

RICHARD F. TEEBAY

DOCKET

08-ALT-1

DATE FEB 27 2009

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February 27, 2009

California Energy Commission
Dockets Office, MS-4
Re: Docket # 08-ALT-1
1516 Ninth Street
Sacramento, CA 95814-5512

Advisory Committee:

RE: Docket Number 08-ALT-1 "Advisory Committee Meeting"

I am writing as one who has spent more than 35 years in the transportation industry. During the past 25 years, I served as the Assistant Fleet Manager for the City of Sacramento, the Automotive Superintendent of the City of Santa Clara. For the past 14 years, I have been employed by Los Angeles County, and for several years, I was responsible for one of the County's larger fleets. During the past decade, I have worked closely with the staff of the South Coast Air Quality Management District and the California Air Resources Board in the development and implementation of their various Fleet Rules and Regulations. In the late 1990's, I obtained and implemented an Energy Commission grant for electric vehicles and their charging stations. I have worked with the Federal Environmental Protection Agency (EPA) and have been active with the EPA's West Coast Collaborative. I have served as a board member of the National Association of Fleet Administrators' (NAFA) Pacific Southwest Chapter. At the national level, I have served as both the Vice Chair and then Chair of NAFA's Fuels and Technology Committee. I have followed and strongly support CALStart's Hybrid Truck and Bus Users Groups.

The following comments are offered on both the CEC's Investment Plan document and the AB118 Funding Recommendations.

CEC's Investment Plan:

On page 21, Low Carbon Fuels

Natural Gas and Propane: Please update the information in the Investment Plan document to reflect:

Roush Enterprises, a Tier 1 supplier to Ford Motor Company, announced that they have received California Air Resources Board (CARB) certification for dedicated propane versions of the 2010 model year Ford F-150 and F-250 with the 5.4L engine. (Last year I had the opportunity to drive one of Roush's 49 state models. Its performance was superior to that of its gasoline counterpart.) The Roush system may also be available as a CARB certified retrofit. A CleanFuels USA propane version of General Motors 6.0L is currently being CARB certified. The 6.0L is an oversized version of GM's 350 cubic inch medium-duty truck engine with cross-bolt main bearings. This engine is generally found in chassis of 10,000 lbs. to 16,000 lbs. CleanFuels USA currently has a CARB certified version of GM's 8.1L engine for chassis up to 25,999 lbs.

Currently there are CARB certified CNG conversions from BayTech for both Ford and GM light and medium duty truck engines. International Trucks is developing a natural gas powered version of its large displacement (Mann) engine. I believe that far more development is on going with natural gas versions of popular truck engines.

In 2010, Ford Motor Company will be release an electric version of its Transit for sale in the US. The Transit is a European vehicle. The electric version is a Smith conversion. I have read that Smith (of Great Britain) can also retrofit vehicles. Within the coming months, Ford will introduce 40 MPG hybrid versions of its Fusion and Milan. Other pure electrics and plug-in hybrids are in the pipeline. Nissan will be providing electric vehicles to the Tennessee Valley Authority and the State of Oregon.

On page 22, Ultra Low Carbon Fuels

Biofuels: The State Water Board oversees the permitting of underground fuel tanks. The Water Board has significant concerns with the storage of biofuels and especially, biodiesel. In 2008, the Water Board issued two guidance directives for biodiesel. Their concerns were based upon an estimated 1.5 million possible formulations of biodiesel blends. This does not include many of the biodiesel versions envisioned in this document. In its most recent directive, the Water Board limited the underground storage of biodiesel to B-5 in double-walled tanks installed since 2004. Because of the Water Board's concerns, I would strongly recommend that during the first two years of funding that the CEC's co-funding of biodiesel refueling stations be limited to above ground storage tanks, similar to those found at many CalTrans yards. The Water Board is not opposed to the storage of biodiesel in above ground tanks and has indicated a preference for above ground basis on an interim basis.

