



THE PORT
OF LOS ANGELES
Executive Director's
Report to the

Board of Harbor Commissioners

DATE: OCTOBER 30, 2013

FROM: ENVIRONMENTAL MANAGEMENT

SUBJECT: RESOLUTION NO. _____ - TECHNOLOGY ADVANCEMENT PROGRAM COST SHARE AGREEMENT WITH THE PORT OF LONG BEACH FOR THE INTERNATIONAL RECTIFIER CORPORATION CLASS 8 PLUG-IN HYBRID-ELECTRIC DRAYAGE TRUCK WITH ZERO-EMISSIONS MODE DEMONSTRATION PROJECT

SUMMARY:

The Clean Air Action Plan (CAAP) Technology Advancement Program (TAP) Advisory Committee has reviewed and recommended funding for the International Rectifier Corporation (IRC) of El Segundo, California, Class 8 Plug-in Hybrid-Electric Drayage Truck with Zero-Emissions Mode Demonstration Project (Project). The Project would convert one (1) existing conventional Class 8 drayage truck to a parallel plug-in hybrid-electric vehicle with four selectable operation modes: all-electric drive, all-diesel drive, concurrent electric and diesel drive, and zero-emissions anti-idle system. It is anticipated that the plug-in hybrid-electric drayage truck will result in significant reductions in criteria pollutant and greenhouse gas emissions, as well as fuel consumption. The recommended funding amount of \$350,000 is to be shared equally between the City of Los Angeles Harbor Department (Harbor Department) and the Port of Long Beach (POLB) in a contract to be entered into and administered by the POLB. The proposed action is to approve a Cost Share Agreement, under which, the Harbor Department will reimburse the POLB for fifty percent (50%) of the cost in the amount of \$175,000. Total cost to the Harbor Department will be \$175,000.

RECOMMENDATION:

It is recommended that the Board of Harbor Commissioners (Board):

1. Approve the Cost Share Agreement with the Port of Long Beach for a total not-to-exceed contract amount of \$175,000;
2. Authorize the Executive Director to execute and the Board Secretary to attest to said Agreement, for and on behalf of the Board; and
3. Adopt Resolution No. _____.

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DISCUSSION:

Background/Context - On November 20, 2006, during a joint meeting between the ports of Los Angeles and Long Beach Boards of Harbor Commissioners, the Final 2006 San Pedro Bay Ports Clean Air Action Plan (CAAP) was adopted. A significant initiative of the CAAP is the Technology Advancement Program (TAP), which will accelerate the availability of new strategies into the suite of CAAP control measures that will ultimately result in significant reductions of diesel particulate matter (DPM), nitrogen oxides (NOx), sulfur oxides (SOx), and other pollutants. The mission statement for the TAP is:

To accelerate the verification or commercial availability of new, clean technologies, through evaluation and demonstration, to move towards an emissions free port.

The TAP is the catalyst for identifying, evaluating, and demonstrating new and emerging emissions reduction technologies applicable to the port industry that could be utilized in future updates to the CAAP as new control measures, alternatives to existing measures, or as additional mitigation options for new projects.

Project Description - The Project will convert one (1) existing conventional Class 8 drayage truck into a parallel plug-in hybrid-electric vehicle (PHEV) with three driver-selectable operation modes: all-electric drive, all-diesel drive, concurrent electric and diesel drive. In addition, a zero-emissions anti-idle system will permit drivers to have access to full heating ventilation and air conditioning (HVAC) and onboard accessories without requiring power from the diesel engine or generator. Tail-pipe emissions and fuel consumption are assumed to be zero when operating in all-electric mode within Port of Los Angeles (Port) boundaries. All-electric drive is designed for near-dock and short-haul drayage under electric power only, hybrid-electric drive is for longer-haul drayage that exceeds the all-electric range of the PHEV, and all-diesel drive is a baseline performance mode to gather data for comparison and also as a back-up propulsion system. The conversion (retrofit) kit for the Class 8 truck application makes this a unique technology.

