Subject: Comment Submission for Modified 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:

1. Section 1958.1(b) & Section 1956.8(a)(3)

LiveWire would like to request clarification on how CARB defines "delivered for sale". Does CARB intend this to be when a street-use motorcycle is wholesaled or retailed to final consumer.

The reporting requirements are also specified to indicate the specific model year. As ZEM adoption is in early stages, manufacturers may have excess inventory of past model years that they are still trying to retail. Would sales of MY23 or prior be eligible if sold in CY 2024+ towards the end of model year reporting and ZEM Credit Generation?

2. 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).

3. Section 1958.5(c)(2)

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.

4. Section 1958.5(d)(2)

LiveWire would like to propose that CARB consider extending, or adding a reduced multiplier for Model Years 2034 – 2035. This is currently a gap between the calculated credit and the flat rate that goes into effect for Model Year 2036. At least possibly consider a 2x multiplier for Tier III vehicles.

5. 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 (VIN), be removed from the required information provided to determine ZEM credits.

6. 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?

7. Section 1958.7(d)(1)

Assuming compliance and enforcement testing would be audit checks of performing the certified range tests, what shall be the acceptable criteria for deviations from the value that has been reported by manufacturers? Range testing varies depending on multiple factors such as ambient conditions, rider mass, rider input (into controls), vehicle to vehicle variability, etc.

How can a manufacturer ensure that they are staying within the compliance as the range tests per SAE and EU 134/2014 are a single declaration value from the output of a single test run.

8. Section 1976.

Like our comments on Section 1958.2.(a) and 1958.3.(a)(1) LiveWire would like to propose that 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)."

9. 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)."

10. 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.

11. 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.

12. 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.

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

Brian Silovich LiveWire EV, LLC.