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> October 23, 2013 Clerk of the Board California Air Resources Board Headquarters Building 1001 I Street Sacramento, CA 95814

Dear Chairman Nichols and Members of the Board,

Thank you for the opportunity to comment on the success of the Zero Emission Vehicle (ZEV) regulation and to support the minor technical changes proposed to strengthen the ZEV regulation. The Union of Concerned Scientists (UCS) is the nation's leading science-based nonprofit putting rigorous, independent science to work to solve our planet's most pressing problems. We write to you today on behalf of our 50,000 supporters in California, our over 350,000 supporters nationwide, and our network of more than 17,000 scientists, engineers and public health professionals.

The ZEV regulation has been successful in bringing substantial numbers of ZEV and lowemission vehicles to California roads. The number of ZEV manufacturers is growing and so are the choices of vehicles available. In just the last 3 years, over 34,000 plug-in electric vehicles have been put into service in our state. Already, plug-in vehicles are avoiding burning over 10 million gallons of gasoline each year in our state, improving air quality and reducing global warming emissions.

As of September 2013, all regulated manufacturers are meeting the ZEV requirements. The ZEV regulation is flexible, as it allows different vehicle manufacturers to meet the ZEV regulation requirements in different ways including through direct sales of ZEV (e.g. battery electric and fuel cell vehicles) and TZEVs (e.g plug-in hybrids), purchase of credits, and the use of regulatory structures and incentives such as the travel provision, greenhouse gas regulation over compliance, transit connections, and shared-use programs. The latest statistics from ARB show that 3,425 pure ZEV credits (equivalent to the credit that would be generated for 32,000 Type II BEV sold in 2013) have been banked by large manufacturers alone, meaning they are currently over-complying and that the ZEV framework is working. In addition, over 8,600 pure ZEVs were sold in California during 2013 to date<sup>2</sup>, well exceeding the current ZEV requirements. The ZEV regulation is working and meeting or exceeding targets.

<sup>&</sup>lt;sup>1</sup> http://www.arb.ca.gov/msprog/zevprog/zevcredits/2012zevcredits.htm

<sup>&</sup>lt;sup>2</sup> https://energycenter.org/clean-vehicle-rebate-project/cvrp-project-statistics

The success of the ZEV regulation is due to the coordinated and complementary efforts of government, industry, and concerned citizens. Compliance with the ZEV regulation has been enabled by the availability of vehicles, incentives for ZEV purchase and use, and the construction of refueling infrastructure. The Clean Vehicle Rebate Program, High-Occupancy Vehicle lane access, and support for public recharging stations have all had a positive impact and will continue into the future. Recent legislation also dedicates significant funding for hydrogen refueling stations, ensuring that even more ZEV options will be available.

UCS supports the minor technical modifications to the ZEV regulation as proposed by staff. These changes will ensure that ZEV credits are properly awarded to manufacturers that are putting ZEVs in operation. In particular, the proposed modification to the fast refueling credit requirements is needed to ensure that diverse types of ZEVs are available. The intent of the fast-charging provision is to reward technologies with fast refueling capability so that public refueling stations can service a large number of vehicles. To date, battery swapping has not been demonstrated as a fast refueling mechanism that can service ZEVs on a regular basis and there is no demonstrated ability for a public battery swapping station to service large numbers of vehicles. For these reasons, we support the decision of ARB staff to categorically exclude battery swapping from qualifying as a fast-refueling technology.

UCS also supports the minor amendments to the cap on combining credits for non-pure ZEV credits. As staff notes in the Initial Statement of Reasons for Rulemaking, "The proposed amendments do not change the percentages of ZEVs or equivalent number of credits within the current ZEV regulation, but will merely simplify implementation of and compliance with the ZEV regulation as it was originally intended." UCS agrees with the rationale behind these minor changes and supports their adoption.

UCS thanks ARB for its continued leadership in providing transportation options for California that will result in cleaner air and reduced global warming emissions. The ZEV regulation is an important mechanism to achieve these important goals, and the minor changes proposed will improve implementation of the regulation.

Sincerely,

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