



Board Report

File #: 2023-0528, File Type: Contract

Agenda Number: 20.

OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE NOVEMBER 16, 2023

SUBJECT: P2550 LIGHT RAIL VEHICLE MIDLIFE OFFSITE TESTING

ACTION: APPROVE RECOMMENDATIONS

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to:

- A. EXECUTE Contract Modification No. 6 to Contract No. PS183832000P2550 Light Rail Vehicle (LRV) Midlife Modernization with Kinkisharyo International, L.L.C. for Offsite LRV Qualification Testing increasing the total Contract value by \$1,500,000 from \$159,119,493 to \$160,619,493 to enable LRV testing offsite LACMTA property; and
- B. EXECUTE Contract Modifications under this Contract for up to \$1,000,000 per Contract Modification.

ISSUE

Metro is currently undergoing several projects to modernize existing LRVs to the current state of technology to ensure the LRV fleet remains in a State of Good Repair (SGR). After the initial LRV's (pilot LRVs) are modernized, they are usually shipped to Metro for design qualification tests on Metro's mainline. As Metro's priorities are passenger service and maintenance of its assets, supporting project tests on the mainline with test operators places tremendous strain on Metro's resources. In some cases, conflicts may result in an impact to service, delays to the test program, or both. Using Metro's mainline for test purposes adds further risk in the event of test failures. As an example, Metro's resources may be additionally strained if a revenue-ready LRV needs to be sent to retrieve a failed pilot LRV.

This contract modification will allow the contractor, Kinkisharyo (KI), to lease a test track where most of the planned mainline design conformance tests of the pilot vehicles may be performed, reducing impact to service and to Metro's operations. It is critical to note that the fleet will still need to undergo limited testing on Metro's mainline to verify that there are no production or quality issues that need to be addressed prior to acceptance.

BACKGROUND

In March 2021, the Board approved an award to issue Kinkisharyo Contract No. P2550-2019 a firm-fixed unit rate contract in the amount of \$170,349,474 for the Midlife Modernization of the 50 existing P2550 LRVs, inclusive of Options. To date, only 2 out of 7 options have been exercised. The Project's primary objective is to deliver safe, reliable, high-quality overhauled LRVs that will be modernized to the current state of technology to ensure the LRV fleet remains in a State of Good Repair (SGR).

DISCUSSION

The Project is currently in the design phase. Once this phase is complete, the LRV level qualification testing phase will commence. These tests are typically performed with the pilot LRVs on a transit agency's mainline and have a duration of 9 to 12 months. Supporting this approach places significant strain on an agency's resources including track allocation, test operators, shop space and personnel. The test track location needs to be determined early to facilitate coordinated planning amongst stakeholders.

Considerations were made to perform LRV qualification testing at Metro's site. However, Metro's planned and unplanned test track closures/maintenance, in addition to the increasing track needs to support revenue service, could further reduce test track availability for LRV design qualification testing.

This recommended Contract Modification is to facilitate the qualification testing at an offsite facility in Pueblo, CO. Metro initiated this Change request because of the limited availability to test the vehicles at LA Metro facilities due to limited operator availability, unplanned track closures and maintenance, and other factors related to track maintenance and rail operations.

Approval of this recommendation will minimize risk to Metro's service and operations. Simultaneously, it will benefit the test program by allowing it to proceed with few restrictions or interruptions.

Recommendation B allows Metro and the Contractor to negotiate future change orders in a timely manner to ensure that the maximum cost and schedule benefits can be realized. The P2550 Midlife Modernization Project's schedule is aggressive. The added delegation of authority allows staff to mitigate program schedule impacts that may arise from change orders. The request for an increase in CMA from \$500,000 to \$1,000,000 for individual changes is consistent with Board authorized Contract Modification Authority (CMA) for other Rolling Stock programs, such as Contracts for A650 Midlife Overhaul, P3010 LRV procurement, and the 45-foot CNG Composite Buses.

DETERMINATION OF SAFETY IMPACT

The approval of this Contract Modification will ensure the Project's continuity to provide a direct and positive impact to system safety, service, quality, system reliability, maintainability, and overall customer satisfaction.

FINANCIAL IMPACT

The requested new NTE contract price of \$160,619,493 is within the overall Board approved project LOP budget of \$206,340,841, for project 214003.

Since this is a multi-year contract, the Chief Operations Officer, Project Manager, and cost center manager will be responsible for future fiscal year budgeting.

Impact to Budget

The current source of funds for this action is Proposition A 35%. This funding is eligible for rail capital and operating projects. Staff continues to pursue additional funding sources as they become available.

