ~~January 1, 2029~~ December 31, 2028, which is when the one hundred percent zero-emission bus purchase requirement begins.

(c) A Bonus Credit cannot be transferred to another transit agency, but may be used by transit agencies participating in a Joint Group to comply with zero-emission bus purchase requirements collectively as set forth in section 2023.2(c)(2).

NOTE: Authority cited: Sections 38501, 38510, 38560, 39002, 39003, 39012, 39017, 39018, 39027, 39500, 39600, 39601, 39606, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43100, 43101, 43102, 43104, 43105, 43106, 43701(b), 43801 and 43806, Health and Safety Code. Reference: Sections 38501, 38510, 38560, 39002, 39003, 39017, 39027, 39500, 39600, 39601, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43101, 43104, 43105, 43701(b), 43801 and

43806, Health and Safety Code; Sections 233, 350, 545, and 28114, Vehicle Code; sections 5303 and 5324, title 49, United States Code; Code of Federal Regulations, title 49, section 665.13.

**§ 2023.4. Provisions for ~~Extension or~~ Exemption of a Zero-Emission Bus Purchase.**

(a) It is the intent of this section to ensure transit service is not adversely affected, transit agencies may request an ~~extension or~~ exemption from the zero-emission bus requirements set forth in section 2023.1 ~~as provided in this section.~~ The Executive Officer will grant an exemption upon request, if the specified criteria in section 2023.4(c) are met.

(b) A request for ~~extension or request for~~ exemption for a particular calendar year's compliance obligation must be submitted to the Executive Officer by November 30<sup>th</sup> of that year.

(c) A request for ~~extension or exemption~~ must demonstrate as provided below that at least one of the following circumstances exists beyond the transit agency's control:

~~(1) Delay in the bus delivery is caused by the bus manufacturer. A transit agency may request an extension of the requirements of section 2023.1(a)(4) if the purchased bus cannot be delivered in time due to manufacturing delays. This exemption is available for all bus purchases, including conventional internal combustion engine buses, zero-emission buses, and buses fully converted to zero-emission.~~

~~(A) A request for extension for delay in bus delivery caused by the bus manufacturer must include the following information:~~

~~1. An explanation of the delay and proof the manufacturer delayed delivery of the bus beyond the original delivery date;~~

- ~~2. A copy of the Notice to Proceed that shows when a transit agency notified the bus manufacturer to start with production of a bus; and~~
- ~~3. A copy of the contractual agreement for purchase and delivery of a bus.~~

~~(B) The Executive Officer may grant up to a one-year extension from the original expected delivery date.~~

~~(1)(2) Delay in bus delivery is caused by setback of construction schedule of infrastructure needed for the zero emission bus. A transit agency may request an exemption from extension of the requirements of section 2023.1(a)(4), if it cannot finalize the zero-emission bus infrastructure within two years of the initial bus purchase and in time to operate the purchased buses after delivery due to circumstances beyond the transit agency's control.~~

~~(A) For purposes of this section, zeroZero-emission bus infrastructure includes charging stations, hydrogen stations, and maintenance facilities. Such, and circumstances beyond the transit agency's control may include:~~

- ~~1. Delays with installingspace limitations for zero-emission bus infrastructure that would require the transit agency to purchase new rights-of-way or construct new facilities,~~
- ~~2. Change change of a general contractor,~~
- ~~3. Delays delays obtaining power from a utility,~~
- ~~4. Delays delays obtaining construction permits,~~
- ~~5. Archeological archeological discovery of historical or tribal cultural resources under the California Environmental Quality Act, or~~
- ~~6. Natural natural disaster.~~



~~(A)(B)~~ A transit agency must submit a request Request for exemptionExtension to the Executive Officer by submitting the following documentation: including an

1. A official letter from its Board of Directors, and,

2. A letter from the licensed contractor performing the work, related utility, building department, or other organizations involved in the project explaining the reasons for delay and estimating the completion date of the project.

~~(B) The Executive Officer may grant up to a one-year extension from the original expected bus delivery date, after validating the claim.~~

~~(C) If the required infrastructure still cannot be completed within the approved extension period, the~~ The transit agency may request an exemption from the zero-emission bus purchase requirements set forth in section 2023.1(a) if the transit agency can provide documentation that demonstrates the needed infrastructure cannot be completed within the two-year extension period or in time to operate the purchased buses after delivery, whichever is later.

