

October 17, 2016

ARB Mobile Sources Staff and Board 1001 I Street, P.O. Box 2815 Sacramento CA 95812

RE: Comments on the proposed Innovative Technology Regulation (ITR)

Dear Board Members and ARB Mobile Sources Team,

At XL Hybrids we are very appreciative of the efforts of the ARB team in developing the Innovative Technology Regulations (ITR). We enthusiastically support the ITR initiatve at a high level and provide the following detailed comments.

XL Hybrids is currently the leading fleet electrification company in the U.S. with over 30 Million fleet customer miles per year driving our products across North America. Our core hybrid electric upfit product for Class 2 to 6 vehicles provides 20% fuel and proportional CO2 savings. This success is because of two important factors:

- 1. XL Hybrids does not significantly alter the major OEM vehicle and powertrain, and so major fleets can buy and service major OEM vehicles without any changes
- 2. XL Hybrids price point is under \$10,000 for a Class 2B hybrid electric full size van, and under \$20,000 for larger vehicles which has attractive payback for fleets that considerable lifetime vehicle mileage

The reasons we support the ITR are primarily because it is an effort to address the barriers to deployment caused by "initial certification costs and engineering challenges with ARB's robust certification program" as stated in the ISOR. The ITR recognizes that OEM full certification is not necessary or warranted because the risks are relatively low:

- Initial sales volumes of new technology vehicles are relatively small
- In most cases, the original OEM exhaust, evaporative, and OBD systems are fully or substantially preserved

The comments we have are as follows:

1. Complexity

The proposed ITR is relatively long and complex with several different paths. We are concerned that when implemented there is the potential for this actually taking longer and costing more for innovative technology companies depending on details of how ARB staff implements the regulations and works with the innovative companies to get them through the gates in a reasonable timeframe.

2. Cost Analysis

ARB staff has been very consultative with the innovative technology companies along the path of development the proposed ITR, but cost analysis did not come out until the September 2016 ISOR and we feel that the savings or potential increased costs of the ITR are going to vary widely depending on the innovative technology. There are not that many innovative technology companies actively pursuing the CA market today so we do not think it would be an impossible task for ARB to model more fully the range of potential entrants into this regulation and have discussions on the uncertainties. As an example, the proposed regulation requires to a 3-day evaporative emissions test whereas till this point ARB has only requested a 2-day diurnal test for our aftermarket products so this will be a cost increase. I'll also note the 3-day test is one that the El Monte facilities are not even capable of performing today.

3. Fixed AER Threshold

The proposed regulation has a fixed AER threshold for different paths of the regulation; however, this covers a very wide range of vehicle types and uses and we feel that more flexibility in this threshold would have been preferable. For example, what if a vastly more cost effective product came on the market with only 30 miles AER and moving to 35 miles AER would make it considerably more expensive. 35 miles AER makes sense as a standard threshold for passenger vehicles but not for the full range of commercial vehicles all the way up to Class 8.

4. Staff Support

Because of the complexity of this proposed regulation we think it will be worthwhile for ARB to provide a significant level of staff support to aid companies in proceeding through the Tiered process. The El Monte staff in charge of reviewing applications and issuing EOs understandably needs to remain independent, but this would not prevent another branch within ARB from providing pro-active support services as innovative technology companies attempt to navigate this process.

Sincerely,

Eleveral Konelover

Edward Lovelace Chief Technology Officer <u>elovelace@xlhybrids.com</u> 617-335-8162