The PHEV will be demonstrated for a period of one year, commencing on the date that the truck is placed into service following delivery. The test and demonstration plan provided by IRC will ensure that the PHEV will meet the Harbor Department's duty-cycle requirement for on-road drayage trucks. Following the completion of this Project, the PHEV is intended to serve as a demonstration vehicle to showcase the success of the program.

Cost Share - In June 2007, the Harbor Department and the POLB executed the CAAP Master Cost Share Agreement No. 2546 to establish a cost sharing arrangement for all joint, non-legal CAAP expenditures. In accordance with the provisions of this Master Cost Share Agreement, a Cost Share Agreement between the Harbor Department and the POLB is being submitted for approval (Transmittal 1).

The total cost of the Project is estimated at \$731,972. The IRC will contribute \$381,972 and each port will contribute \$175,000. This Cost Share Agreement identifies the POLB as the lead

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port who will contract directly with the IRC. IRC will submit invoices to the POLB based on Project milestones. The POLB will subsequently submit invoices to the Harbor Department for reimbursement of one half the amount paid by the POLB to IRC.

ENVIRONMENTAL ASSESSMENT:

The proposed action is to approve a Cost Share Agreement with the POLB for a Class 8 drayage truck conversion (retrofit) and demonstration project involving drayage operations at both ports consistent with the Clean Air Action Plan’s Technology Advancement Program. As such, the Director of Environmental Management has determined that the proposed action is exempt from the requirements of the California Environmental Quality Act (CEQA) under Article II Section 2(f) and Article III Class 6(2) of the Los Angeles City CEQA Guidelines.

ECONOMIC BENEFITS:

Approval of the proposed Cost Share Agreement with the Port of Long Beach will have no employment impacts.

FINANCIAL IMPACT:

Approval of the Cost Share Agreement authorizes a reimbursement to the POLB for a total not-to-exceed amount of \$175,000 for the implementation of the IRC Project. This Project was approved under the CAAP TAP. The total cost of the Project is estimated at \$731,972. The IRC will contribute \$381,972 and each port will contribute \$175,000. This Cost Share Agreement identifies the POLB as the lead port who will contract directly with the IRC. IRC will submit invoices to the POLB based on Project milestones. The POLB will subsequently submit invoices to the Harbor Department for reimbursement of up to \$175,000. It is anticipated that funds under the Cost Share Agreement will be reimbursed to the POLB as follows:

FY 2013/2014	\$ 70,000
FY 2014/2015	\$ 70,000
FY 2015/2016	<u>\$ 35,000</u>
TOTAL	\$ 175,000

This project is funded out of the Clean Air Action Plan (CAAP), Technology Advancement Program (TAP). The annual budget for CAAP TAP projects is \$1,500,000. The budget is used to fund various projects that may be proposed to the Port of Long Beach and the Harbor Department. Funds in FY 2013/2014 are available in the Operating Budget, Account 59965, Center 0330, Program No. 000. The Harbor Department’s financial obligations after the current fiscal year are contingent upon the Board’s appropriation of funds. If any subsequent fiscal year funds are not appropriated by the Board for the work required by the Cost Share Agreement, the Cost Share Agreement shall be terminated. However, such termination shall not relieve the parties of liability for any obligations previously incurred. Future year funds will be requested to be budgeted through the Harbor Department’s annual budgeting process, upon Board approval.

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CITY ATTORNEY:

The Office of the City Attorney has reviewed and approved the Cost Share Agreement as to form and legality.

TRANSMITTAL:

1. Cost Share Agreement



CHRISTOPHER CANNON
Director of Environmental Management

FIS Approval:  (initials)
CA Approval:  (initials)



MICHAEL R. CHRISTENSEN
Deputy Executive Director

APPROVED:



GERALDINE KNATZ, Ph.D.
Executive Director

AUTHOR: RENE SPENCER
BOARD MEETING: 11/07/2013

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