~~(D) A transit agency may purchase conventional internal combustion engine buses instead of zero-emission buses once the exemption is granted. The approved exemption would be valid until the transit agency's next purchase cycle.~~

~~(2)(3) When available zero-emission buses at the end of battery or fuel cell stack warranty period cannot meet a transit agency's daily mileage needs.~~

~~(A) A transit agency may submit a request for exemption from the extension if zero-emission bus purchase requirements es at the end of the battery or fuel cell stack warranty provided by the ZEB manufacturer or battery manufacturer cannot be placed in revenue service to if no battery electric~~

bus can meet the daily mileage needs of any similar bus type in the fleet. For this purpose, a transit agency and by submitting documentation to ~~must~~ show that the miles travelled between charges of ~~all available depot charging battery electric buses~~ bus cannot meet the transit agency's daily operational needs for any bus in the existing fleet.

~~(B) (A) The Request~~ request for ~~Extension exemption~~ must include the following information:

1. An explanation of why the ~~extension exemption~~ is needed including: ~~along with~~
  - a. ~~how~~ How zero-emission buses that have already been purchased or placed in service were suitable, and
  - b. ~~why~~ Why the daily mileage range of any available depot charging battery electric bus is insufficient to meet the service needs of any conventional internal combustion engine bus in the transit agency's fleet of the same bus type;
2. A current monthly mileage report for each bus type in the fleet to show the daily usage for all of the buses of that type;
3. A copy of the zero-emission bus request for proposal and resulting bids ~~including~~ showing rated battery capacity that is available for each of the buses when new; and
4. If available, measured energy use data from ~~available~~ zero-emission buses operated on daily assignments in the transit agency's service which includes, but is not limited to, battery degradation, air conditioning, passenger loading, grades, and driving behavior that shows typical energy usage over one month or more of regular revenue service.

~~(C)(B) The Executive Officer will grant an review the exemption submitted information as set forth in section 2023.4(c)(3)(B) and compare the transit agency's required mileage with ranges of battery electric buses currently available using the Orange County Bus Cycle as described in section 2023(b)(39) to determine the energy use per mile. If if the transit agency's required range cannot be met based on its battery electric bus energy use data. If energy use data is not available for the transit agency, the tested energy use on the Orange County Bus Cycle described in section 2023(b)(40) will be used to determine the energy use per mile. If the minimum required range is higher than eighty (80) percent of the range on available battery electric buses (using the largest available battery pack at the end of battery or fuel cell stack warranty period) on this cycle, the transit agency will be granted an extension exemption from the zero-emission bus purchase requirement.~~

~~(C) A transit agency may purchase an internal combustion engine bus instead of a zero emission bus once the exemption is granted until the next bus purchase.~~

~~(3)(4) A transit agency may request an exemption if available zero-emission buses do not have adequate gradeability performance to meet the transit agency's daily needs for any bus in its fleet.~~

~~(A) The transit agency must provide the following information to the Executive Officer:~~

- ~~1. Documentation that no other buses in the fleet can meet the transit agency's gradeability requirements and that the available zero emission buses of that bus type cannot be placed into service anywhere else in the fleet;~~
- ~~2. Topography information including the measurement of the grade(s) where the zero-emission buses would be placed in service along~~

with the explanation of which bus types currently provide these services;

3. An description of the bus types that currently serve the route(s) in question, and data showing the performance of conventional internal combustion engine buses of the same bus type that includes the passenger load, bus speed and grade of slope measured when operating on the route(s) the zero-emission buses would be placed in service;
4. An explanation of why the gradeability of all available zero emission buses are insufficient to meet the transit agency's service needs;
5. A copy of the zero-emission bus request for proposal, specifying the transit agency's required gradeability and minimum sustained speed, and the resulting bids; and
6. If available, empirical data including but not limited to grades, passenger loading, and speed data from available zero-emission bus operated on the same grade to show that available zero-emission buses are unable to meet the same speed requirements under the same operating conditions as the same type of conventional bus in the transit agency's fleet.

(B) A transit agency may purchase an internal combustion engine bus instead of a zero emission bus once the exemption is granted.

(4) When a required zero-emission bus type for the applicable weight class based on gross vehicle weight rating (GVWR) is unavailable for purchase.

(A) A transit agency may request an exemption from an immediate zero-emission bus purchase requirement as set forth in section 2023.1(a) if zero-emission buses are unavailable as described below, ~~provided that all~~

available zero-emission buses have been purchased in that compliance year.

