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Research Gap and Restrictive Qualifications

Additional submitted attachment is included below.

NORTH AMERICAN REPOWER

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Commissioner Janea A. Scott
California Energy Commission
1516 Ninth Street
Sacramento CA 95814

RE: 2015-2016 INVESTMENT PLAN UPDATE FOR THE ALTERNATIVE AND RENEWABLE FUEL AND VEHICLE TECHNOLOGY PROGRAM

Dear Commissioner,

In reviewing the staff update I see two major shortcomings in the plan as it pertains to Natural Gas/ Renewable Natural Gas as a Heavy Duty vehicle transportation fuel and as a means to reduce GHG emissions to meet the goals AB32, AB118 and the LCFS.

First is the research gap between the EISG program and the Innovative Technology Vehicle Demonstration program. EISG gives limited funding to advance ideas to the "proof of concept" stage, while the Innovative Technology Vehicle Demonstration program provides funding of demonstrations of vehicles equipped with "near commercially available technology".

In between "proof of concept" and "near commercially available" is a tremendous amount of development work that OEM HD diesel vehicle manufacturers and Venture Capital firms have been reluctant to finance. The current "gem" of the ARB and CEC investments in HD Natural gas technology is the Cummins/Westport 0.02 NOx 8.9 liter spark ignited engine, which was developed with funding from ARB, SCAQMD and CEC over the past 10 years. In prior years, funding of this technology was possible as the grants were not limited to vehicle demonstrations, and as a result this technology is finally now available in near commercially available form.

Other technologies exist that could well outperform the Cummins engine in terms of total GHG production and fuel economy, and could be used on other OEM engine platforms, but have no readily available funding source to develop them past a minimal proof of concept demonstration. I suggest that CEC look at the success that the Cummins engine represents in investing in technology that is not near commercially available. I also suggest that staff review the technology assessment work of ARB that clearly states one of the largest roadblocks to adoption of RNG/CNG in HD fleets is the limited engine platforms available-AKA no competition for Cummins. This is proof that without funding from CEC or ARB, no competing technologies will be funded by OEM HD vehicle manufacturers.

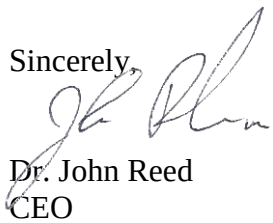
This brings me to the second shortcoming, and that is an increasing requirement for existing major OEM vehicle or engine manufacture participation in proposals as either the primary or a major partner. It is understandable that the CEC and ARB would wish to invest in projects that have a clear path to market. Only funding development work proposed by major OEMs is a means to only see proposals that have been vetted internally by a knowledgeable OEM staff with a clear desire to create a marketable product prior to submission.
However, the same, if not a higher level of expertise and experience when it comes to alternative fuels and innovative technologies, exists in companies outside the major OEMs. In fact, the majority of commercially viable advances in HD engine technology over the past 20 years has come from third party technology providers, like Sturman Industries. Mandating the participation of OEMs puts third party technology providers at a distinct disadvantage, as they must now not only compete for CEC funding, but they must FIRST be vetted and partnered with OEMs that have already demonstrated little desire to invest in alternative fuels, or are competing for these very same funds themselves. I do not believe that was the intention of this requirement, but the awarding of points for or the mandating of OEM participation (as in the latest ARB demonstration solicitation) in projects does not allow technologies to compete on a level playing field.

As to the concerns of the ability of a non OEM entity to go to market with a product designed to reduce emissions from HD vehicles, the CEC and ARB need to get out of the mindset that the introduction of emissions reducing technology can ONLY be accomplished through sales of new vehicles designed and created by the existing OEMs. The legacy diesel fleet is the mobile source that needs to be addressed, and not through a forced exodus of older vehicles out of California. Alternative fuel technology exists now, and even better technology is in development that can make these in use vehicles the lowest carbon fleet in existence, and in a fashion that is economically advantageous to the fleet owners, the OEM branded dealerships and even to the OEMs.

Dealerships are not owned by the OEMs, and these dealers are very receptive to any technology that not only makes economic sense to their customers, but also fixes the failures of prior OEM attempts at emissions reductions- like troublesome EGR and DPFs, or SCRs that don't work in traffic. OEMs are also very willing, and actually prefer to let others prove out their alternative fuel technology in the aftermarket prior to adopting these technologies for use in new vehicles.

In conclusion, I suggest that funds be made available in the plan to support development of alternative fuel vehicle technologies that are not required to be "near commercially available" nor require or are given priority for participation by a major vehicle OEM.

Sincerely,



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