



October 19, 2018

Chair Nichols  
California Air Resources Board  
1001 I Street  
Sacramento, CA 95814

RE: Proposed FY 2017-18 Funding Plan for Clean Transportation Incentives

Dear Chair Nichols,

Cummins Westport Inc., a manufacturer of on-road natural gas engines certified in California to optional low-NOx emission standards, offers the following comments to the above referenced proposal. Our near-zero engines are offered in a variety of applications including transit, refuse, dump, cement mixer and regional haul through many original equipment vehicle manufacturers. Specifically, our comments are related to the “Low NOx Engine Incentives” section of the proposal.


We support the following aspects of the proposal:

- Increasing the incentive for the L9N engine to \$45,000.
  - o We believe this will support expanding technology adoption into applications beyond early adopters in transit and refuse.
- Explicitly allowing and supporting repower of previous generations of natural gas engines with the lowest emission, near-zero version.
  - o We have had the opportunity to discuss the potential adoption of this provision, along with the increased incentive amount, with fleets currently operating previous generations. Feedback from existing fleet users has been extremely positive.

Staff has proposed eliminating incentive eligibility for new purchases of the L9N engine in transit and refuse applications, who were early adopters of natural gas engine technology. We believe no specific application or vocation should be excluded. Specifically related to refuse applications:

- Eliminating their ability to receive incentives could be viewed as punishment for being an early adopter of natural gas, low emission technology. This may very well prevent existing users from expanding their fleet of near-zero technology.
- There continues to be an incremental cost associated with the near-zero natural gas engine and fuel system.
- Refuse fleets have the option to purchase engine systems that meet the current base emission standards and be compliant with applicable California Fleet Rules.
- While several refuse fleets have adopted natural gas technology, there are still many throughout the state that have not. Removing their incentive eligibility will likely eliminate any chance of adoption.

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Staff has estimated the incremental cost for an ISX12N equipped truck between \$40,000 to \$45,000. While the Staff's proposal to increase the incentive amount to \$45,000 will be helpful for any "on the edge" fleets, we believe it isn't enough to support substantial deployment of the near-zero technology.

- The ISX12N is designed for regional haul applications and some routes may require maximizing on-board fuel capacity, which will likely drive the incremental cost beyond \$45,000.
- There are "soft costs" associated with moving from traditional technology to near-zero technology. Examples include arranging for new fuel supply, re-routing to access fuel, driver and maintenance training as well as additional parts stocking.
- If the incentive only covers the incremental cost of the equipment, fleets are hesitant to move away from their traditional purchase behavior.
- Our recommendation is an increase the incentive for the near-zero ISX12N allow for an additional amount based on fuel capacity of the application.
  - o Base incentive of \$45,000 for up to 120 diesel gallon equivalent (DGE) fuel system
  - o 160 DGE fuel system = \$10,000 additional or \$55,000 total incentive
  - o 175 DGE fuel system = \$15,000 additional or \$60,000 total incentive

We've had the opportunity to share and discuss our areas of support and difference of opinion with Staff. As usual, Staff has made themselves available to discuss aspects of the proposal in an engaged, thoughtful and professional manner.

Best regards,



Tom Swenson  
Business Development Manager