(B) A zero-emission bus type is considered unavailable for purchase if any of the following circumstances exists:

1. The zero-emission bus has not passed the complete Bus Testing and not obtained a Bus Testing Report as described in section 2023(b)(8)(7);
2. The zero-emission bus cannot be configured to meet applicable requirements of the Americans with Disabilities Act (ADA); or
3. The physical characteristics of the zero-emission bus would result in a transit agency violating any federal, state, or local laws, regulations, or ordinances.

(C) The request for exemption must include the following information:

1. A summary of all bus body-types, vehicle weight classes being purchased with their GVWR, chassis (if applicable), and the reasons why existing zero-emission buses are unavailable for purchase;
2. ~~Current~~ ~~The transit agency must update its~~ ~~fleet information to show~~ ~~showing~~ ~~how many zero-emission buses of that bus type are~~ ~~already in service and how many are on order and a demonstration~~ ~~that any available zero-emission bus that would meet the purchase~~ ~~requirement have been purchased and to show that the zero-~~ ~~emission bus purchase requirement cannot be met with purchase~~ ~~of other types of zero-emission buses purchases in that year;~~
3. If the zero-emission bus type and vehicle weight class to be purchased cannot be adequately equipped to meet applicable Americans with Disabilities Act requirements, then the transit

agency must submit documentation to show what Americans with Disabilities Act requirement cannot be met and why the manufacturer cannot meet it by submitting information from the manufacturer; and

4. If the zero-emission bus would result in a transit agency violating any federal, state, or local law, regulation, or ordinance, then the transit agency must submit an official letter from its Board of Directors that details how the physical characteristics of the zero-emission bus would violate such federal, state, or local law, regulation or ordinance and how the violation would be avoided with the purchase of a combustion engine bus of the same type. This letter must include all relevant citations to state and federal regulatory code sections.

(D) The Executive Officer ~~may~~ will grant an exemption from the requirement to purchase ~~unavailable~~ zero-emission buses of the unavailable weight class and bus types ~~described in section 2023.4(d)(1)(A)~~ if the criteria of section 2023.4(c)(4)(B) are met and the information required by section 2023.4(c)(4)(C) had been provided.

(E) A transit agency may purchase conventional internal combustion engine buses instead of such unavailable zero-emission buses for that bus in a ~~designated cycle of~~ purchase once the exemption is granted. ~~The exempted buses shall be excluded from the total number of new bus purchases in that year.~~

- (5) When a required zero-emission bus type cannot be purchased by a transit agency due to financial hardship. A transit agency may request an exemption from the zero-emission bus purchase requirements set forth in section 2023.1(a) due to financial hardship.

(A) Financial hardship would be ~~restricted to~~ granted if a fiscal emergency is declared under a resolution by a transit agency's Board of Directors following a public hearing, a transit agency can demonstrate that it cannot offset the incremental cost of purchasing all available zero emission buses when compared to the cost of the same type of conventional bus, or a transit agency can demonstrate that it cannot offset the managed, net electricity cost for depot charging battery electric buses when compared to the fuel cost of the same type of conventional internal combustion engine buses.

(B) The request for exemption must include the following documentation: ~~a~~

1. Either a resolution by a transit agency's ~~Board~~ board declaring a fiscal emergency; or

2. Documentation showing a transit agency cannot offset the initial capital cost of purchasing zero-emission buses, including:

a. A letter from a transit agency's board declaring the transit agency in good faith has applied for all available funding and financing options that could be used to offset the higher capital costs of zero-emission buses and associated infrastructure;

b. Documentation to show the transit agency has been denied financing, or financing options are not available; and

c. Documentation to show the transit agency cannot offset the higher incremental costs of available zero-emission buses.

(C) The Executive Officer ~~will~~ may grant an exemption from the requirement to purchase ~~of~~ zero-emission buses until the next bus purchase.

(D) A transit agency may purchase conventional internal combustion engine buses instead of zero-emission buses ~~in a designated purchase cycle~~

once the exemption is granted. ~~The exempted buses shall be excluded from the total number of new bus purchases in that year.~~

NOTE: Authority cited: Sections 38501, 38510, 38560, 39002, 39003, 39012, 39017, 39018, 39027, 39500, 39600, 39601, 39606, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43100, 43101, 43102, 43104, 43105, 43106, 43701(b), 43801 and 43806, Health and Safety Code. Reference: Sections 38501, 38510, 38560, 39002, 39003, 39017, 39027, 39500, 39600, 39601, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43101, 43104, 43105, 43701(b), 43801 and 43806, Health and Safety Code; Sections 233, 350, 545, and 28114, Vehicle Code; sections 5303 and 5324, title 49, United States Code; Code of Federal Regulations, title 49, section 665.13.



