May 5, 2015

Richard Corey, Executive Officer
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: Comments to Proposed Amendments to Sections 1962.1 and 1962.2, Title 13, California Code of Regulations

Dear Mr. Corey:

On behalf of Tesla Motors, Inc., this letter provides you with our comments to the latest proposed amendments to the Zero Emission Vehicle (ZEV) mandate. As the only domestic manufacturer committed exclusively to ZEV technology, and the only company in the world producing passenger cars in California, we are very concerned by the fact that the revised Intermediate Volume Manufacturer (IVM) proposal still provides these multi-billion dollar global automakers with a complete exemption from the ZEV requirement for the next decade. As highlighted in this comment letter, we believe that this concession is not warranted in light of demonstrated, commercial viability of ZEV technology, existing regulatory flexibilities and the clear financial capacity of IVMs to launch such programs.

As a core concern, we note that further delays to the ZEV requirement will create doubt in the minds of critical stakeholders regarding California's commitment to overall ZEV goals. Such doubt will harm the efforts of those who are bearing significant cost and risk to advance the ZEV movement today. This concern is heightened by the fact that the concessions are being proposed despite compelling data and analysis showing that the IVMs can reasonably comply with the current standards. As outlined in greater detail below, not only do the IVMs have the resources to invest in zero emission technology, they can also fully offset their compliance obligation using ZEV credits at a cost that is insignificant when compared to their profitability. The push by the IVMs for concessions is part of a broader effort by the auto industry to dial back the ZEV mandate before the standards increase in 2018, an effort that includes a proposal to allow greater use of plug-in hybrid technology to meet ZEV minimums. With ZEV credit balances at all-time highs, we believe it is the right time for the Air Resources Board to propose amendments that dramatically strengthen the ZEV mandate, not weaken it.

We note from the outset that we are relieved to see that the annual ZEV percentage requirements will not be reduced as part of staff's latest proposal, however, we remain concerned by the fact that the proposal still allows IVMs to delay their ZEV programs eight years

beyond the lead times already provided. Specifically, Mazda and Subaru, two manufacturers that are currently required to deliver ZEVs in small volumes starting in 2018, would now have until 2026 to launch these programs. Jaguar Land Rover, Volvo and Mitsubishi have not yet reached the 20,000 unit volume threshold in California and, therefore, may not be required to deliver a single ZEV until 2030 or beyond. This delay has been proposed despite the fact that ZEV technology is clearly available today, as demonstrated by the eighteen different ZEV products placed on California roads by thirteen different automakers, including one of the five IVMs lobbying to delay the ZEV requirement. Tesla, a company that generates a small fraction of the revenue of the average IVM, has been delivering fully electric vehicles since 2008, and in 2014 was already delivering EVs in California at more than 3x the 2025 ZEV requirement for the average IVM.[1&2] If the average IVM was subject to the current ZEV requirement, it would only have to deliver 280 fully electric vehicles in California in 2018 and only 1,900 EVs ten years from now.[3] Today, the companies that own the IVM brands are delivering average annual volumes of nearly one million cars worldwide, including 200,000 in the United States.[4] California's existing ZEV requirement represents an incredibly small number of vehicles when compared to the volumes of emissions-generating cars produced by the IVMs each year. Further diluting this requirement is unnecessary and sends the wrong signal to the regulated industry regarding the importance of furthering this vital technology.

In addition to technology readiness, all of the IVMs have the financial capacity to design and produce zero emission vehicles. The analysis conducted in the Initial Statement of Reasons (ISOR) supporting the proposed rulemaking failed to provide a full and accurate picture of the IVM's financial position. Specifically, the ISOR only contained consideration of IVM revenue. A more accurate financial analysis would have also considered cash reserves, forecasted operating profits, and access to both private and public funding. In addition, several of the IVM brands are owned by much larger parent companies with substantial financial resources. The IVMs and their parent companies have billions of dollars in cash on hand and access to billions more through the same financial markets that enabled Tesla to raise the capital it needed to launch electric vehicles. By way of comparative example, Tesla secured sufficient funding not only to design and develop long-range electric vehicles, but also to build out all of the associated infrastructure to manufacture, sell and service those cars. Tesla did

