



Board Report

File #: 2024-0186, File Type: Contract

Agenda Number: 21.

**OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE
MAY 16, 2024**

**SUBJECT: P3010 LIGHT RAIL VEHICLE COMPONENT OVERHAUL OF TRUCK SYSTEMS
(POWER AND NON-POWER AXLE) ASSEMBLIES**

ACTION: APPROVE RECOMMENDATION

RECOMMENDATION

CONSIDER:

- A. AMENDING the Life of Project Budget for the P3010 Fleet Component Overhaul project by \$14,542,000 for a total of \$50,532,000; and
- B. AUTHORIZING the Chief Executive Officer to award a firm fixed price Contract No. MA101250000 to ORX Railway Corporation for transporting, inspecting, overhauling, and testing a total of 257 P3010 fleet truck systems assemblies including 88 individual gear unit spares for a firm fixed price amount of \$39,551,971.00, for a period of 49 months after the issuance of Notice to Proceed, subject to the resolution of any properly submitted protest(s), if any.

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 the equipment operates within the designed reliability and longevity targets.

The P3010 rail car fleet manufacturer, along with its sub-suppliers, identified component level overhauls to vehicle systems, including friction brakes, propulsion, doors, the truck assembly including traction motor and gearbox, auxiliary power supply, coupler, master controller, pantograph, and heating ventilation/air conditioning equipment. Therefore, the P3010 overhaul program will require Board authorization for nine separate vendors and new component contracts to complete the project over a 5-year period. On February 22, 2024, the Board approved the 2nd overhaul project consisting of Battery Kit replacements.

BACKGROUND

The P3010 LRV fleet was originally placed in revenue service between 2016 - 2023 to support the opening of the previously named Expo Line and the Gold Line extensions, as well as the replacement of the P865/P2020 legacy Light Rail Vehicle (LRV) fleets that were decommissioned between 2017 - 2021. Today, the P3010 LRV 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 with an accumulated fleet mileage of 77,855,821 miles.

DISCUSSION

The Component Level Overhaul program consists primarily of repairing and replacing identified equipment that will be overhauled several times during the vehicle's life. This is the first of several overhaul cycles necessary to meet the vehicles' 30-year design life. Rail Fleet Services' (RFS) 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 the 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 and Rail Fleet Services staff performed a technical review of the OEM 600,000 overhaul recommendations and concurred 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 five years throughout the vehicle's service life. The Component Level Overhaul is unlike the Mid-life Overhaul program, which 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, and is scheduled to occur beginning in the calendar year 2031.

The original LOP of \$36M was established in 2021. Due to industry inflationary pressures the cost of materials and labor have significantly increased necessitating additional funding added to the original LOP in the amount of \$15.5M to cover these costs. The new LOP is \$50.5M to cover Metro's labor costs including a five year lookahead that coincides with the 600,000 mile component overhaul interval.

DETERMINATION OF SAFETY IMPACT

Passenger safety is of the utmost importance to Metro. 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 \$5,320,000 for the Truck Systems Overhaul is included in the FY24 budget under approved Capital Project (CP) 214009. - P3010 Fleet Component Overhaul. Assuming approval of the LOP increase of \$14,542,000, bringing the LOP up to \$50,532,000, this action is within the project LOP.

Since this is a multi-year project, the cost center Senior Executive Officer, Component Overhaul Superintendent, and the Division Director 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. Given approved guidelines and provisions, this funding source maximizes the allowable project application.

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 K lines, including many Equity Focus Communities where disparities within the region can exist between residents' access to jobs, housing, education, health, and safety. The P3010 fleet operates on all light rail lines directly impacting EFCs, such as neighborhoods in East and South Los Angeles, Long Beach, Compton, Watts, Crenshaw, and Inglewood, among others. Rail transportation provides an essential lifeline for travelers with limited transportation options, and the Metro light rail maintenance programs ensure 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. ORX Railway Corporation exceeded the goal by making a 2.53% DBE commitment.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

Approval of the P3010 Truck Systems Overhaul 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 eight overhaul projects. This overhaul program ensures sustained fleet reliability, including safe, accessible, and affordable transportation for Metro's light rail system riders.

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 reliably meeting passenger safety and fleet needs.

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 over time 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 item is needed since the truck systems overhaul will be performed concurrently with friction brakes, propulsion, doors, coupler, master controller, auxiliary power supply, pantograph, and heating ventilation and air conditioning component overhaul work.

NEXT STEPS

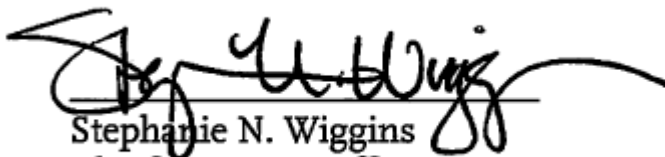
Upon approval from the Board, staff will execute Contract No. MA101250000 for the P3010 Power Truck Systems overhaul. Staff will return to the Board for approval of future contract awards inclusive of propulsion, doors, coupler, master controller, auxiliary power supply, pantograph, and heating ventilation and air conditioning overhauls.