Adopt new sections 2023.5, 2023.6, 2023.7, 2023.8, 2023.9, 2023.10, and 2023.11, title 13, California Code of Regulations to read as follows:

(Note: The entire text of sections 2023.5, 2023.6, 2023.7, 2023.8, 2023.9, 2023.10, and 2023.11 set forth below is new language in “normal type” proposed to be added to the California Code of Regulations.)

**§ 2023.5. Zero-Emission Mobility Option.**

(a) A transit agency may opt to use a Zero-Emission Mobility Program in lieu of making a zero-emission bus purchase to meet the required minimum number of zero-emission buses as set forth in section 2023.1(a)(4) if such program meets the following requirements:

(1) The program provides zero-emission mobility services by using bicycles, scooters, or other zero-emission vehicles with a GVWR of 14,000 pounds or less, or any combination of these both;

(2) The program must be either directly operated by the transit agency or operated by a contractor to the transit agency;

(3) The transit agency must be able to track and record zero-emission passenger miles for each zero-emission vehicle.

(4) A transit agency must achieve the following zero-emission passenger miles per year to be eligible to receive each mobility credit:

(A) A large transit agency must achieve at least 320,000 zero-emission passenger miles per year;

(B) A small transit agency must achieve at least 180,000 zero-emission passenger miles per year.

(b) Procedure to opt-in and opt-out of a Zero-Emission Mobility Option.

(1) To opt into a zero-emission mobility option, a transit agency must submit a Request to Opt-In to the Executive Officer with the following information to prove it is meeting the requirements set forth in section 2023.5(a):

(A) A description of the types of vehicles, including their GVWR and types of propulsion systems;

(B) Documentation to show who will operate these services; and

(C) A description of the method of collecting accurate zero-emission passenger miles per vehicle.

(2) A transit agency may choose to opt out from the Zero-Emission Mobility Option at any time with the submittal of a Request to Opt-Out to the Executive Officer with expected date of program termination.

(c) Calculation and issuance of mobility credits.

(1) ~~Upon approval by the Executive Officer, a~~ Provided the criteria set forth in section 2023.5(a) has been met and the information required by section 2023.5(b) has been submitted to the Executive Officer, a transit agency that opts into a Zero-Emission Bus Mobility Option may receive one credit that is equivalent to operation of one zero-emission bus in the fleet based on the following calculations:

(A) When a bicycle is used in a Zero-Emission Mobility Option, a multiplier of three (3) shall apply when quantifying zero-emission passenger miles from a bicycle.

(B) The zero-emission mobility credit is calculated by ~~dividing using the total~~ zero-emission passenger miles in each calendar year achieved by the Zero Emission Mobility program divided by 320,000 passenger miles per year for a large transit agency or divided by 180,000 passenger miles per year for a small transit agency;

(C) For each calendar year, if a transit agency maintains at least the same zero-emission passenger miles as required in section 2023.5(a)(4) then the mobility credits will continue to count as zero-emission buses in the fleet.

(D) If the calculated number of mobility credits as set forth in section 2023.5(c)(1)(B)(A) does not result to a whole number, the number must be rounded to the nearest integer to determine the number of credits.

(d) Use of mobility credits.

(1) Each calculated credit as set forth in section 2023.5(c)(1)(B)(A) will be treated the same as operating one zero-emission bus in the fleet in a given calendar year.

(2) Each mobility credit earned annually by a transit agency may be counted the same as having a zero-emission bus by the transit agency in its fleet will be used when calculating the required minimum number of zero-emission buses in the following year of achieving passenger miles as set forth in section 2023.1(a)(4).

(e) Reporting. Any transit agency that opts into the is approved to use Zero-Emission Mobility Option must report annually to show the total zero-emission passenger miles achieved in the previous calendar year. A transit agency using the Zero-Emission Mobility Option must meet the reporting and record keeping requirements set forth in sections 2023.8(f) and 2023.9(c) for zero-emission passenger miles.