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[1] Source: Company filings and equity analyst reports. Revenue for parent companies of IVM(4) brands. Volvo is excluded from this average as financial statements for parent company Zhejiang Geely Holding Group are not publicly available.
[2] Source: Polk registration data. IVM(5) 2025 California requirement based on analysis referenced in footnote #3.
[3] Historical delivery data sources: ARB & Polk. Delivery forecast data source: IHS. Analysis assumes IVM(5) comply with 100 mile UDDS range BEV in 2018, with a range improvement of 5% each year.
[4] Represents 2014 IVM(5) parent company automotive delivery volume. Source: IHS

this as a new company, starting essentially from scratch to build award-winning and compelling battery electric ZEVs. By contrast, the IVMs have been in existence for decades, and benefit from an existing and robust global supply chain, manufacturing operations, dealership networks and an average annual operating profit of $2.7 billion.[5] If a small start-up company can achieve volumes of tens of thousands of ZEVs from nothing, surely multi-national, multi-billion dollar manufacturers with decades of automotive experience can deliver the small volumes required by the ZEV mandate.

In the October 2014 Board hearing, the IVMs directed ARB's attention to their size relative to the LVMs. This comparison is irrelevant, however, as the regulations already adjust the number of ZEVs required based on the sales volume of each manufacturer. The key consideration is not the size of the IVMs relative to the LVMs, but rather whether the IVMs have sufficient financial capacity to achieve their individual ZEV targets. The data shows that they indeed have more than enough capacity to deliver the volumes required by the mandate.

We also note that the IVMs are not without a multitude of compliance options. The current regulations already provide substantial compliance flexibility for the IVMs, primarily through the ability to satisfy up to the full ZEV requirement with purchased credits. The IVMs have commented to ARB that they want "cars, not credits". We urge ARB to consider the fact that credits are only generated as automakers advance the goals of the mandate by placing ZEVs on the road. Credit trading supports those companies that are taking on higher risk and expense to foster the market for electric vehicles in the early years of the ZEV movement. Furthermore, the very fact that IVMs would otherwise have to purchase credits motivates them to more aggressively pursue their own electric vehicle programs. Delaying the ZEV requirement will remove this key motivating force, and could lead to significant delays in EV technology investments. In fact, providing concessions despite the existence of reasonable and readily accessible regulatory flexibilities sends a signal to the rest of the industry that further concessions can be negotiated. We believe this will cause automakers to slow down their investments in ZEV product lines, particularly in advance of the midterm review.

It is important to note that the same lead time offered in the current regulatory proposal can be achieved through means already present in the existing regulations. IVMs can do this by purchasing ZEV credits at a cost that is incredibly small relative to the profits of these manufacturers. Therefore, requiring IVMs to pursue credit trading for lead time flexibility would

[5] Source: Company filings and equity analyst reports. Operating profit for parent companies of IVM(4) brands. Volvo is excluded from this average as financial statements for parent company Zhejiang Geely Holding Group are not publicly available.

in no way preclude them from making necessary investments in ZEV technology. Specifically, with respect to credit availability, there are over 150,000 banked ZEV credits sitting in manufacturer accounts today, and this figure is growing each year. In fact, with no growth in current ZEV delivery rates, the industry will generate sufficient credits to fully satisfy California's ZEV requirement through at least 2022.[6] Credit trading, therefore, is a perfectly reasonable flexibility for the IVMs to pursue should they desire more time to launch ZEV programs.

Based on the foregoing data and analysis, we urge you to consider reducing the lead time for the IVMs in your proposal. Furthermore, we believe that the Board never intended for manufacturers to continue to comply after 2026 using only PHEVs. We recommend that ARB add a provision to clarify that all IVMs will be considered LVMs by no later than 2026. With more than 16 million combustion engine vehicles delivered in the United States every year, it is critical that the ZEV standards remain strong and that all automakers are motivated to achieve California's emissions reduction goals.[7] Other countries are starting to take notice of the initial success of the ZEV mandate, and several are now considering adopting their own versions of this policy. Now more than ever, the impact of ARB's policy decisions will extend far beyond the borders of our state and our country.

Thank you for considering our comments. We look forward to continuing to work with ARB on these important policy matters.

Sincerely,

James C. Chen,
Vice President of Regulatory Affairs

[6] Historical delivery data sources: ARB & Polk. Delivery forecast data source: IHS. Analysis assumes manufacturers achieve a 5% annual improvement in the electric range of their current ZEV offerings.
[7] 2014 US delivery volume. Source: IHS.