

May 31, 2022

Chair Liane Randolph and Members of the Board
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Subject: Battery Durability Requirements, Electric Vehicle Manufacturers Comments

We appreciate the opportunity to provide input to the Advanced Clean Cars II (ACC II) rulemaking, and specifically on the battery durability requirements proposed in the Initial Statement of Reasons (ISOR). The resulting regulation will have unprecedented impact on the landscape of transportation, not only in California but nationwide. This letter, signed by a wide swath of automakers (The Automakers), including those who produce only electric vehicles (EVs), and those whose fleets are in transition, requests changes to the battery durability requirements to ensure California's requirements do not inadvertently add costs and weight to electric vehicles.

The Automakers recognize the need to ensure new customers have sufficient confidence to adopt EVs, enabling the rapid acceleration in sales called for by the Governor's Executive Order and the ACC II rule itself. The Automakers support plans to provide EV customers with real-time information on battery state-of-health, with benefit to both customers and the used-vehicle market. The Automakers, who already provide generous EV battery warranties to customers without regulatory obligation, are supportive of a Battery Warranty provision, as included in the ACC II draft rule for Model Years 2026-2030, which requires a customer warranty of 70% of remaining EV battery state-of-health after 8 years or 100,000 miles of use.

Unfortunately, The Automakers cannot support the proposed requirement on Battery Durability, which specifies 80% remaining EV range at 10 years or 150,000 miles, nor could we support even a moderately lower threshold, should one be proposed. This requirement exceeds the capability of current battery cell technology implementation, and the range of penalties associated with failure to meet the requirement include recall; a drastic and prohibitively costly remedy. Based on current and publicly disclosed future technology, as well as reasonable assumptions about technological maturation, compliance with the proposed regulation is possible only through the addition of extra, reserve battery capacity to 'simulate' the cell degradation curve desired by the regulation.

If this proposal becomes regulation, The Automakers' ability to rapidly accelerate EV sales will be negatively impacted. New-vehicle EV customers in California and other adopting states will be forced to buy extra battery capacity which they cannot use, and the vehicles they buy will carry the weight of this extra capacity to end of life, negatively impacting their efficiency. This will add cost to EVs and slow the auto industry's transition to affordable EVs across vehicle segments. It will result in fewer EVs produced

and made available to prospective vehicle buyers, as battery raw materials and the battery supply chain cell production remain constrained. If any net pollution benefit results, it will be extremely small.

We respectfully ask that this proposal be revised, either to align with the United Nations Global Technical Regulation (UN-GTR) of 70% useable battery energy at 8 years / 100,000 miles, or to initiate the requirement in 'data gathering' mode, without jeopardy of recall.

Again, we appreciate the opportunity to input.

Signatory Automakers

BMW Group

Adam McNeill
Vice President – Engineering USA

Ford Motor Company

Steve Henderson
Manager - Regulatory Strategy

General Motors

Matthew Rudnick
Director - Climate, Environment & Energy Policy

American Honda Motor Co., Inc.

Jenny Gilger
Vice President – Product Regulatory Office

Hyundai Motor America

Yuval Steiman
Manager - Eco-Strategy, Regulatory Compliance
& Eco-Mobility

Jaguar Land Rover NA

Chris Marchand
Vice President - Government and Industry
Relations, Americas

Kia

Stephen Kosowski
Manager – Long Range Strategy & Planning

Mazda USA

Daniel V Ryan
Vice President - Government and Public Affairs

Mercedes-Benz North America

Julia M. Rege
General Manager – Regulatory Affairs

North American Subaru, Inc.

Maurice Arcangeli
Director - Government Regulatory Affairs

Porsche Cars North America

Michael Scott
Director - Regulatory Affairs

Rivian

Chris Nevers
Senior Director - Public Policy

Tesla

Joseph Mendelson
Senior Counsel - Public Policy and Business
Development

Volkswagen Group Of America

Rob Sutschek
Vice President

Volvo Cars

Katherine Yehl
Vice President Government Affairs