NOTE: Authority cited: Sections 38501, 38510, 38560, 39002, 39003, 39012, 39017, 39018, 39027, 39500, 39600, 39601, 39606, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43100, 43101, 43102, 43104, 43105, 43106, 43701(b), 43801 and 43806, Health and Safety Code. Reference: Sections 38501, 38510, 38560, 39002, 39003, 39017, 39027, 39500, 39600, 39601, 39650, 39655, 39658, 39659,

39667, 40000, 43000.5, 43013, 43018, 43101, 43104, 43105, 43701(b), 43801 and 43806, Health and Safety Code; Sections 233, 350, 545, and 28114, Vehicle Code; sections 5303 and 5324, title 49, United States Code; Code of Federal Regulations, title 49, section 665.13.

**§ 2023.6. Low-NOx Engine Purchase Requirements.**

(a) Starting January 1, 2020, when new conventional internal combustion engine bus or hybrid bus purchases are made, transit agencies must purchase buses with Low-NOx engines if ~~the~~ Low-NOx engines are available that meet both of the following criteria for the bus type and propulsions system type being purchased:

(1) The engine or hybrid propulsion system paired with the engine must have been commercially available for purchase or lease for at least two years; and

(2) The engine or hybrid propulsion system paired with the engine must be certified to the lowest level of NOx emissions per title 13 of California Code of Regulations, section 2208(c)(18) at the time of purchase that is suitable for the bus and fuel type for the engine being purchased.

(b) The Low-NOx engine purchase requirements apply to the purchase of all new conventional internal combustion engine buses, ~~except but does not apply to the buses that will be~~ ~~are~~ dispatched from areas defined as NOx Exempt Areas as described in section 2023(b)(39)(37).

(c) Any ~~early~~ Low-NOx engine purchases prior to January 1, 2020, including any voluntary Low-NOx engine repower, may be counted once towards meeting the requirements set forth in section 2023.6 (a) through (b).

(d) A transit agency that is subject to Low-NOx engine purchase requirements must report annually as set forth in section 2023.8(g) and keep records of all conventional internal combustion engine bus purchases as required in section 2023.9(d).

NOTE: Authority cited: Sections 38501, 38510, 38560, 39002, 39003, 39012, 39017, 39018, 39027, 39500, 39600, 39601, 39606, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43100, 43101, 43102, 43104, 43105, 43106, 43701(b), 43801 and 43806, Health and Safety Code. Reference: Sections 38501, 38510, 38560, 39002, 39003, 39017, 39027, 39500, 39600, 39601, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43101, 43104, 43105, 43701(b), 43801 and 43806, Health and Safety Code; Sections 233, 350, 545, and 28114, Vehicle Code; sections 5303 and 5324, title 49, United States Code; Code of Federal Regulations, title 49, section 665.13.

**§ 2023.7. Requirements to Use Renewable Fuels.**

(a) Starting January 1, 2020, a large transit agency must purchase only renewable diesel or renewable natural gas when renewing fuel purchase or delivery contracts for diesel or natural gas. A small transit agency is exempt from this requirement.

(b) A large transit agency that is subject to the requirements set forth in section 2023.7(a) must meet the reporting and record keeping requirements set forth in sections 2023.8(h) and 2023.9(e) for all new and renewed fuel purchase or delivery contracts.

NOTE: Authority cited: Sections 38501, 38510, 38560, 39002, 39003, 39012, 39017, 39018, 39027, 39500, 39600, 39601, 39606, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43100, 43101, 43102, 43104, 43105, 43106, 43701(b), 43801 and 43806, Health and Safety Code. Reference: Sections 38501, 38510, 38560, 39002, 39003, 39017, 39027, 39500, 39600, 39601, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43101, 43104, 43105, 43701(b), 43801 and 43806, Health and Safety Code; Sections 233, 350, 545, and 28114, Vehicle Code; sections 5303 and 5324, title 49, United States Code; Code of Federal Regulations, title 49, section 665.13.

**§ 2023.8. Reporting Requirements for Transit Agencies.**

(a) Commencing March 31, 2021, and continuing every year thereafter through March 31, 2050, each transit agency must annually submit by March 31 to the Executive Officer a compliance report meeting the requirements of this section for the prior calendar year.

(b) The initial report must be submitted by March 31, 2021, and must include the number and information of active buses in the transit agency's fleet as of December 31, 2017.

(c) Each transit agency must report the following information annually:

(1) Transit agency information.

