

11 June 2024

National Highway Traffic Safety Administration (NHTSA)  
Department of Transportation (DOT)

Re: [Docket No. NHTSA-2024-0012] Notice of proposed rulemaking (NPRM) Federal Motor Vehicle Safety Standards; FMVSS No. 305a Electric-Powered Vehicles: Electric Powertrain Integrity Global Technical Regulation No. 20, Incorporation by Reference

49 CFR Part 571  
RIN 2127-AM43

Dear NHTSA,

The American Council of Independent Laboratories is a long-time membership organization that advocates and supports the independent testing and certification across multiple industries.

One of the sections of ACIL is the Conformity Assessment Section (CAS) which is made up testing, product evaluation and certification stakeholders including laboratories, accreditation bodies, and certification bodies (TCBs).

The American Council of Independents Laboratories (ACIL) respectfully submits the following responses to the aforementioned Docket.

### General Comments

ACIL is in strong support of NHTSA incorporating existing standards for conformity assessment and testing by reference within its rules. ACIL also supports in adding new requirements and test procedures covering new and existing aspects of electric vehicle safety especially with regard to the battery. ACIL member laboratories look forward to supporting manufacturers in complying with the agency's testing requirements regarding electric vehicle safety.

### Specific Comment

Page 130 paragraph 2 states:

*"Part of the performance criteria for a thermal runaway propagation test under consideration is for some form of warning to vehicle occupants and/or bystanders outside the vehicle in the event of thermal propagation within and outside the REESS. However, NHTSA considers warning to be a secondary mitigation strategy which would not prevent the thermal propagation from occurring in the first place. Thermal propagation resulting in EV fires are difficult to extinguish and may cause significant damage to adjacent structures and may pose a safety risk to people nearby, even when a warning is provided."*

ACIL Comment: While this statement is correct that a warning is not actual mitigation of thermal runaway, it is a mechanism that will otherwise save lives. In the same way that fire alarms, bomb sirens, and unbuckled seat belt warnings save lives by ensuring people are notified of impending danger with a sufficient enough lead time to take proactive measures. Although the proposed documentation requirements are "providing a holistic risk mitigation of thermal propagation", ACIL recommends a passenger/bystander warning system be included in the design and testing requirements. The warning will save lives and could even be enforced in a simple manner that would allow for first responders and others to know when the battery system has identified a hazard, again, analogous to a fire alarm. Exact means by which this alarm should visually, audibly, or otherwise be implemented can be left up to committee, but it should be specific and universal to the REESS within vehicles.

As NHTSA works to finalize this NPRM, ACIL strongly encourages NHTSA to include requirements for a warning mechanism to vehicle occupants and/or bystanders outside the vehicle in the event of thermal propagation.

Respectfully,



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