

**Board Report**

File #: 2018-0488, **File Type:** Contract

Agenda Number: 14.

**OPERATIONS, SAFETY AND CUSTOMER EXPERIENCE COMMITTEE
OCTOBER 18, 2018**

SUBJECT: ARTICULATED ZERO EMISSION TRANSIT BUSES

ACTION: APPROVE RECOMMENDATIONS

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to:

- A. EXECUTE Modification No. 3 to Contract No. OP28367-001, Part D, awarded to New Flyer of America, for the acquisition of sixty foot Zero Emission Buses (ZEB), to upgrade and increase the onboard bus battery capacity in the firm fixed price amount of \$2,792,074, for a total contract amount of \$70,970,417; and
- B. NEGOTIATE AND EXECUTE with New Flyer of America future contract modifications to Contract No. OP28367-001, Part D, for a not to exceed amount of \$1,000,000 for each contract modification.

ISSUE

Consistent with Metro Board direction, motion by Directors Garcetti, Krekorian and Antonovich on Oct 27, 2016 Regular Board Meeting Item 42 (File ID 2016-0852), Metro is in the process of converting the Metro Orange Line (MOL) from 100% Compressed Natural Gas (CNG) operation to 100% Zero Emission Buses (ZEB) operation by 2020.

Contract No. OP28367-001, Part D, requires the delivery of buses, depot chargers and on-route chargers. Due to the rapidly changing improvement in battery density, Metro has an option to transition to a battery configuration with more capacity and still maintain the high charge rates. New Flyer has proposed to upgrade the battery capacity from 250 kW-hr to 320 kW-hr. This option was not available during the solicitation of the contract award; and the final battery configuration has recently been designed. Approval of Recommendation A authorizes the increase in battery capacity.

The project delivery schedule is very aggressive and challenging in part due to the long lead times associated with designing and installing charging equipment at multiple locations and the coordination required with outside organizations such as the Los Angeles Department of Water and Power. Recommendation B will allow Metro and the Contractor to negotiate future change orders in a timely manner to ensure that the maximum cost and schedule benefits are realized. The request

for an increase in Contract Modification Authority (CMA) from \$500,000 to \$1,000,000 for individual changes is consistent with Board authorized CMA's for other Rolling Stock programs, such as for the light rail vehicle Contracts P3010 and P2550, and the 45-foot CNG Composite Buses under Contract OP33202082.

BACKGROUND

In November 2017, Metro issued notice to proceed (NTP) on Contract No. OP28367-001, Part D for 35 (subsequently increased to 40 buses in the March 2018 Board Meeting under File #2016-0836) zero emission battery electric buses, on-route and depot charging equipment. At the time of the award, New Flyer proposed a battery capacity of 250 kW-hr.

DISCUSSION

During the March 1, 2018 Advanced Transit Vehicle Consortium (ATVC) board meeting, New Flyer mentioned that as a result of improvements to energy density their standard battery capacity was increasing in 2019. In response to staff's inquiry, New Flyer confirmed that an increase from 250 kW-hr to 320 kW-hr would be available for Metro's deliveries beginning in 2019. The higher capacity translates directly to an increase in bus range; e.g., permitting an increase from 1.5 to 2 roundtrips between the Chatsworth and North Hollywood stations. Approval of Recommendation A offers Metro further operational flexibility, such as deferring charging of buses when electrical rates are cheaper, reducing charging times at layovers, and mitigation of any risk if a charger is inoperable.

Approval of Recommendation B increases the CEO's Contract Modification Authority, allows for unforeseen changes to be successfully negotiated and addressed with New Flyer in an expedited manner, minimizing impact to the project schedule.

DETERMINATION OF SAFETY IMPACT

There are not any anticipated impacts to safety from this action.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

Approval of this recommendation supports the following Metro Strategic Plan Goal: Transform Los Angeles County through Regional collaboration and national leadership. This action will advance Metro's goal of converting the Metro Orange Line (MOL) from 100% Compressed Natural Gas (CNG) operation to 100% Zero Emission Buses (ZEB) operation by 2020.

FINANCIAL IMPACT

Funding of \$40,980,229 for this contract is included in the FY19 budget in project 201073. Because this is a multi-year contract, the Cost Center Manager will be responsible for ensuring that future year funding is programmed.

Impact to Budget

There is no anticipated impact to the FY19 budget for this action. Current year funding is Proposition C 40% Discretionary. Future funding for this procurement may come from various eligible available federal, state and local funding sources including financing options and grants that are eligible for bus capital projects. Staff will pursue all sources of funding maximizing their use for these activities.

ALTERNATIVES CONSIDERED

Staff considered remaining with 250 kW-hr battery capacity. This alternative was not considered due to improvements in battery technology and the fleet operational flexibility offered by increased battery capacity.

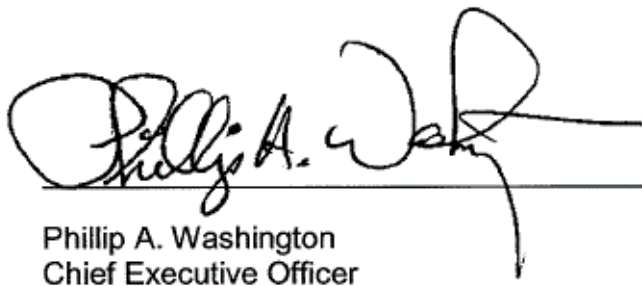
NEXT STEPS

Upon Board approval, staff will execute the Contract Modification with New Flyer of America.

ATTACHMENTS

- Attachment A - Procurement Summary
- Attachment B - Contract Modification/Change Order Log
- Attachment C - DEOD Summary
- Attachment D - Regular Board Meeting Motion Item 42 (File ID 2016-0852)

Prepared by: Steve Schupak, Sr. Manager, Project Control, (213) 617-6294
Jesus Montes, Sr. Executive Officer, Vehicle Engineering & Acquisition, (213) 418-3277
Reviewed by: James T. Gallagher, Chief Operations Officer, (213) 418-3108
Debra Avila, Chief Vendor/Contract Management Officer, (213) 418-3051



Phillip A. Washington
Chief Executive Officer