

# **Board Report**

Los Angeles County
Metropolitan Transportation
Authority
One Gateway Plaza
3rd Floor Board Room
Los Angeles, CA

File #: 2023-0758, File Type: Contract Agenda Number: 20.

## OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE FEBRUARY 15, 2024

SUBJECT: P3010 LIGHT RAIL VEHICLE COMPONENT OVERHAUL BATTERY KITS

ACTION: APPROVE RECOMMENDATIONS

### **RECOMMENDATION**

#### CONSIDER:

- A. AUTHORIZING the Chief Executive Officer to award a 24-month indefinite quantity/indefinite delivery Contract No MA101202000 to Saft America Inc. for the purchase of 235 P3010 Battery Kits for a not-to-exceed amount of \$3,513,278 subject to the resolution of any properly submitted protest(s), if any; and
- B. FINDING that there is only a single source of procurement for the item(s) set forth in Recommendation A above and that the purchase is for the sole purpose of duplicating or replacing supply, equipment, or material already in use, as defined under Public Utilities Code Section 130237.

(REQUIRES TWO-THIRDS VOTE OF THE FULL BOARD)

#### **ISSUE**

The Original Equipment Manufacturer (OEM) identified and established a component overhaul schedule for all vehicle systems occurring at the 600,000-mile interval to sustain passenger comfort and safety while ensuring equipment operates within designed reliability and longevity targets.

The P3010 rail car fleet manufacturer, along with its sub-suppliers, identified component level overhauls to vehicle systems, including the friction brakes, propulsion, doors, truck assembly including traction motor and gearbox, auxiliary power supply, coupler, master controller, pantograph and Heating Ventilation/Air Conditioning Systems. Therefore, the P3010 overhaul program will require board authorization for 10 separate vendors and new component contracts to complete the project over a 5-year period. The battery kits represent one such system to be overhauled.

#### **BACKGROUND**

The P3010 LRV fleet was originally placed in revenue service between 2016 - 2023 to support the E (Expo) and former L (Gold) Line extensions, as well as the replacement of the P865/P2020 legacy fleets that were decommissioned between 2017 - 2021. Today the P3010 light rail fleet operates on all of Metro's light rail lines, including A (Blue), C (Green), E (Expo), and K (Crenshaw) lines. The P3010 LRV fleet consists of 235 rail cars operating with consistent performance, reliability, and safety at over 74.624.607 miles.

## **DISCUSSION**

The Component Level Overhaul program consists primarily of the repair and replacement of identified equipment that will be overhauled several times during the life of the vehicle. This is the 1<sup>st</sup> of several overhaul cycles necessary to meet the vehicle's 30-year design life. Rail Fleet Services mechanical staff will perform the removal, testing, and reinstallation of the equipment overhauled by OEM contractors, as the Rail Fleet Service shops do not have the necessary expertise, tools, equipment, and space to perform the actual component overhauls. The contractors are required to meet Federal Transit Administration (FTA), Association of American Railroad (AAR), California Public Utilities Commission (CPUC), and Metro's Corporate Safety Standards.

Metro's Transit Vehicle Engineering (TVE) Department, along with Rail Fleet Services staff, performed a technical review of the OEM 600,000 overhaul recommendations and concur with each future overhaul project as described in the Heavy Repair Manuals. TVE also developed the Statement of Work and specifications for the contractor to follow.

The Component Level Overhaul program is mileage based on the current rollout and headway requirements. These overhauls will occur every 5 years throughout the vehicle's service life. The Component Level Overhaul is unlike the Mid-life Overhaul program that typically involves an overhaul contractor, and/or equipment replacement to the major systems while addressing obsolete parts and performance issues/upgrades. The Mid-life rehabilitation occurs at the vehicle's Mid-life, typically 15-years, scheduled to occur beginning calendar year 2031.

#### **DETERMINATION OF SAFETY IMPACT**

Passenger safety is of the utmost importance to Metro and staff. These batteries are integral components to ensure the safe operation of an LRV as they provide power for raising the pantographs, opening/closing doors and providing emergency interior and exterior lighting for the LRV.

Therefore, it is critical for staff to meet maintenance and overhaul cycles as defined by the OEM while maintaining compliance with state and federal regulations as well as Metro's internal safety standards, policies, and procedures.

#### **FINANCIAL IMPACT**

Funding in the amount of \$3,513,278 for these battery kits is included in the FY24 budget under approved Capital Project (CP) 214009. - P3010 Fleet Component Overhaul.

Since this is a multi-year project, the cost center Component Overhaul Superintendent, Division Director, and Sr. Executive Officer of Rail Fleet Services will ensure that the balance of funds is budgeted in future years.

#### Impact to Budget

The current source of funds for this action is Proposition A 35%., which is eligible for Metro Rail Operations. Use of this funding source maximizes the allowable project application given approved guidelines and provisions.

#### **EQUITY PLATFORM**

This action will ensure that Metro's P3010 LRV fleet is able to provide vital transportation services throughout the City and County of Los Angeles via A, C, E and L lines, including many underserved communities where disparities within the region can exist between residents' access to jobs, housing, education, health, and safety. Rail transportation provides an important lifeline for travelers with limited transportation options, and the Metro light rail maintenance programs ensures the proper State of Good Repair to the P3010 light rail fleet to provide transportation for those that primarily rely on transit.

The Diversity and Economic Opportunity Department (DEOD) established an overall 2% Disadvantaged Business Enterprise (DBE) goal. SAFT exceeded the goal by making a 2.08% DBE commitment.

## IMPLEMENTATION OF STRATEGIC PLAN GOALS

Approval of the P3010 rail fleet battery supports Strategic Goal 1: Provide high-quality mobility options that enable people to spend less time traveling. The procurement of rail batteries precedes the forthcoming nine overhaul projects. This overhaul program ensures sustained fleet reliability, including safe, accessible, and affordable transportation for all riders of Metro's light rail system. The recommendation supports Metro Strategic Plan Goal 5) Provide Responsive, Accountable, and Trustworthy governance within the Metro organization. Contract Modification Authority and Contract extension safeguard overhaul production continuance while meeting passenger safety and fleet reliably.

#### **ALTERNATIVES CONSIDERED**

The P3010 fleet is Metro's newest and most reliable light rail fleet with sustained availability and reliability. Execution of this overhaul regenerates equipment performance with a positive impact on passenger safety. An alternative is to defer the OEM recommended overhaul program. However, this is not recommended as the fleet will suffer overtime and will create decreased availability/reliability with a high risk of equipment breakdowns as well as negative impacts to on-time-performance and customer service.

Approval of this board item is needed due to the expertise required from the OEM that will save time and money rather than having to re-solicit for these services. Additionally, due to the nature of the

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existing overhaul services contract, replacing motors will be performed concurrently to other overhaul services under the contract.

#### **NEXT STEPS**

Upon approval of the Board, staff will execute procurement for Contract No. MA101202000 of light rail vehicle batteries with Saft America, Inc. The staff will return to the board for approval of future contract awards inclusive of truck systems, coupler, heating ventilation and air conditioning, low voltage power supply, propulsion, high speed circuit breaker, master controller, and pantograph.

#### **ATTACHMENTS**

Attachment A - Procurement Summary
Attachment B - DEOD Summary

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