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July 22, 2008

California Energy Commission
Dockets Office, MS-4
Re: Docket No. 08-OIR-1
1516 Ninth Street
Sacramento, CA 95814-5512

DOCKET	
08-OIR-1	
DATE	JUL 22 2008
RECD.	JUL 23 2008

**RE: Committee Workshop – Comments Regarding AB118, the Alternative and Renewable Fuel and Vehicle Technology Program.
Docket Number 08-OIR-1.**

IMPCO Technologies, Inc. respectfully submits the following comments for your consideration.

History

For 50 years, IMPCO Technologies has manufactured fuel systems that allow internal combustion engines to operate on gaseous fuels such as natural gas and propane.

IMPCO is the world's leading source of advanced alternative fuel systems for internal combustion engines. IMPCO products enable these engines to operate on environmentally-friendly gaseous fuels such as propane and natural gas. IMPCO products optimize efficiency and performance while reducing emissions to the lowest levels. IMPCO is a major supplier to transportation, industrial, and power generation market segments.

Alternative Fuel Vehicles (AFVs)

The intent of AB118 is to help develop and deploy innovative fuel and vehicle technologies that will help achieve the following goals set forth in the State Alternative Fuels Plan (AB1007):

- Reduce petroleum consumption
- Increase alternative fuel use
- Improve air quality
- Reduce greenhouse gas emissions

The early introduction of alternative fuel vehicles, particularly natural gas and propane vehicles, is critical to the success of this program and will immediately put the state of California in a position to meet these goals.

Dedicated vs. Dual-Fuel Vehicles

Dedicated alternative fuel vehicles, i.e., those vehicles capable of operating on only one fuel, deter a good portion of the potential AFV end user market from purchasing an AFV.



If a vehicle runs out of fuel on the road, the vehicle must be towed to the nearest fueling facility, wherever that may be. Again, this alone may prevent many from purchasing an AFV.

Dual-fuel vehicles, i.e., vehicles that operate separately on either gasoline or on the alternative fuel, are *absolutely critical* in this transition to bring AFVs to fleets and the mainstream public. The driver is able to operate on the alternative fuel without worrying about whether the vehicle will run out of fuel. This dual mode promotes alternative fuels as a motor vehicle fuel, and provides a backup in the event that an alternative fuel station is out of range.

Fueling

It is critical to deploy technologies that have the infrastructure to support them.

A significant number of natural gas and propane fueling stations are already available throughout California. According to the U.S. Department of Energy¹, there are 186 natural gas fueling stations and 199 propane fueling stations in the state of California alone. Owners of natural gas vehicles can even purchase a home fueling unit that will allow them to fill their vehicles overnight using their home's natural gas supply. As a bonus, in California a gallon of natural gas or propane costs approximately 35% less than a gallon of gasoline^{2,3}.

Alternative Fuel Conversions

While Original Equipment AFVs are available for purchase, model selection is extremely limited.

The technology to retrofit even the most sophisticated vehicles has been available for years. For example, IMPCO sells over 30,000 natural gas and propane fuel-injected conversion systems each month, worldwide. 21 original equipment vehicle manufacturers in 12 countries employ this fuel system, which is offered as a factory option, delayed OEM, or OEM-endorsed program.

California Aftermarket Certification

A California Air Resources Board (ARB) certificate is required to install an aftermarket conversion system on a vehicle registered in the state of California. An EPA certificate is required to install an aftermarket conversion system on a vehicle registered in the remaining 49 states. IMPCO currently has EPA certificates for a number of dual-fuel natural gas and dual-fuel propane aftermarket conversion systems that cover over 65 vehicle makes and models. IMPCO does not have any ARB certificates, as the ARB certification requirements are prohibitively difficult and expensive.

To obtain an EPA certificate, IMPCO must calibrate the vehicle for emissions and drivability, perform emissions tests, meet onboard diagnostics requirements, and submit an application for certification. IMPCO has even sent a vehicle to EPA's test laboratory in Michigan to confirm the very low emissions levels. Given the low emissions levels that have been demonstrated, ARB should give fuel system manufacturers the option to

¹ http://www.eere.energy.gov/afdc/fuels/stations_counts.html

² http://www.altfuelprices.com/reports/California_fill_stations.php

³ http://www.eia.doe.gov/oil_gas/petroleum/data_publications/wrgp/mogas_home_page.html



either receive an ARB certificate using the existing requirements in place, or to accept an EPA certificate in lieu of an ARB-specific aftermarket certificate.

Californians *want* alternative fuel vehicles. IMPCO's sales department has received hundreds of calls from Californians who want to convert their vehicles to operate on an alternative fuel. Unfortunately, without any ARB certificates, IMPCO has to turn them away.

In no way does IMPCO support a conversion free-for-all. Specific test protocol must be followed and emissions standards must be met so as to not compromise the emissions integrity of the vehicles. However, reasonable means must be taken to make these vehicles available to the public.

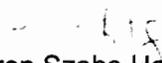
Summary

- The deployment of propane and natural gas AFVs is critical to the success of AB1007 and AB118.
- Dual-fuel vehicles will play a crucial role towards meeting these goals.
- Proven, sophisticated AFV conversion systems are available today.
- The fueling infrastructure is available today.
- ARB certification requirements are the only barrier to introducing these systems into the California market. ARB should give a fuel system manufacturer the option of obtaining either an ARB or an EPA certificate.

IMPCO would like to invite the CEC and ARB staff to further discuss the alternative fuel products available and the best way to introduce these to market.

Please call me at (714) 656-1245 if you have any questions or would like additional information.

Regards,


Karen Szabo Hay
Certification and
Regulatory Affairs