(A) Name of the transit agency; ~~its~~

(B) Transit agency mailing address;~~;~~

(C) ~~5-digit~~ National Transit Database (NTD) identification number;~~;~~

(D) Name ~~name~~ of related Metropolitan Planning Organization (MPO) or Regional Transportation Planning Agency; ~~Agencies;~~

(E) Air ~~air~~ district;~~;~~

(F) Air ~~air~~ basin;~~;~~

(G) ~~the~~ Joint Group Number (if applicable as set forth in section 2023.2(b)(2) ~~;~~ and

(H) Name ~~name~~ of a contact person;~~;~~

(I) ~~that person's~~ Contact e-mail address;~~;~~

(J) Contact title; and

(K) Phone ~~phone~~ number;

(2) Information on each bus purchased, owned, operated, leased, or rented by a transit agency, including the following:

(A) Information on vehicle.

1. Vehicle identification number (VIN);

2. License~~license~~ plate;

3. Transit~~transit~~ agency fleet's own vehicle ID;

4. Ownership~~ownership~~ type (owned, leased, rented) ;

5. Make~~make~~;

6. Model~~model~~;

7. Bus type;

8. Bus length;

9. Chassis~~chassis~~ (if applicable) ;

10. Bus fuel type;

11. GVWR;~~curb weight~~;

12. Manufacture~~manufacture~~ year;

13. Propulsion~~propulsion~~ technology type;

14. Vehicle~~vehicle~~ status (active, emergency contingency, or retired) ;

15. Date~~date~~ in-service; and

16. Bus retired date;

(B) Information on engine and propulsion system.

1. Engine manufacturer;
2. Engine model;
3. Engine model year;
4. Engine family name;
5. Engine cylinder displacement size (liters) ;
6. Battery rated capacity or energy level (kWh) ;
7. Bus charging strategy type (on-route, in depot, combination) ;
8. Fuel cell system manufacturer;
9. Fuel system model; and
10. Fuel system rated power (kW);

(C) Information on bus purchases. Quantity of zero-emission and conventional internal combustion engine buses purchased in the calendar year and their status as new or used, effective date of a Notice to Proceed, and actual or expected bus delivery date; and

(D) Information on converted buses. Quantity of buses fully converted to zero-emission from conventional internal combustion engine buses in each calendar year.

(d) Each transit agency subject to the requirements of section 2023.2 must report the same information as required under sections 2023.8(a) through 2023.8(c) using the assigned Joint Group Number.

(e) CARB will calculate the number of bonus credits set forth in section 2023.3(a) based on the required information in section 2023.8(c).

(f) Each transit agency operating a Zero-Emission Mobility Option as set forth in section 2023.5 must report the following information:



- (1) Total accumulated annual zero-emission passenger miles provided by scooters and other vehicles with a GVWR of 14,000 pounds or less;
- (2) Total accumulated annual zero-emission passenger miles provided by bicycles; and
- (3) CARB will calculate the number of mobility credits annually according the requirement of section 2023.5(c)(1)(A) and reported total zero-emission passenger miles.

(g) Each transit agency subject to requirements for purchase of Low-NOx engines as set forth in section 2023.6(b)(1) must submit an annual report identifying the general location a conventional internal combustion engine bus is dispatched from, the NOx Certification Standard, and the NOx Executive Order number.

(h) Each transit agency subject to requirements to use renewable fuels as set forth in section 2023.7 must submit annual report identifying fuel types used, quantity of renewable and non-renewable fuel purchased, and fuel contract number and its effective date and expected or actual end date.

(i) A report that does not contain all required information in sections 2023.8(c) through (h) will not be considered complete. A report will be considered to be complete as of the date that all required information is submitted.

NOTE: Authority cited: Sections 38501, 38510, 38560, 39002, 39003, 39012, 39017, 39018, 39027, 39500, 39600, 39601, 39606, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43100, 43101, 43102, 43104, 43105, 43106, 43701(b), 43801 and 43806, Health and Safety Code. Reference: Sections 38501, 38510, 38560, 39002, 39003, 39017, 39027, 39500, 39600, 39601, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43101, 43104, 43105, 43701(b), 43801 and 43806, Health and Safety Code; Sections 233, 350, 545, and 28114, Vehicle Code; sections 5303 and 5324, title 49, United States Code; Code of Federal Regulations, title 49, section 665.13.

