



August 8, 2019

To: Transit Committee

From: Darrell E. Johnson, Chief Executive Officer

Subject: Sole Source Agreement for the Purchase of Nineteen Near-Zero Emission Bus Engines for the Midlife Overhaul of Articulated Buses

Overview

The Orange County Transportation Authority's active revenue vehicle fleet includes 20 New Flyer 60-foot articulated, compressed natural gas-powered buses, that are model year 2013, and are in need of a midlife engine replacement. There is only one compressed natural gas engine currently available for purchase that has been certified by the State of California for transit buses. In order to advance the midlife engine replacement for the articulated bus fleet, a sole source agreement is required to proceed with the engine replacement.

Recommendation

Authorize the Chief Executive Officer to negotiate and execute Purchase Order No. C-9-1085 between the Orange County Transportation Authority and Cummins Pacific, LLC, in the amount of \$1,348,248, for the purchase of 19 replacement Cummins L9N near-zero emission compressed natural gas-powered engines.

Discussion

The Orange County Transportation Authority (OCTA) purchased 20 articulated (60-foot) New Flyer compressed natural gas (CNG)-powered buses that were delivered in 2013 and 2014. These buses are in need of an engine replacement due to high mileage and ongoing engine failures. A midlife engine overhaul is generally performed once a bus has exceeded 250,000 miles or when cumulative failures deem it necessary to advance the replacement to ensure vehicle reliability in revenue service. These vehicles are expected to reach the 250,000 mileage threshold within the next year. Although not all vehicles have yet reached 250,000 total miles traveled, engine-related failures have been frequent in all 20 buses, requiring replacement of major engine components.

The buses were equipped with Cummins 8.9 Liter CNG ISL-G engines and will be replaced with Cummins 8.9 Liter L9N near-zero emission CNG-powered engines. This engine is the lowest emissions engine available and is certified by the California Air Resources Board for use in transit buses. The California Air Resources Board has certified the Cummins L9N near-zero emission CNG-powered engine at 0.02 grams NOx per brake horsepower-hour. The L9N near-zero emission CNG-powered engine reduces NOx by 90 percent and greenhouse gases by nine percent, compared to the standard ISL-G CNG-powered engine. This engine is the only CNG-powered engine certified for use in transit buses by the California Air Resource Board.

To adequately evaluate this engine, one Cummins L9N near-zero emission engine was procured, installed by OCTA, and verified by Cummins Pacific, LLC (Cummins), on a prototype bus as approved by the Board of Directors (Board) on November 12, 2018. The installation quality audit was conducted and approved by Cummins, rendering the remaining 19 articulated buses eligible for the Cummins L9N near-zero emission engine replacement.

Due to these frequent and costly failures, staff recommends the engines be replaced as soon as possible.

Since there is only one manufacturer with engines certified by the California Air Resources Board for use in transit buses, a sole source agreement is required to proceed with the engine replacement. The sole source agreement request includes the purchase of 19 engines, with a standard two-year, or 100,000-mile, all-inclusive base warranty.

Procurement Approach

This procurement was handled in accordance with OCTA Board-approved policies and procedures for a sole source procurement.

Cummins CNG-powered engines are the only approved and certified engines by the California Air Resource Board for use in transit buses in California, and Cummins is the sole supplier and distributor. Therefore, the procurement meets the guidelines for a sole source purchase as the engines are available from only one responsible source, and no other supplier can meet the requirements.

Cummins provided pricing to OCTA for 19 Cummins L9N near-zero emission CNG-powered engines, with a standard two-year, or 100,000-mile, all-inclusive base warranty, at a firm-fixed price in the amount of \$1,348,248, including sales tax.

The Cummins proposal was reviewed by staff from the Contracts Administration and Materials Management and Transit Technical Services departments to ensure compliance with the contract terms and conditions, as well as the technical requirements.

In accordance with the OCTA sole source procurement procedures, a sole source agreement over \$50,000 requires the OCTA Internal Audit Department (Internal Audit) to conduct an independent pre-award agreed-upon procedures review of Cummins' proposed pricing. The results from Internal Audit indicate that the unit price in the Cummins proposal is consistent with the unit price of the prototype engine procured in 2018. Based on Cummins' financial status and negotiated pricing, staff has concluded that Cummins is deemed responsive to OCTA's requirements.

Fiscal Impact

The project was included in OCTA's Fiscal Year 2019-20 Budget. Funds have been allocated under Near-Zero Emission Engine Replacement for Articulated Buses, Account 2114-9024-D2108-02A, Near-Zero Emission Engine Campaign for 19 Buses.

Summary

The 20-vehicle articulated bus fleet, originally placed into service in 2013 and 2014, is in need of midlife engine replacements. There is only one CNG-powered engine approved and certified by the California Air Resources Board for use in transit buses, therefore requiring a sole source agreement. Based on the information provided, staff recommends the Board authorize the Chief Executive Officer to negotiate and execute Purchase Order No. C-9-1085 with Cummins Pacific, LLC, in the amount of \$1,348,248 for the purchase of 19 Cummins L9N near-zero emission CNG-powered engines.

Attachment

None.

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