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TESLA

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Testimony of Diarmuid O'Connell, Vice President of Corporate & Business Development
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## I. Introduction

Chairperson Nichols, distinguished members of the Board, good afternoon. My name is Diarmuid O'Connell. I am the Vice President for Corporate and Business Development at Tesla Motors. Thank for the opportunity to testify before the Board today regarding the 2012 proposed amendments to the California Zero Emissions Vehicle program.

As many members of the Board are aware, Tesla Motors is a California based corporation with headquarters in Palo Alto and a large manufacturing facility in Fremont, California. We are a California company dedicated to the innovation and production of world class electric vehicles in California for the U.S. market and the rest of the world.

Tesla Motors is committed to the larger mission of producing high performance, high utility, long range electric vehicles at ever decreasing price points and through expanding the mass market for EVs. In order to achieve this goal, Tesla's business strategy follows a two prong approach.

First, we produce our own vehicles like the ground-breaking, first-of-its-kind Tesla Roadster; with a 0 to 60 mph time of 3.7 seconds and a range of 245 miles on a single charge. There is little argument that the launch of this vehicle in 2008 catalyzed the current generation of EVs.

We are quickly moving toward the start of production of our second vehicle, the Model S, which will begin customer deliveries by July of this year. The Model S is a premium, all electric vehicle capable of seating five adults and two children, a 0-60 time as little as 4.4 seconds and a range of up to 300 miles on a single charge. The Model S will be offered at a base price of less than $50,000 after the federal tax credit – a cost less than half of the Tesla Roadster.

We will be producing Model S vehicles at Fremont in quantities of 20,000 or more per year, thereby increasing economies of scale while aggressively bringing down the price point of Tesla EVs. And we aren't finished there. We are continuing to develop new vehicles and new platforms improving our technology, building our economies of scale and inexorably bringing down the cost of EVs to ever more affordable levels while continuing to provide leadership in performance and range.

Second, and less well known, we design, manufacture and sell EV powertrain systems for other manufacturers with a view to leveraging their economies of scale and thereby further catalyzing the mass market for EVs – especially in California.

As Board members may be aware, we have developed battery pack and charging systems for Daimler, parent of Mercedes Benz – powering the Smart ED, several hundred of which are already deployed in service in San Diego with larger numbers on the road throughout Europe. We have also designed and manufactured a battery and charging system for the Mercedes-Benz A-Class, a popular five seat vehicle offered in Europe.

More recently we have designed and will soon begin manufacturing in Fremont, California the full powertrain solution (battery pack, charger, motor, inverter and related software) to another leading OEM – Toyota – for deployment in the next generation Toyota RAV4 EV, slated for release to customers this year. We continue to build our powertrain supply business both with existing and new customers.

Both our own vehicles and the vehicles we are developing with our strategic partners, Daimler and Toyota, demonstrate the market and technology leadership that Tesla has been able to establish in the brief period of our existence.

We are proud that this innovation is being developed in California and is being manufactured in California by California workers. As of today, we have 1,600 employees. As we ramp up production at Fremont, we expect to have over 3,000 total employees by year's end.

## II. Comments to the ZEV Mandate Amendments

### A. Support of Stronger ZEV Amendments

Turning to the ZEV mandate, we believe that the Board is on the right path with respect to encouraging the rollout of EV technology. The ZEV mandate is now back on track to providing the technology forcing impetus needed to encourage proliferation of electric vehicles.

Tesla especially applauds specific provisions proposed by ARB that strengthen the ZEV mandate. Examples of which include:

(1) ramping up the ZEV requirement in the 2018 to 2025 timeframe from current levels to a minimum of 22% with at least 16% of the credits coming from pure ZEVs;

(2) tying the amount of credits earned by each ZEV exclusively to the vehicle's UDDS range, thereby incentivizing long-range ZEVs;

(3) lowering the threshold for the definition of a Large Volume Manufacturer (LVM) in order to increase the number of ZEV offerings and ensure a level playing field among all the major vehicle manufacturers; and

(4) allowing all manufacturers to earn, bank, and trade model year 2012 and higher ZEV credits for compliance in later model years without artificial expiration limits.

B. <u>Opposition to GHG Over Compliance Option</u>

Tesla must take issue, however, with a single provision in the proposal that threatens to undermine the core mission of the ZEV mandate and runs contrary to every other proposed modification to the mandate – the so-called GHG over compliance option.

Under this proposed option, a manufacturer could have a full half of its ZEV mandate permanently excluded in model years 2018 and 2019 for over complying with the federal greenhouse gas standards. Up to 40% excused in 2020 and up to 30% in 2021. In return, manufacturer need only over comply by 2gCO2/mile in order to avail itself of this option.

This option translates into very real numbers. By some estimates, this provision could result in the preclusion of the introduction of over 375,000 pure EVs based on the volume from manufacturers that may utilize this option. The resulting losses from the GHG over compliance provision directly contradict the California stated objective to place pure EVs on the road "in high enough production to reach inflection point on a cost curve." A loss of nearly 400,000 EVs over four years will simply not allow obtainment of this goal. In fact, this provision by itself can so gut the ZEV program goals as to render every other provision encouraging ZEVs ineffectual.

From Tesla's perspective, the impacts are very real. The removal of the requirement will send a market signal that may reduce the overall demand for EV technology - our OEM powertrain business - in the marketplace, keeping costs high and slowing, if not arresting, the employment growth at Tesla.

This option will also reduce the demand for ZEV credits, the sale of which Tesla uses to support its operations and growth, including the further development and production of EVs and EV power train components.

C. Adverse Impacts to California Leadership Position

We also have concern about the potential precedent this provision establishes. Specifically, California has always taken a leadership position in the area of vehicle emission regulation. By compromising the ZEV program, this provision dilutes California's leadership in the area of vehicle regulation.

## III. Conclusion

The threat posed by allowing the GHG over compliance provision to move forward is very real in terms of the integrity of the ZEV program, threats to California jobs, damage to the California economy and harm to California's leadership position in the area of clean vehicles.

For these reasons, while Tesla supports the bulk of the 2012 proposed amendments to the California ZEV regulation, we vigorously oppose the GHG over compliance option.

Thank you for your time.