

## **Comment 1 for Innovative Technology Regulation (itr2016) - 45 Day.**

First Name: John

Last Name: McNichols

Email Address: jmcnichols@energeticsdrivetrains.com

Affiliation: Energetics Drivetrains

Subject: ITR 2016 Reg

Comment:

We wanted to comment regarding the Innovative Technology Regulation proposed in 2016. We have advocated a change in the outdated regulations that catered to the passenger vehicle volumes to justify the certification costs for some time. As you are aware, the commercial truck and bus markets are small by comparison. This regulation that allows limited quantities of new technologies get into the field to gather real world data on emissions and performance, is invaluable to suppliers of these new and innovative technologies. The ITR 2016 regulation allows minimal quantities of emerging technologies into field trials without extensive testing and data collection. This phased approach allows manufacturers to work with local California fleets to trial and implement the technologies while collecting valuable data for them and the ARB. While we think there is still much ground to cover regarding full integration into OEM chassis and OBD compliance, this regulation is a step in the right direction.

We strongly support the passage and 'fast track' implementation of this regulation to allow emerging technologies to begin to make an impact on air quality as soon as possible. Many new technologies from many companies are in the works which will assist in achieving clean air goals set by the ARB. Failure to implement this regulation quickly will result in the 'status quo' air quality improvement, which is not sufficient to reach the stated goals.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2016-10-04 10:57:16

No Duplicates.

## **Comment 2 for Innovative Technology Regulation (itr2016) - 45 Day.**

First Name: James

Last Name: Burns

Email Address: jim@transpowerusa.com

Affiliation: Transportation Power, Inc.

Subject: 4. Alternate Emission Standards for Heavy-Duty Hybrids with at Least 35 Miles AER  
Comment:

TransPower is encouraged, and future generations well served we believe, by the inclusion of language and technical considerations embodied in the section of the proposed rules titled "Alternate Emission Standards for Heavy-Duty Hybrids with at Least 35 Miles AER". This variation of HD propulsion will be much aided on its path to commercialization by a consistent and forward-thinking regulation as drafted here. Range-extension of a battery dominant heavy duty hybrid vehicle using a lighter duty engine, in a serial generation mode, may help accelerate early adoption of cleaner trucks by reducing up-front dependence on initially scarce charging infrastructure while at the same time providing deployment flexibility for early adopters. We ask for continuing flexibility of thought as such solutions are brought to market and begin to prove their merits.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2016-10-11 15:48:48

No Duplicates.

### **Comment 3 for Innovative Technology Regulation (itr2016) - 45 Day.**

First Name: Glen

Last Name: Naylor

Email Address: glen\_naylor@newflyer.com

Affiliation: New Flyer Industries

Subject: ITR2016

Comment:

This regulation is needed, relevant and timely. New Flyer is the largest HD transit bus manufacturer in America and offers zero emission transit buses for sale in trolley bus, battery electric and fuel cell technology. However, mass deployment has not yet happened as all of these technologies have some road blocks to broad deployment. Battery cost and range are a roadblock to broad deployment of battery electric buses. Fuel cell cost and infrastructure cost are concerns for fuel cell buses. Battery dominant series drive electric buses with a small ICE engine-generator for range extension are a realistic path to deploy HD buses with zero-emission miles that would significantly reduce emissions compared to solutions that are available today. However, today's HD engines are too big compared to the power required for operation as a range extended generator. They are too heavy and would not operate in their optimum power range for low emissions and good fuel efficiency. There needs to be a reasonable path to certify a small ICE engine as a range extender in a zero emission battery bus. Please continue to develop this regulatory solution.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2016-10-14 13:02:04

No Duplicates.

## **Comment 4 for Innovative Technology Regulation (itr2016) - 45 Day.**

First Name: Benoit  
Last Name: Lacroix  
Email Address: benoitlacroix@effenco.com  
Affiliation: Effenco

Subject: Comments to the proposed ITR  
Comment:

Please see the attached letter that contains our comments to the proposed ITR.

Best Regards,

Benoit Lacroix

Attachment: 'www.arb.ca.gov/lists/com-attach/4-itr2016-W2kANldnBWBReldm.pdf'

Original File Name: 2016-10-14 Effenco Comments - CARB ITR.pdf

Date and Time Comment Was Submitted: 2016-10-16 18:57:41

No Duplicates.

## **Comment 5 for Innovative Technology Regulation (itr2016) - 45 Day.**

First Name: Roger

Last Name: Gault

Email Address: rgault@emamail.org

Affiliation: Truck and Engine Manufacturers Associati

Subject: Proposed Regulation to Provide Certification Flexibility for Innovative Heavy-Duty Engines

Comment:

Please see EMA's comments attached.

