

Subject: Comment Submission for Proposed ONMC Regulation Order

Dear California Air Resources Board,

I hope this message finds you well. On behalf of LiveWire, an electric motorcycle manufacturer, we would like to express our thoughts on the proposed amendments to the Appendix A On-Road Motorcycle Standards and Test Procedures and Adoption of New On-Board Diagnostics and Zero-Emission Motorcycle Requirements.

#### Amendment Specific Comments

Upon review of the proposed Amendments, LiveWire respectfully offers the following comments:

#### **Appendix A**

##### **1. Section 1958.2.(a) Applicability**

Electric motorcycles do not produce emissions and do not have emission control systems; thus these vehicle types shall be exempt from On-Board Diagnostic requirements. It is noted in 1958.2.(b)(1) that the requirements "...includes only the OBD monitors and functions that are related to emission control systems and associated components, not those associated exclusively with functional safety or other items unrelated to emissions." This however does not explicitly state electric motorcycles as being exempt from the requirements.

LiveWire would like to propose additional language be added that mirrors other language in this proposed regulatory order stating the following "Motorcycles are excluded from the requirements of this section if: The motorcycle is Zero-Emission Motorcycle as described in title 13, California Code of Regulations (CCR) section 1958.4(b)."

##### **2. Section 1958.3.(a)(1) Applicability**

Like our comments of Section 1958.2.(a) LiveWire would like to propose additional language be added that mirrors other language in this proposed regulatory order stating the following "Motorcycles are excluded from the requirements of this section if: The motorcycle is Zero-Emission Motorcycle as described in title 13, California Code of Regulations (CCR) section 1958.4(b)."

##### **3. Section 1958.4(b) Definitions**

LiveWire supports CARB's definition but has a concern with the callout/definition listed for "Highway Fuel Economy Drive Cycle (HFEDS)" as it's the drive cycle described by 40 CFR Section 600.109(b) which CARB states is incorporated by reference. However, under section (e) of this requirement CARB defines the test procedure to follow either the SAE J2982\_202210 or the EU Regulation No. 134/2014. Neither of these test procedures refer to the 40 CFR Section 600.109(b).

##### **4. Section 1958.4(e)(1)(F)**

LiveWire supports CARB's statement for default mode, however LiveWire has concerns over what is meant by "normal mode". LiveWire would like to recommend that CARB add additional language to section 1958.4(b) Definitions to provide clearer definition for "default" and "normal mode".

Electric vehicles may be equipped with multiple riding modes of which all are capable of meeting the range test requirements. However, these ride modes may result in different reported range values based upon their settings.

##### **5. Section 1958.4(h)(4)**

LiveWire wanted to note a possible grammatical error € should be (e).

##### **6. Section 1958.5(c)**

LiveWire supports CARB's requirements for qualifying for the fast charge credit, however LiveWire would like to propose an additional acceptable criterion be added. As of December 18, 2023, SAE published its J3400-202312 NACS Electric Vehicle Coupler, LiveWire would like for this to be added as a qualified charging standard.

**7. Section 1958.5(c)(1)(A)**

LiveWire supports CARB's requirements for equipment with a conductive charging inlet and on-board charging system, however LiveWire would like to propose an amendment to this language by adding the option for also meeting DC Level 3 per SAE. Vehicles shall be able to meet AC Level 1 and Level 2 per SAE J1772 OR shall meet DC Level 3 per SAE J1772. Following SAE J1772 provides options for the combined charging system (CCS) which offers both AC using an on-board charger and DC which by-passes the charger and charges the battery directly. This DC charging provides the quickest means for charging of a vehicle.

**8. Section 1958.5(f)(1)**

LiveWire supports CARB's method for determining total credits and the information for which manufacturers need to provide, however LiveWire has a concern with the requirement to provide the Vehicle Identification Number (VIN) for each ZEM that was produced and delivered for sale in California. Currently with ICE vehicles CARB only requires the final summation of vehicles produced and delivered, manufacturers are not required to provide the VIN's for each ICE vehicle sold. As EV's continue to grow in popularity this list will become quite extensive. The other criteria such as make, model, ZEM group, certified range and fast charge equipment (if applicable) is all that CARB would need to calculate and determine ZEM credits, the VIN will not provide any value to the determination.

LiveWire proposes that the Vehicle Identification Number (VIB), be removed from the required information provided to determine ZEM credits.

**9. Section 1958.5(i)**

LiveWire supports CARB's requirements of this section. LiveWire however would like to ask a question as to whether CARB will provide a template or a set of requirements for what information shall be provided when credits are transferred. Like section 1958.5(f) when determining credits, manufacturers need to provide criteria to CARB for how to determine. What information needs to be provided to CARB when credits are transferred?

**10. Section 1976.**

Like our comments of Section 1958.2.(a) and 1958.3.(a)(1) LiveWire would like to propose additional language be added that mirrors other language in this proposed regulatory order stating the following "Motorcycles are excluded from the requirements of this section if: The motorcycle is Zero-Emission Motorcycle as described in title 13, California Code of Regulations (CCR) section 1958.4(b)."

**11. Section 2036.(b)(D)**

Like our comments of Section 1958.2.(a), 1958.3.(a)(1), and 1976 LiveWire would like to propose additional language be added that mirrors other language in this proposed regulatory order stating the following "Motorcycles are excluded from the requirements of this section if: The motorcycle is Zero-Emission Motorcycle as described in title 13, California Code of Regulations (CCR) section 1958.4(b)."

**12. Section 2036.(c) Warranty Period**

LiveWire would like to note that the current language is specific to internal combustion engines only. Electric vehicles motors are not defined in displacement and would not fit within the current definition of Class I, II or III vehicle types. LiveWire would like to propose Electric motorcycles be excluded from Section 2036. Requirements or additional definition be added to define how electric motorcycles shall be handled.

**13. Section 2112. Definitions**

Like our comments of Section 2036.(c) LiveWire would like to propose additional language be added for definition of Class I, II and III electric motorcycles, as the current definitions which are defined in displacement volumes do not apply to electric motorcycles.

**14. Section 2904.(c)(3) Certification Fees**

According to the note at the bottom of this table, CARB has identified that the Certification of ZEM groups will begin in MY 2028. It therefore seems unnecessary to show the ZEM test group fee as listed in the MY25-MY27 table if it is not applicable until 2028. This new addition should be placed in the table under (c)(4) for MY2028 and subsequent model years.

CARB proposes to start the collection of fees from MY25, however there is no option provided for a partial carryover, or carryover cost for manufacturers that may have products starting in MY25 which could then be carried over into MY26 & MY27. For the equivalent ICE products, a discount is granted for these products. LiveWire believes that EVs should not be excluded from a similar discounted rate.

**Appendix B2**

**15. Section 1. Applicability**

LiveWire would like to propose that the language be amended to mirror that of appendix B1 applicability. Electric motorcycles do not produce evaporative emissions and should be excluded from these requirements.

“...determine evaporative emissions from model year 2028 and subsequent on-road motorcycles (ONMC), **except for zero-emission motorcycles, subject to the phase-in schedule of title 13, CCR, section 1958(h)(5).** This test procedure...”

On behalf of LiveWire. we appreciate the opportunity to contribute to this discussion.

Sincerely,

Brian Silovich  
LiveWire EV, LLC.