## **§ 2023.9. Record Keeping Requirements.**

(a) Each transit agency subject to the reporting requirements of section 2023.8 must maintain copies of the information reported under section 2023.8, as well as the records described in subsections (b) through (e) in this section, and retain such records as required below in subsection (g).

(b) Each transit agency must maintain records of all purchased, leased, rented or operated conventional internal combustion engine buses, zero-emission and full converted buses to zero-emission buses for the purpose of demonstrating compliance with the requirements of sections 2023.1 through 2023.4 and section 2023.6. Transit agencies must keep record of the following:

(1) Every Notice to Proceed sent to bus manufacturers or sales representatives for the purpose of purchasing buses;

(2) Bus purchase contracts that Notice to Proceeds are based upon;

(3) Any lease agreements with bus manufacturers or sales representatives;

(4) Documentation to show ownership transfer for purchase of used buses;

(5) Documentation to show when a conventional internal combustion engine bus is fully converted to a zero-emission bus;

(6) Copy of vehicle's registration;

(7) Proof of bus delivery date.

(c) A transit agency that has opted-in to a Zero-Emission Mobility Option must keep records of zero-emission passenger miles generated by scooters, bicycles and other eligible zero emission vehicles ~~and bicycles.~~

(d) Each transit agency subject to requirements of section 2023.6 must maintain bus purchase contracts of conventional internal combustion engine buses, including the ones with Low-NOx engines, to demonstrate compliance.

(e) Each large transit agency must maintain records of ~~every~~ all fuel contracts that are executed on and after January 1, 2020, demonstrate compliance with the requirements specified in section 2023.7.

(f) Audit of Records. A transit agency must make the records required under this section available to CARB within 10 calendar days of its request for an audit to verify the accuracy of the reported information.

(g) Record Retention. A transit agency shall maintain the records required under this section for each bus, zero-emission passenger miles, and fuel contracts that are subject to the reporting requirements of section 2023.8 and record keeping requirements of section 2023.9(b) through (e) for three (3) years after the bus is retired, ownership is transferred, or the fuel contract is expired.

NOTE: Authority cited: Sections 38501, 38510, 38560, 39002, 39003, 39012, 39017, 39018, 39027, 39500, 39600, 39601, 39606, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43100, 43101, 43102, 43104, 43105, 43106, 43701(b), 43801 and 43806, Health and Safety Code. Reference: Sections 38501, 38510, 38560, 39002, 39003, 39017, 39027, 39500, 39600, 39601, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43101, 43104, 43105, 43701(b), 43801 and 43806, Health and Safety Code; Sections 233, 350, 545, and 28114, Vehicle Code; sections 5303 and 5324, title 49, United States Code; Code of Federal Regulations, title 49, section 665.13.

#### **§ 2023.10. Authority to Suspend, Revoke, or Modify.**

(a) If the Executive Officer finds that any zero-emission bus bonus or mobility credit was obtained based on false information, the Executive Officer may revoke the

credit. Each revoked credit is equivalent to one required zero-emission bus the agency has failed to purchase. A transit agency with a deficit in the numbers of required zero-emission buses is considered to be in violation of zero-emission bus requirements as set forth in section 2023.1.

NOTE: Authority cited: Sections 38501, 38510, 38560, 39002, 39003, 39012, 39017, 39018, 39027, 39500, 39600, 39601, 39606, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43100, 43101, 43102, 43104, 43105, 43106, 43701(b), 43801 and 43806, Health and Safety Code. Reference: Sections 38501, 38510, 38560, 39002, 39003, 39017, 39027, 39500, 39600, 39601, 39650, 39655, 39658, 39659, 39667, 40000, 43000.5, 43013, 43018, 43101, 43104, 43105, 43701(b), 43801 and 43806, Health and Safety Code; Sections 233, 350, 545, and 28114, Vehicle Code; sections 5303 and 5324, title 49, United States Code; Code of Federal Regulations, title 49, section 665.13.

**§ 2023.11. Severability.**

(a) If any subsection, paragraph, subparagraph, sentence, clause, phrase, or portion of the Innovative Clean Transit Regulations in this article 4.3 is for any reason held invalid, unconstitutional, or unenforceable by any court of competent jurisdiction, such portion shall be deemed as a separate, distinct, and independent provision, and such holding shall not affect the validity of the remaining portions of these Innovative Clean Transit Regulations.

NOTE: Authority cited: Sections 38596, 39600, and 39601, Health and Safety Code. Reference: Sections 38596, 39600, and 39601.