On page 23, Super Ultra Low Carbon Fuels

Plug-in Hybrids and Battery Electric Vehicles: There was discussion of how the cost of recharging Plug-in Hybrids (PHEVs) and Battery Electric Vehicles (BEVs)

could be recovered. One commercial model being circulated involves significant costs to the user with a fee being paid to the property owner with an EV charging station. However the higher costs associated with this model could negatively impact adoption of these vehicles – public agency and/or utility employees are unlikely to pay to recharge an employer's vehicle. Another model was suggested several years ago by Professor James Sweeney, Director of the Precourt Institute for Energy Efficiency at Stanford University. He suggested that each vehicle could have its own Internet Protocol (IP) address. The owner could be billed for the charges. Charges could reflect time of charge, including premium for peak charging and/or a discount for off-peak charging.

In Appendix D: Important References for Program Development

On page D-3 Table 1, there is just one value for Natural Gas. I would ask that there be two values for natural gas. The first value should reflect the full fuel cycle weighting for natural gas piped in from Texas and/or Canada. The second value would reflect the full fuel cycle weighting for natural gas from the Pacific Rim. It should reflect the additional energy used to liquefy the gas, to transport it across the Pacific to the LNG port in Baja Mexico, and ultimately, to re-gasify it and pipe it to California. According to sources within the industry, during the re-gasification process at the LNG terminal in Baja, approximately 10% of the natural gas by volume is very high grade propane which is separated and "flared." The value of natural gas should reflect or include the value of the flared propane. If the LNG importer were to capture and use the propane currently being flared, such as to power its light duty pickups, the value from the flaring would be adjusted and eliminated from the analysis. This is consistent with the Program's framework for sustainability by decreasing life-cycle pollution.

AB118 Funding Recommendations:

I strongly encourage support and additional funding for:

- the development and integration of methane from landfills, animal and agricultural waste streams;
- the advancement of light weight materials for hydraulic hybrids in weight sensitive applications such as refuse trucks;
- hybrids (light, medium, and heavy duty), plug-in hybrids, pure electrics, and substantial more fuel efficient vehicles for public agencies; and,
- the development of fuel efficient, alternatively-fueled hybrids, especially in high fuel use applications such as utility trouble trucks, shuttle buses, transit buses and refuse applications.

As one who is employed by a public agency, I can speak to agencies financial concerns. Currently, funding is a significant issue for local government agencies. Because of significant funding issues at the State level, agencies are struggling to reduce costs and avoid staff reductions. Many agencies have laid-off

employees; some have asked and/or ordered employees to take time off without pay in order to reduce expenses. In Los Angeles County, two departments with significant funding for replacement vehicles have had their current year fixed asset budgets reduced by 30% or more, (\$3 million and \$4 million respectively). Most agencies have significantly reduced and/or completely eliminated their fix assets purchases. Hybrids carry a price premium. Some agencies have felt that they have to choose between purchasing a few hybrid vehicles or purchasing a larger number of non-hybrid replacement vehicles. Unlike private firms, public agencies are not able to benefit from the Federal tax credits on new hybrid vehicle purchases. In recognition of this, I would seek the following:

- a higher level of reimbursement for hybrid and/or alternatively-fueled vehicles for public agencies, up to the full incremental cost of a hybrid;
- permit and encourage agencies to use AB 118 funding in conjunction with grants from other local or federal funding sources;
- consideration of higher funding levels for vehicles that need light weight materials for weight sensitive applications, such as refuse trucks;
- direct payment to the successful supplier, similar to the voucher method being considered by the California Air Resources Board's AB 118 program;
- assistance with education and financial instruments, such as municipal leases, to help local agencies with a cost effective funding mechanism and/or increased payment flexibility.

Thank you for allowing me to offer comments on the Investment Plan and the CEC's AB 118 initial funding plan. Should you have any comments or concerns, please feel free to contact me.

Sincerely,

Richard F. Teebay

cc: Patrick O'Connor, Kent & O'Connor
Bill Van Amburg, CALSTART