

BOARD MEETING DATE: July 10, 2015

AGENDA NO. 5

PROPOSAL: Amend Contract to Provide Additional Funding to Develop and Demonstrate Plug-In Hybrid Vehicles 

SYNOPSIS: The Board previously recognized \$45,443,332 from the DOE for the development and demonstration of a fleet of medium-duty plug-in hybrid vehicles at utilities and other fleets across the nation, and a contract was executed with the Electric Power Research Institute (EPRI) to conduct the project. This action is to amend the contract with EPRI to continue data collection in order to further evaluate performance and operational benefits while providing feedback for optimization of these plug-in hybrid vehicles in an amount not to exceed \$250,000 from the Clean Fuels Fund (31).

COMMITTEE: Technology, June 19, 2015; Recommended for Approval.

RECOMMENDED ACTION:

Authorize the Chairman to amend a contract with EPRI to continue data collection in order to further evaluate performance and operational benefits while providing feedback for optimization of this fleet of medium-duty plug-in hybrid vehicles in an amount not to exceed \$250,000 from the Clean Fuels Fund (31).

Barry R. Wallerstein, D.Env.
Executive Officer

MMM:FM:JI

Background

The Electric Power Research Institute (EPRI), which is the research arm of the electric utility industry, has long been a supporter and developer of PHEV technologies. The SCAQMD, in partnership with the DOE, contracted with EPRI to build a large and diverse test fleet of medium-duty PHEVs across the nation. The project includes a total of 296 trucks and vans in 64 different fleets across 23 states plus the District of Columbia. Out of the 296 vehicles, 119 PHEVs are Odyne utility boom trucks distributed across 35 different fleets. All of the PHEVs have been delivered to customers, and the program is successfully coming to a conclusion.

Proposal

Given the size and diversity of this fleet of PHEVs, there is significant merit in continuing data collection and analysis on operational benefits and performance to enhance optimization of these vehicles. The data will continue to be collected for all 296 vehicles and sent to the national laboratories for analysis. The additional refinements to the data set are expected to provide greater insight into geographic, duty-cycle and operational differences among the fleets. EPRI has estimated costs to conduct this follow-on work and is requesting a 30 percent cost-share from the SCAQMD.

Benefits to SCAQMD

The expansion of PHEVs is included in the *Technology Advancement Office Clean Fuels Program 2015 Plan Update* under the category “Electric/Hybrid Technologies & Infrastructure.” Plug-in hybrid technologies overall have the potential for lower criteria pollutant emissions, reduced greenhouse gas emissions and zero local emissions during portions of their drive cycle when they are operating solely on electric power. These technologies can provide substantial benefits to communities, neighborhoods and schools where these vehicles operate.

Resource Impacts

The total cost for the original project was \$90,940,227, of which \$45,443,332 (50%) was provided by the DOE, \$5,000,000 (5%) provided by the CEC and \$40,496,895 (45%) provided by EPRI and participants. The total cost for SCAQMD’s contribution to this contract amendment shall not exceed \$250,000 from the Clean Fuels Fund (31). EPRI will provide \$594,678 in-kind as outlined in the table below.

Funding Partners	Funding Amount	Funding
EPRI	\$594,678	70%
SCAQMD (<i>requested</i>)	\$250,000	30%
Total	\$844,678	100%

With this amendment, the revised total project cost will be \$91,784,905, of which SCAQMD’s cost-share shall not exceed \$250,000 (less than 1%).

Sufficient funding for this proposed project is available from the Clean Fuels Fund, established as a special revenue fund resulting from the state-mandated Clean Fuels Program. The Clean Fuels Program, under Health and Safety Code Sections 40448.5 and 40512 and Vehicle Code Section 9250.11, establishes mechanisms to collect revenues from mobile sources to support projects to increase the utilization of clean fuels, including the development of the necessary advanced enabling technologies. Funds collected from motor vehicles are restricted, by statute, to be used for projects and program activities related to mobile sources that support the objectives of the Clean Fuels Program.