EQUITY PLATFORM

Metro's existing light rail lines serve a majority of Equity Focus Communities (EFCs) who rely on public transit for their daily lives, including travel for work, school, and other activities. Rail ridership consists of 67% low-income and 82% passengers of color based on the Countywide Planning's 2022 customer satisfaction survey. EFC areas along the light rail alignments included areas in Downtown LA, Chinatown, in the vicinity of downtown Long Beach. Please refer to Attachment D for Metro's current rail line map showing areas of the EFCs that will benefit from this board decision. The P2550 fleet is currently experiencing low service reliability and availability due to age and obsolescence issues. This project and the approval of this recommendation will ensure a more reliable fleet for these light rail riders.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

This recommendation supports strategic plan goal # 1) to provide high-quality mobility options that enable people to spend less time traveling and #5) to provide responsive, accountable, and trustworthy governance within the Metro organization.

ALTERNATIVES CONSIDERED

Staff considered using Metro resources to support the LRV qualification tests. However, this approach is not recommended as Metro has limited resources and bandwidth to adequately support this LRV testing that directly competes with revenue service. Further, Metro's first priorities are passenger service and maintenance of its assets.

The Board of Directors may choose not to authorize the Contract Modification; however, this alternative is not recommended by Metro staff because the LRV qualification tests in this midlife program are critical to maintaining an SGR on the fifty existing P2550 LRVs.

NEXT STEPS

Upon Board approval, staff will execute Contract Modification No. 6 with Kinkisharyo International, L.L.C.

ATTACHMENTS

Attachment A - Procurement Summary
Attachment B - Contract Modification Log
Attachment C - DEOD Summary
Attachment D - Metro EFC Map

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Stephanie N. Wiggins
Chief Executive Officer

PROCUREMENT SUMMARY

P2550 MID-LIFE MODERNIZATION PROGRAM / PS183832000P2550

1.	Contract Number: PS183832000P2550		
2.	Contractor: Kinkisharyo International, LLC		
3.	Mod. Work Description: Offsite LRV Qualification Testing in Pueblo CO		
4.	Work Description: Mid-life modernization of Light Rail Vehicles		
5.	The following data is current as of: 10.12.23		
6.	Contract Completion Status:		Financial Status:
	Award Date:	04.12.2021	Contract Value
	Notice to Proceed (NTP):	05.17.2021	Total Contract Modification Authority (CMA):
	Original Completion Date:	55 months after NTP	Value of Mods. Issued to Date (including this action):
	Current Est. Complete Date:	December 2028	Remaining Board Approved Amount:
7.	Contract Administrator: Aniza Wan Nawang		Telephone Number: (213)922-4677
8.	Project Manager: Jason Yaw		Telephone Number: (213)922-3325

A. Contract Action Summary

This Board Action is to approve Contract Modification No. 6 which is to be issued in support of the offsite LRV qualification testing in Pueblo, CO.

This Contract Modification will be processed in accordance with Metro's Acquisition Policy. The contract type is a firm fixed unit price.

On March 25, 2021, Metro's Board of Directors approved Board Agenda Item 2020-0055 to Kinkisharyo International, LLC. for the midlife modernization of the 50 AnsaldoBreda P2550 Light Rail Vehicles.

The intent of this midlife modernization program is to maintain the State of Good Repair and ensure the continued safety, reliability, availability, and maintainability of the fleet for revenue service any of the critical systems and components on the AnsaldoBreda P2550 LRV fleets.

On April 12, Contract P2550-2019 was issued in the amount of \$157,231,331. To date, five (5) Contract Modifications have been issued for the following: -

1. Contract Modification No. 1: Modify Milestone Payment Schedule for first 7 Milestones issued on June 10, 2021 at no cost.

2. Contract Modification No. 2: Exercise Option TS 4.10 – Coupler self-wiping requirement, decreasing PF-2 cost issued on July 31, 2021 for (\$241,550)
3. Contract Modification No. 3: Incorporate Technical Spec Changes from TS Review meeting issued on August 2, 2021 at no cost.
4. Contract Modification No. 4: Exercise Option 6.1. & 6.2 – TS-13.10 Passenger Information Displays into each LRV, training & manuals issued on August 17, 2021 for \$2,129,712, and
5. Contract Modification No. 5: Unknown-Unknown Task Order Labor Rate (1 of 3) escalation increase equaling 7.3% issued on May 13, 2022 at no cost.

This recommended Contract Modification is to facilitate the qualification testing at an offsite facility in Pueblo, CO. Metro initiated this Change request because of the limited availability to test the vehicles at LA Metro facilities due to limited operator availability, unplanned track closures and maintenance and other factors related to track maintenance and rail operations.

B. Cost/Price Analysis

The recommended price has been determined to be fair and reasonable based upon Metro Independent Cost Estimate (ICE), cost analysis, technical evaluation, fact finding, and negotiation.