ATTACHMENTS

Attachment A - Procurement Summary
Attachment B - DEOD Summary

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Reviewed by: Conan Cheung, Chief Operations Officer (213) 418-3034



Stephanie N. Wiggins
Chief Executive Officer

PROCUREMENT SUMMARY

P3010 LRV COMPONENT OVERHAUL OF TRUCK SYSTEMS (POWER AND NON-POWER AXLE) ASSEMBLIES

1.	Contract Number: MA101250000	
2.	Recommended Vendor: ORX Railway Corporation	
3.	Type of Procurement (check one): <input type="checkbox"/> IFB <input checked="" type="checkbox"/> RFP <input type="checkbox"/> RFP-A&E <input type="checkbox"/> Non-Competitive <input type="checkbox"/> Modification <input type="checkbox"/> Task Order	
4.	Procurement Dates:	
	A. Issued: 03-23-2023	
	B. Advertised/Publicized: 03-24-2023	
	C. Pre-Proposal Conference: 04-05-2023	
	D. Proposals Due: 07-31-2023	
	E. Pre-Qualification Completed: 03-05-2024	
	F. Conflict of Interest Form Submitted to Ethics: 08-08-2023	
	G. Protest Period End Date: 05-23-2024	
5.	Solicitations Picked up/Downloaded: 27	Bids/Proposals Received: 4
6.	Contract Administrator: Aniza Wan Nawang	Telephone Number: (213) 922-4677
7.	Project Manager: Richard Lozano	Telephone Number: (323) 224-4042

A. Procurement Background

This Board Action is to approve the award of Contract No. MA101250000 to transport, inspect, overhaul, and test two hundred fifty-seven (257) P3010 car kits including eighty-eight (88) individual gear units. Each car kit consists of two (2) non-powered axle assemblies, four (4) powered axle assemblies with four (4) gear units, and four (4) traction motors. The contract type is Firm Fixed Price, and the work is expected to be completed by August 1, 2028. Board approval of contract award is subject to the resolution of any properly submitted protest(s), if any.

On March 23, 2023, Request for Proposals (RFP) No. MA101250 was issued as a competitive procurement in accordance with LACMTA's Acquisition Policy. A total of twenty-seven (27) firms downloaded the RFP and were included in the planholders' list. A pre-proposal conference and site visit was held on April 5, 2023. During the solicitation phase of this RFP, LACMTA issued eight (8) amendments, and two (2) sets of clarifications, answering a total of forty-four (44) questions received from the proposers.

Eight (8) amendments were issued during the solicitation phase of this RFP:

- Amendment No. 1, issued on April 11, 2023, revised critical dates, and extended the proposal due date.

- Amendment No. 2, issued on April 12, 2023, revised the Race Conscious Disadvantaged Business Enterprise (RC-DBE) goal from 28% to 2%.
- Amendment No. 3, issued on May 16, 2023, revised critical dates, and extended the proposal due date.
- Amendment No. 4, issued on June 7, 2023, extended the proposal due date, and changed the Contracting Officer
- Amendment No. 5, issued on June 27, 2023, extended the proposal due date, and changed the Contracting Officer
- Amendment No. 6, issued on July 12, 2023, revised the Technical Specifications, and included a new Exhibit 2 – Schedule of Quantities of Prices
- Amendment No. 7, issued on July 19, 2023, revised the Technical Specifications, and included the Form 60 Pricing Form
- Amendment No. 8, issued December 8, 2023, revised the Technical Specifications and issued a Best and Final Offer (BAFO)

Four (4) proposers responded to the RFP by the due date on July 31, 2023, listed herein in alphabetical order: Pamco Machine Works, Inc (Pamco), UTCRAS, Penn Machine Company LLC (Penn Machine) and ORX Railway Corporation (ORX).

B. Evaluation of Proposal

This procurement was conducted in accordance with LACMTA's Acquisition Policy and Procedure. A Proposal Evaluation Team (PET) consisting of staff from Rail Fleet Services and Transit Vehicle Engineering was convened and conducted a comprehensive technical evaluation of the proposals received.

The proposals were evaluated based on the following evaluation criteria and weights:

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|------------------------|-----|
| • Proposed Work Scope | 30% |
| • Technical Capability | 20% |
| • Price | 20% |
| • Past Performance | 15% |
| • Project Management | 15% |

The evaluation criteria are appropriate and consistent with criteria developed for similar projects. Several factors were considered in developing these weights, giving the greatest importance to the understanding of the scope of services and technical capability of proposers.