Attachment: 'www.arb.ca.gov/lists/com-attach/5-itr2016-W2kBN1RkBGFVYldn.pdf'

Original File Name: 20161017142507344.pdf

Date and Time Comment Was Submitted: 2016-10-17 12:26:00

No Duplicates.

## **Comment 6 for Innovative Technology Regulation (itr2016) - 45 Day.**

First Name: Sanjay

Last Name: Pimple

Email Address: sanjay.pimple@cummins.com

Affiliation:

Subject: CMI Comments for the Innovative Technology Regulation

Comment:

Hello,

Please find the attached file which includes Cummins' comments on the proposed Innovative Technology Regulation.

Thank you

Sanjay

Attachment: 'www.arb.ca.gov/lists/com-attach/6-itr2016-UjFUPwvWFQDbFUh.pdf'

Original File Name: CMI\_ITR\_Comments\_17Oct16.pdf

Date and Time Comment Was Submitted: 2016-10-17 13:18:56

No Duplicates.

## **Comment 7 for Innovative Technology Regulation (itr2016) - 45 Day.**

First Name: Bill  
Last Name: Mammen  
Email Address: bill.mammen@odyne.com  
Affiliation: Odyne Systems LLC

Subject: Comments for ITR  
Comment:

I attached our comments.

Attachment: 'www.arb.ca.gov/lists/com-attach/7-itr2016-WjVXNVEpAj8DYAdY.pdf'

Original File Name: Odyne Systems LLC - Comments on CARB Proposed ITR 161017.pdf

Date and Time Comment Was Submitted: 2016-10-17 13:41:02

No Duplicates.

## **Comment 8 for Innovative Technology Regulation (itr2016) - 45 Day.**

First Name: Michael

Last Name: Geller

Email Address: mgeller@meca.org

Affiliation: Manufacturers of Emission Controls Assoc

Subject: MECA Comments on ARB's Proposed Innovative Technology Regulation  
Comment:

Please find attached a copy of MECA's comments on ARB's Proposed Innovative Technology Regulation.

Please let me know if you have any questions or comments.

Best regards,

Michael Geller  
Deputy Director  
MECA

Attachment: 'www.arb.ca.gov/lists/com-attach/9-itr2016-AWxdPgZkBzVWDwlq.pdf'

Original File Name: MECA Comments on ARB Innovative Technology Regulation final.pdf

Date and Time Comment Was Submitted: 2016-10-17 15:26:04

No Duplicates.



## **Comment 9 for Innovative Technology Regulation (itr2016) - 45 Day.**

First Name: Ryan

Last Name: Schuchard

Email Address: rschuchard@calstart.org

Affiliation: Policy Director, CALSTART

Subject: Comments on Innovative Technology Regulation

Comment:

Please find attached CALSTART's comments on the Innovative Technology Regulation.

Attachment: 'www.arb.ca.gov/lists/com-attach/10-itr2016-UTJQNwdqBCQCcAVk.pdf'

Original File Name: CALSTART Comments on Innovative Technology Regulation - October 2016.pdf

Date and Time Comment Was Submitted: 2016-10-17 16:12:49

No Duplicates.

## **Comment 10 for Innovative Technology Regulation (itr2016) - 45 Day.**

First Name: Edward  
Last Name: Lovelace  
Email Address: elovelace@xlhybrids.com  
Affiliation: XL Hybrids

Subject: XL Hybrids Comments on Proposed ITR  
Comment:

At a high level, XL Hybrids is supportive of the proposed ITR because the goals are to reduce the regulatory cost and time to market introduction for innovative technologies. We do, however, have comments in the attachment regarding complexity, cost, and restrictions of the proposal.

Attachment: 'www.arb.ca.gov/lists/com-attach/11-itr2016-AjBWYAc3WTwAKwU0.pdf'

Original File Name: 2016-10-17 XL Hybrids Comments on ITR.pdf

Date and Time Comment Was Submitted: 2016-10-17 16:34:05

No Duplicates.

**There are no comments posted to Innovative Technology Regulation (itr2016) that were presented during the Board Hearing at this time.**

## **Comment 1 for Innovative Technology Regulation (itr2016) - 15-1.**

First Name: Edward  
Last Name: Lovelace  
Email Address: elovelace@xlhybrids.com  
Affiliation: XL Hybrids

Subject: Comments on the May 31st, 2017 modified proposed Innovative Technology Regulation (ITR)

Comment:

See attached comments.

Attachment: [www.arb.ca.gov/lists/com-attach/12-itr2016-BTdQZgc3BGADKAEx.pdf](http://www.arb.ca.gov/lists/com-attach/12-itr2016-BTdQZgc3BGADKAEx.pdf)

Original File Name: 2017-06-15 XL Hybrids Comments on ITR.pdf

Date and Time Comment Was Submitted: 2017-06-15 14:23:13

No Duplicates.