Proposal Amount	Metro ICE	Negotiated Amount
\$1,573,487.88	\$1,350,714.89	\$1,500,000.00

KI’s change proposal amount of \$1,573,487.88 is \$222,772.99 (16.5%) greater than the Metro developed ICE. Discussions were entered with KI to understand the significant elements that made up the differences in the proposal and the ICE. Negotiations were then conducted to arrive at a fair and reasonable amount. The negotiations resulted in a best-attainable amount of \$1,500,000.00 for the changed work, which is within \$149,285.11 or 11% of the ICE. There are three contributing factors that make up most of that difference:

1. Travel – the proposal from KI contained a higher travel cost component than the ICE. KI’s rotation to regularly cycle offsite staff increased the travel costs but was proposed and accepted to maintain efficiency over the four-month testing period. KI’s staff rotation over the duration of the offsite testing period was not considered in the ICE.
2. Facility cost – the Pueblo, CO test site is the closest testing facility to Metro. The facility cost rate that KI is passing through to Metro includes monthly escalation from the facility operator, which was not fully considered in the ICE.
3. Electricity cost – KI proposed a rate range to cover the electricity consumed by the testing. The ICE estimated this amount significantly lower than the range proposed by KI. To address this difference, Metro negotiated the

electricity cost as a pass-through cost based on only the actual time the Metro vehicles are testing on the test track.

The proposed travel rotation for KI staff adds \$59,045.88 to the travel cost element. The additional facility cost per the escalation and electricity supported by actual cost data adds another \$26,376.32 and \$28,357.18 respectively. Supplementing the ICE with these three cost elements bridges the difference between the ICE and the negotiated amount to \$35,505.73 or around 2.63% which is a best attainable price based on the negotiations.

CONTRACT MODIFICATION LOG

P2550 MID-LIFE MODERNIZATION PROGRAM / PS183832000P2550

Mod. no.	Description	Status (approved or pending)	Date	Amount
1	Modify Milestone Payment Schedule for first 7 Milestones. No change to overall value or risk.	Approved	6.10.21	nil
2	Exercise Option TS 4.10 - Coupler self-wiping requirement, decreasing PF-2 cost	Approved	7.31.21	\$(241,550)
3	Incorporate Technical Spec Changes from TS Review meeting - No cost Change order	Approved	8.2.21	nil
4	Exercise Option 6.1. & 6.2 - TS-13.10 Passenger Information Displays into each LRV, training & manuals	Approved	8.17.21	\$2,129,712
5	Unknown-Unknown Task Order Labor Rate (1 of 3) escalation increase equaling 7.3%	Approved	5.13.22	nil
6	Offsite LRV Qualification Testing at TTC Pueblo	Pending	(tba)	\$1,500,000
	Modification Total:			\$3,388,162
	Original Contract:			\$157,231,331
	Total:			\$160,619,493

DEOD SUMMARY

**P2550, LIGHT RAIL VEHICLE (LRV) MIDLIFE OFFSITE
TESTING/PS183832000P2550****A. Small Business Participation**

Kinkisharyo International, LLC, a Transit Vehicle Manufacturer (TVM), is on the Federal Transit Administration's (FTA) list of eligible TVMs. Kinkisharyo International, LLC has submitted its overall Disadvantaged Business Enterprise (DBE) goal of 6% to FTA, in compliance with 49 Code of Federal Regulations (CFR) Section 26.49(a)(1). TVMs submit overall DBE goal methodology annually and report participation directly to FTA semi-annually.

B. Living Wage and Service Contract Worker Retention Policy Applicability

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

C. Prevailing Wage Applicability

Prevailing wage is not applicable to this modification.

D. 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.

P2550 LIGHT RAIL VEHICLE (LRV) MIDLIFE MODERNIZATION OFFSITE TESTING



Metro

BACKGROUND

- The P2550 (Midlife) contractor is required to demonstrate the safe and reliable operation of trains. Design conformance tests are normally performed with pilot trains on the agency's mainline.
 - Tests normally require 9-12 months to complete.
 - Tests compete with revenue service and scheduled mainline maintenance.
 - Tests place a significant burden on Metro operation staff and equipment to support.

FINDINGS

- Moving the majority of pilot train tests to an offsite location is anticipated to:
 - Significantly minimize the project's impact to revenue service and scheduled mainline maintenance.
 - Significantly minimize impact to Metro's operation staff and resources.
 - Significantly reduce delays due to scheduling conflicts; allowing test programs to proceed more efficiently and effectively.



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RECOMMENDATIONS

- Authorize Contract Modification to enable LRV testing offsite LACMTA's property.
- Increase the CEO's contract modification authority to \$1,000,000.



Thank you



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