

**Board Report**

File #: 2025-0226, **File Type:** Contract**Agenda Number:** 31.

**OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE
MAY 15, 2025****SUBJECT: P3010 LIGHT RAIL VEHICLE HIGH-SPEED CIRCUIT BREAKER OVERHAUL SERVICES****ACTION: AWARD CONTRACT****RECOMMENDATION**

AUTHORIZE the Chief Executive Officer to award a firm fixed price Contract No. OP123944000 to Toyo Denki Railway Services, LLC., in the amount of \$2,721,997.50 to transport, inspect, overhaul, and test Metro's P3010 High Speed Circuit Breaker (HSCB) assembly, 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 rail vehicle systems occurring at the 600,000-mile interval. The high-speed circuit breaker assembly is a protection device performing as the interface between the Light Rail Vehicle (LRV) and the Overhead Catenary System (OCS), 750 VDC. Through the HSCB, the 750 VDC is connected to the LRV propulsion and auxiliary systems. Upon overcurrent situations, the HSCB contacts open, thereby protecting both the LRV and OCS from catastrophic damage.

The P3010 light rail car fleet manufacturer, Kinkisharyo, along with its sub-suppliers, identified the following component level overhauls to the vehicle systems: friction brake, propulsion, doors, truck assembly including traction motor and gearbox, auxiliary power supply, coupler, master controller, pantograph, and heating ventilation and air conditioning equipment. Therefore, the P3010 component-level overhaul project will require Board authorization for 10 separate vendors and new component contracts to complete the project over a 5-year period, some of which have already been awarded. To date, friction brake, truck systems, battery, and slewing ring overhaul contracts have been awarded.

BACKGROUND

On August 7, 2012, the Metro Board awarded Kinkisharyo International, LLC, a contract for the purchase of 78 P3010 Light Rail Vehicles (LRV), including four options for a total of 235 vehicles. The P3010 fleet was placed in revenue service between 2016-2023. The P3010 fleet operates on all of Metro's light rail lines. The P3010 fleet is Metro's newest and most reliable light rail fleet, with

consistent performance, reliability, and safety at over 96,377,050 fleet miles.

DISCUSSION

The P3010 fleet Component Overhaul project consists primarily of the repair and replacement of vehicle wear items that require overhaul or replacement over the vehicles' 30-year design life at the targeted mileage intervals of 600,000 miles. Rail Fleet Services (RFS) staff will perform the removal, installation, and testing of the overhauled or new equipment.

Metro's Transit Vehicle Engineering (TVE) Department, along with RFS staff, performed a technical review of the OEM component overhaul tasks and are in concurrence with the work scope and overhaul schedule as described in the Heavy Repair Maintenance Manual. TVE developed the Statement of Work for this project, ensuring the Contractors followed Federal Transit Administration (FTA), Association of American Railroads (AAR), California Public Utilities Commission (CPUC), and Metro's Corporate Safety Standards.

The rail car manufacturer recommends overhaul or replacement of the high-speed circuit breaker at the 600,000-mile interval for electronic equipment calibration and replacement of wear items, including high-voltage contacts, coils, and resistors.

Metro received a total of one bid proposal in response to Solicitation No. OP123944. Please refer to Attachment A- Procurement Summary for a detailed description of efforts taken by the Contract Administrator that outline the strategies implemented to reach out to potential bidders.

DETERMINATION OF SAFETY IMPACT

Passenger safety is of the utmost importance to Metro's Board of Directors, ridership, and staff. The P3010 high-speed circuit breaker is an integral component of the LRV, acting as the protection device between the OCS power and the LRV. This is designed for safe and reliable vehicle operation while safeguarding equipment and Metro's passengers.

This Board action will ensure that safety is preserved by ensuring the high-speed circuit breaker assembly is overhauled to as-new condition as defined by the OEM while achieving regulatory compliance within state and federal regulations, including Metro's Corporate safety standards.

It is Metro's best interest to proceed with the overhaul work performance in the U.S. in order to mitigate delays on this time-sensitive and safety sensitive project. The unobserved quality and workmanship concerns, warranty returns, and increase logistical and administrative issues associated with an overseas contractor will be addressed with the U.S. based performance requirement.

FINANCIAL IMPACT

Funding in the amount of \$2,721,997.50 for the high-speed circuit breaker assembly overhaul is included in the FY26 budget under approved Capital Project (CP) 214009 - P3010 Fleet Component Overhaul.

This contract type is a firm-fixed price. A firm-fixed price contract establishes a set price for the work to be performed and does not fluctuate if a contractor's costs change. The Metro solicitation specified the contract type as a firm-fixed price contract so the proposer can build this risk factor into its price.

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 Measure M, State of Good Repair 2%. This funding is eligible for Capital Projects. Given approved funding provisions and guidelines, using these funding sources maximizes project funding intent.

