



Item #13

**DATE** June 6, 2018

**TO** GCTD Board of Directors

**FROM** Tanya Hawk, Buyer *JH*  
James Beck, Fleet Manager

**SUBJECT** **Consider Authorization for the Sole Source Purchase of up to Twenty-Six (26) Cummins L9N Replacement Engines with Near-Zero Emission from Cummins Pacific**

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**I. EXECUTIVE SUMMARY**

GCTD has established a “Low Emission Repower Project” for our fixed route fleet. The repower project consists of replacing existing CNG engines on up to twenty-six (26) New Flyer buses with low emission CNG engines manufactured by Cummins. Repowering these buses are GCTD’s first steps to complying with the California Air Resources Board (CARB)’s strategies to transition heavy-duty mobile source sector to zero and near-zero emission technologies. The L9N low-emission engine will replace the current conventional CNG engine, which are not compliant with CARB strategies. Replacing the engines will extend the useful life of the New Flyer buses from 12-yrs to 18-yrs; these buses would otherwise have to be replaced in the near future.

GCTD currently has grant funding to begin with repowering fourteen (14) of the twenty-six (26) engines on the New Flyers. The remaining twelve (12) buses will be repowered if and when additional funding becomes available.

Staff is recommending a sole source purchase of up to twenty-six (26) compressed natural gas (CNG) replacement engines from Cummins Pacific. Cummins is the only manufacturer that produces the L9N low-emission engine and the only manufacturer of CNG engines for transit buses.

Cummins Pacific has quoted a cost of \$65,782.78 (inc. tax) per engine for a total of \$920,958.92 for the purchase of the initial fourteen (14) L9N engines.

Cummins' price is considered fair and reasonable based on prices obtained through market research. A responsibility determination was conducted, which resulted in determining that Cummins Pacific is a responsive and responsible firm capable of meeting GCTD's requirements.

**It is recommended the Board of Directors authorize the Sole Source purchase of fourteen (14) Cummins L9N Low-Emission Engines for a total not-to-exceed cost of \$925,200.15 and up to an additional twelve (12) future units at a current unit pricing for a total of \$1,718,228.85 and authorize up to an additional 10% for each future unit to cover price or other adjustments that may occur.**

## II. BACKGROUND

This midlife overhaul will extend the useful life of the New Flyer buses from 12-yrs to 18-yrs; these buses would otherwise have to be replaced in the near future. These 2006 New Flyer buses have CNG tanks that will be in good standing until 2026; with the repowering, this will allow the New Flyers to be in service much longer and will allow GCTD to avoid the need to procure replacement buses in the immediate future.

Repowering these buses are GCTD's first steps toward complying with California Air Resources Board (CARB)'s strategies to transition heavy-duty mobile source sector to zero and near-zero emission technologies. The L9N low-emission engine will replace the current conventional CNG engine, which are not compliant with CARB strategies.

A Sole Source Justification was generated by GCTD for the purchase of up to twenty-six (26) Cummins L9N Low-Emissions CNG Engines for a midlife powertrain overhaul of the 2006 New Flyer buses currently in GCTD's bus fleet; fourteen (14) engines at this time and up to an additional twelve (12) as funds become available. Cummins is the only manufacturer that produces the L9N low-emission engine.

GCTD has received CMAQ (Congestion Mitigation Air Quality) grant funds in the amount of \$1,821,046 towards this project. GCTD will also be applying for HVIP (Hybrid/Zero emission Voucher Incentive Program) funds in the amount of \$10,000 per engine.

Staff did extensive research before selecting the Cummins L9N "Near Zero" engine (with exhaust catalyst) for GCTD's "Low Emission Repower Project". The selection was based on the fact that there are no other low-emission CNG engines for transit buses. Staff also did extensive research on the Cummins L9N and determined it would more than adequately meet the agency's requirements for the repower project.

These engines are certified by the California Air Resource Board (ARB) and Environmental Protection Agency (EPA) Optional Low NOx emissions standard of 0.02 g/bhp-hr. – 90% lower than the current emissions standards. It also meets the 2017 EPA greenhouse gas (GHG) emissions requirement. Therefore, the purchase of L9N from Cummins Pacific is justified as sole source procurement.

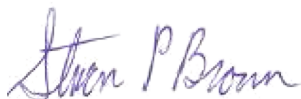
GCTD would typically have done a competitive bid which would have included the cost of the engines and the cost of installing each engine, all from one contractor. In researching the repower project, however, it was found that buying the engines directly from the manufacturer would save GCTD from paying the customary vendor “mark-up” percentage of 10-20%, resulting in a substantial savings of at least \$86,000 (\$6,139 per engine) for the initial purchase and up to an additional \$74,000 for the remaining twelve (12) units. GCTD estimates an overall project savings of approximately \$160,000. GCTD will be able to repower even more buses with the savings resulting from purchasing the L9N directly from the manufacturer of the L9N engine, Cummins Pacific.

Cummins price is considered fair and reasonable based on prices obtained through market research. A responsibility determination was conducted on Cummins Pacific. Staff confirmed that Cummins Pacific was not listed in the System for Award Management (SAM) nor were there any complaints filed with the Better Business Bureau (BBB). As a result, Cummins Pacific was determined to be a responsive, responsible contractor capable of meeting the requirements.

### III. SUMMARY AND RECOMMENDATION

**It is recommended the Board of Directors authorize the Sole Source purchase of fourteen (14) Cummins L9N Low-Emission Engines for a total not-to-exceed cost of \$925,200.15 and up to an additional twelve (12) future units at a current unit pricing for a total of \$1,718,228.85 and authorize up to an additional 10% for each future unit to cover price or other adjustments that may occur.**

Concurrence:



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Steven P. Brown  
General Manager