The proposals required clarification and discussion but were found to be technically and commercially acceptable and in compliance with the requirements of the RFP. A Best and Final Offer request was issued and the final evaluation scoring is shown as follows:

	Evaluation Criteria	Average Score	Weight Factor	Weighted Score	Rank
	ORX				
1	Proposed Work Scope	91.7	30%	27.5	
2	Technical Capability	97.0	20%	19.4	
3	Price	n.a	20%	18.9	
4	Past Performance	94.5	15%	14.2	
5	Project Management	95.0	15%	14.3	
	Total Weighted Score			94.3	1

	Evaluation Criteria	Average Score	Weight Factor	Weighted Score	Rank
	UTCRA				
1	Proposed Work Scope	93.3	30%	28.0	
2	Technical Capability	91.0	20%	18.2	
3	Price	n.a	20%	18.8	
4	Past Performance	91.3	15%	13.7	
5	Project Management	93.4	15%	14.0	
	Total Weighted Score			92.7	2

	Evaluation Criteria	Average Score	Weight Factor	Weighted Score	Rank
	Pamco				
1	Proposed Work Scope	87.0	30%	26.1	
2	Technical Capability	86.0	20%	17.2	
3	Price	n.a	20%	20.0	
4	Past Performance	87.3	15%	13.1	
5	Project Management	93.4	15%	14.0	
	Total Weighted Score			90.4	3

	Evaluation Criteria	Average Score	Weight Factor	Weighted Score	Rank
	Penn Machine				
1	Proposed Work Scope	92.8	30%	27.8	

2	Technical Capability	89.0	20%	17.8	
3	Price	n.a	20%	15.5	
4	Past Performance	91.7	15%	13.8	
5	Project Management	100	15%	15.0	
	Total Weighted Score			89.9	4

One (1) proposer, Pamco, was determined to be non-responsive since it did not meet the Disadvantaged Business Enterprise (DBE) participation goal of two (2%) of the total proposal price. The remaining three (3) proposers (ORX, Penn Machine and UTCRAS) were found to be responsive to the DBE requirement.

C. Price Analysis

In accordance with LACMTA's Acquisition Policy and Procedures for a competitive acquisition, a price analysis is required. Therefore, staff performed a Price Analysis consisting of a comparison of the proposed prices and the Independent Cost Estimate (ICE). The Price Analysis revealed a difference between the ICE and the three (3) proposals, with the ICE being significantly higher than the proposed prices. Further investigation disclosed that the gear unit overhaul component was inadvertently included twice in the ICE calculation. The duplicated cost element of approximately \$95,800 per unit accounts for around \$24,600,000 of the ICE amount. The Price Analysis considered this deductive cost element in conjunction with the ICE to make the determination that the negotiated amount from the highest rated Proposer was fair and reasonable.

The recommended proposal price from ORX at \$39,551,971.00 is lower than, and within a reasonable range of the ICE when factoring out the duplicated cost element in the ICE (with the ICE minus the duplicated cost element totaling around \$41,800,000). The recommended proposal price is determined to be fair and reasonable based on the technical evaluation, negotiations, and price analysis.

	Proposer Name	BAFO Proposal Amount	LACMTA ICE
1	ORX	\$39,551,971.00	\$66,428,964.00
2	UTCRA	\$39,642,449.33	\$66,428,964.00
3	Pamco	\$37,297,499.00	\$66,428,964.00
4	Penn Machine	\$48,031,344.52	\$66,428,964.00

D. Background on Recommended Contractor

The recommended firm, ORX Railway Corporation was founded in 1979 and headquartered in Tipton, Pennsylvania. ORX Railway Corporation is a full-service

shop that provides both new and overhauled products for a wide range of rail transportation including freight cars, locomotives, and light rail and heavy rail transit vehicles. Their most recent and on-going contracts include the wheelset assemblies, axles and gearbox builds and overhauls for LACMTA Gold and Red Line and New York City Transit (NYCT).

DEOD SUMMARY

P3010 LRV COMPONENT OVERHAUL OF TRUCKS SYSTEMS (POWER AND NON-POWER AXLE) ASSEMBLIES

A. Small Business Participation

The Diversity and Economic Opportunity Department (DEOD) established an overall 2% Disadvantaged Business Enterprise (DBE) goal for this solicitation. ORX Railway Corporation exceeded the goal by making a 2.54% DBE commitment.

Small Business Goal	2% DBE	Small Business Commitment	2.54% DBE
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	DBE Subcontractors	Ethnicity	% Committed
1.	Vobecky Enterprises	African American	2.54%
Total Commitment			2.54%

B. Local Small Business Enterprise (LSBE) Preference

The LSBE preference is not applicable to federally funded procurements. Federal law (49 CFR § 661.21) prohibits the use of local procurement preferences on FTA-funded projects.

C. Living Wage and Service Contract Worker Retention Policy Applicability

The Living Wage and Service Contract Worker Retention Policy is not applicable to this contract.

D. Prevailing Wage Applicability

Prevailing wage is not applicable to this modification/contract.

E. Project Labor Agreement/Construction Careers Policy

Project Labor Agreement/Construction Careers Policy is not applicable to this Contract. Project Labor Agreement/Construction Careers Policy is applicable only to construction contracts that have a construction contract value in excess of \$2.5 million.