

Board Report

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Agenda Number: 29.

OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMITTEE SEPTEMBER 20, 2018

SUBJECT: A650 TRACTION GEAR UNIT OVERHAUL (OPTION-BUY FLEET)

ACTION: CONTRACT AWARD

RECOMMENDATION

AWARD a 74-month indefinite delivery/indefinite quantity Contract No. MA47351000 for the overhaul of up to 296 traction gear units for 74 Breda A650 Option Rail Vehicles to ORX, for a not-to-exceed amount of \$4,925,746, subject to resolution of protest, if any.

<u>ISSUE</u>

The Original Equipment Manufacturer (OEM) establishes a timeline for vehicle maintenance and major systems overhauls in order to maintain the safety and level of performance of their vehicles.

Implementation of this overhaul program helps ensure the A650 Option-buy fleet remains in a constant State of Good Repair (SGR) by overhauling multiple systems on the vehicles including friction brake, doors, gear units, traction motors, trucks and suspension, auxiliary power and coupler systems. Completing this scheduled overhaul will ensure equipment safety, performance and longevity of the rail cars.

BACKGROUND

The Breda A650 Option-Buy Heavy Rail Vehicle Fleet is in its 21st year of revenue service operations with an average per car mileage of over 1.4 million miles, accumulated fleet mileage of over 98 million miles with consistent performance, and a reliable safety record. The A650 fleet, consisting of 74 rail cars, is due for traction gear unit overhauls per the original equipment manufacturer (OEM) and Metro engineering's recommendations. The traction gear unit overhaul is one of the fourteen vehicle system overhauls.

DISCUSSION

The traction gear unit is a main mechanical component connected to a traction motor that transforms electrical energy to mechanical energy to propel the rail car. Should a traction gear unit fail there is an impact to revenue service with catastrophic results and the vehicle will cease to move. Servicing and inspecting a traction gear unit is performed by in-house maintenance personnel but for a major overhaul, which is beyond the level of in-house maintenance capability, performance by a qualified

vendor is required. The contractor will perform services in accordance with OEM and Metro engineering specifications following production schedule of four traction gear units per month.

The traction gear unit overhaul is one of the fourteen vehicle system overhauls that will require procurement action in the future. The additional systems to be overhauled or modified include car interior renovations, bike area and railing modifications, loop step modification, seat insert replacement, passenger door, friction brake, air compressor, AC evaporator motor upgrade, coupler, semi-permanent drawbar, low voltage power supply, air spring replacement, traction motor, and gear unit overhaul.

DETERMINATION OF SAFETY IMPACT

Passenger and employee safety are of the utmost importance to Metro and, therefore, it is imperative to maintain the A650 option-buy fleet to a constant state of good repair. The traction gear unit overhaul is in support of the complete A650 component overhaul program. This effort will ensure that these vehicles are maintained within OEM recommendations and regulatory standards, according to the defined schedule and technical specification requirements, and within Metro's internal Corporate Safety standards.

FINANCIAL IMPACT

The total contract amount is \$4,925,746. Funding of \$100,000 for this procurement is included in the FY19 budget in cost center 3942, Rail Fleet Services Maintenance, under project number 206034, line item 50316, Professional & Tech Service.

Since this is a multi-year contract, the cost center manager, project manager and Sr. Executive Officer, Rail Fleet Services will ensure that the balance of funds is budgeted in future fiscal years

Impact to budget

The current source of funding for this acquisition is Proposition A35%. This funding source maximizes allowable allocations given approved funding provisions and guidelines.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

Approval of this recommendation supports the following Metro Strategic Plan Goal: Provide high quality mobility options that enable people to spend less time travelling. This project will improve safety, service, and reliability in an effort to provide a world-class transportation system that enhances quality of life for all who live, work, and play within LA County.

ALTERNATIVES CONSIDERED

Traction gear units are safety critical systems which are required to be overhauled per the OEM and regulatory requirements to avoid catastrophic events resulting from gear and bearing lock with resultant service delays and customer inconvenience. In addition to equipment failure and service delays, deferring the traction gear unit overhaul is not recommended as Metro could also be subject to penalties mandated by the California Public Utilities Commission.

NEXT STEPS

Overhaul of the traction gear unit systems on the A650 heavy rail vehicles will continue in accordance with Rail Fleet Services scheduled requirements. If approved, the project is scheduled to commence in December 2018.

ATTACHMENTS

Attachment A - Procurement Summary Attachment B - DEOD Summary

- Prepared by: Fred Kan, Director, Rail Fleet Services, (213) 922-3304 Richard M. Lozano, Sr. Director, Rail Vehicle Maintenance, (310) 816-6694 Robert Spadafora, Sr. Executive Officer, Rail Fleet Services (213) 922-3144
- 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