

January 23, 2017

To: Members of the Board of Directors

From: Darrell Johnson, Chief Executive Officer

Subject: Approval to Release Invitation for Bids for Engine Installation Kits

Overview

The Orange County Transportation Authority currently operates 98 New Flyer compressed natural gas-powered buses which are eligible for a midlife bus engine overhaul. The award of an agreement for the engines has already been approved by the Board of Directors. The replacement engines require additional components for the new configuration and installation. Staff is requesting approval to release an invitation for bids for the procurement of engine installation kits intended for the engine repower program.

Recommendation

Approve the release of Invitation for Bids 7-1507 for the procurement of 97 engine installation kits to support the engine repower program.

Discussion

The Orange County Transportation Authority (OCTA) operates a sub-fleet of 98 2007/2008 New Flyer compressed natural gas (CNG)-powered buses which are eligible for a midlife bus engine overhaul. These buses are exceeding 250,000 to 300,000 miles of operation. The purchase of new engines was approved by the Board of Directors (Board) on October 13, 2016, and a prototype has already been installed in the first bus. The replacement engine requires additional components for the new configuration and installation.

The engine installation kits (KIT) consist of materials and components regularly required during a midlife engine repower program including: motor mounts, air dryer, drivelines, radiators, charge-air-coolers, plumbing, heat exchangers, electric generators, voltage regulators, hydraulic pumps, and hydraulic fan motors. In addition, brackets, access doors, vents, and other materials are required to displace the excess heat generated by the larger 12-liter combined muffler and catalytic converter.

The KIT will be used on the installation of the Cummins 8.9L ISL-G Near Zero CNG-powered engine with closed crankcase ventilation and a three-way catalyst used to reduce emissions even further than the standard ISL-G engine. The California Air Resources Board has certified the Cummins ISL-G Near Zero CNG-powered engine at below 0.02 grams nitrogen oxide (NOx) per brake horsepower-hour. The ISL-G Near Zero CNG-powered engine reduces NOx by 90 percent and greenhouse gases by nine percent compared to the standard ISL-G CNG-powered engine.

On August 18, 2016, the Mobile Source Air Pollution Reduction Review Committee (MSRC) awarded OCTA \$1.47 million in grant funds to support this project. The MSRC grant award will supplement available federal funding to complete the midlife engine overhaul on the 97 buses and one prototype. This project is budgeted in the current fiscal year (FY) 2016-17 budget.

Staff is requesting approval to release the invitation for bids (IFB) for the procurement of the required KIT to proceed with the engine repower.

Procurement Approach

This procurement will be handled in accordance with OCTA's Board-approved procedures for materials and equipment greater than \$50,000. These procedures, which conform to both federal and state requirements, are used when minimum requirements can be clearly specified and, therefore, the lowest price is the only criterion for choosing among the bidders who are responsive and responsible after a sealed bidding process.

The IFB will be released upon Board approval of the recommendation.

Fiscal Impact

The project is included in the approved OCTA FY 2016-17 Budget, Transit Technical Services, Account 2114-9024-D2108-02A, and is funded through Federal Transit Administration Section 5339 Bus and Bus Facilities Grant No. CA-2016-031, and MSRC grant funds.

Summary

Board approval is requested to release Invitation for Bids 7-1507 for Engine Repower Installation Kits for New Flyer CNG natural gas-powered buses.

Attachment

A. Draft Invitation for Bids (IFB) 7-1507, Engine Installation Kits

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