EQUITY PLATFORM

Metro's P3010 LRV fleet provides vital transportation services throughout the City and County of Los Angeles via the A, C, E, and L lines. This includes many underserved communities where regional disparities exist between residents' access to jobs, housing, education, health, and safety. In addition, Metro's light rail vehicle maintenance programs maintain the fleet's operations within federally mandated State of Good Repair standards for those within the communities that rely on public transportation.

The Diversity and Economic Opportunity Department (DEOD) did not recommend a Small/Disabled Veteran Business Enterprise (SBE/DVBE) participation goal for this procurement. However, Toyo Denki Railway Services, LLC. made a 29.20% SBE commitment.

VEHICLE MILES TRAVELED OUTCOME

VMT and VMT per capita in Los Angeles County are lower than national averages, the lowest in the SCAG region, and on the lower end of VMT per capita statewide, with these declining VMT trends due in part to Metro's significant investment in rail and bus transit.* Metro's Board-adopted VMT reduction targets align with California statewide climate goals, including achieving carbon neutrality by 2045. To ensure continued progress, all Board items are assessed for their potential impact on VMT.

This item supports Metro's systemwide strategy to reduce VMT through rail vehicle equipment purchase and maintenance activities that will support and further encourage transit ridership, ridesharing, and active transportation. Metro's Board-adopted VMT reduction targets were designed to build on the success of existing investments, and this item aligns with those objectives.

*Based on population estimates from the United States Census and VMT estimates from Caltrans' Highway Performance Monitoring System (HPMS) data between 2001-2019.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

Approval of the P3010 LRV high-speed circuit breaker assembly procurement supports Strategic Goal 1: Provide high-quality mobility options that enable people to spend less time traveling and promote better car reliability. This component-level overall project ensures sustained fleet reliability, including safe, accessible, and affordable transportation for all riders of Metro's light rail system. The recommendation supports Metro's 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 reliability.

ALTERNATIVES CONSIDERED

The P3010 fleet is Metro's newest and most reliable light rail fleet with sustained availability and reliability. Approval of this procurement and execution of the overhaul regenerates equipment performance and sustained passenger safety. An alternative is to defer the overhaul; however, this approach is not recommended as the LRV, OCS, and Metro's passengers could be at risk of equipment failure, which will negatively impact the customer's experience, causing delays to our system.

NEXT STEPS

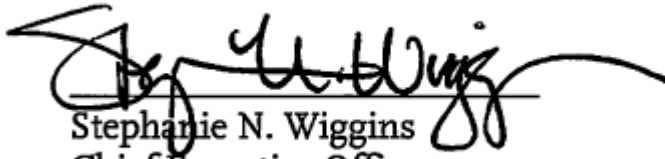
Upon Board approval, staff will execute Contract No. OP123944000 of light rail vehicle high-speed circuit breaker assembly with Toyo Denki Railway Services, LLC. Staff will return to the Board for approval of future contract awards, inclusive of coupler, heating, ventilation and air-conditioning, master controller, low voltage power supply, propulsion, as well as pantograph overhauls.

ATTACHMENTS

Attachment A - Procurement Summary
Attachment B - DEOD Summary

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Stephanie N. Wiggins
Chief Executive Officer

PROCUREMENT SUMMARY

P3010 LIGHT RAIL VEHICLE HIGH-SPEED CIRCUIT BREAKER OVERHAUL SERVICES/OP123944000

1.	Contract Number: OP123944000	
2.	Recommended Vendor: TOYO DENKI RAILWAY SERVICES, LLC.	
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: August 27, 2024	
	B. Advertised/Publicized: August 27- August 31, 2024	
	C. Pre-Proposal Conference: September 5, 2024	
	D. Proposals Due: December 2, 2024	
	E. Pre-Qualification Completed: December 10, 2024	
	F. Ethics Declaration Forms submitted to Ethics: December 3, 2024	
	G. Protest Period End Date: May 14, 2025	
5.	Solicitations Downloaded: 20	Bids/Proposals Received: 1
6.	Contract Administrator: Ani Pogossian	Telephone Number: 213-922-2874
7.	Project Manager: Richard Lozano	Telephone Number: 213-792-8047

A. Procurement Background

This Board Action is to approve Contract No. OP123944000 issued in support of overhaul work to be accomplished by the Contractor and Original Equipment Manufacturer (OEM) in accordance with the Contract. Board approval of contract award is subject to resolution of any properly submitted protest(s), if any.

Request for Proposals (RFP) No. OP123944 was issued in accordance with Metro’s Acquisition Policy and the contract type is a firm fixed price. The Diversity and Economic Opportunity Department (DEOD) did not recommend a Small Business Enterprise (SBE)/Disabled Veteran Business Enterprise (DVBE) participation goal for this procurement due to the lack of certified small businesses that perform this service. Toyo Denki Railway Service, LLC made a 29.20% SBE commitment.

9 amendments were issued during the solicitation phase of this RFP:

- Amendment No. 1, issued on August 29, 2024, added Exhibits;
- Amendment No. 2, issued on September 10, 2024, extended the proposal due date and critical dates, and amended Evaluation Criteria;
- Amendment No. 3, issued on October 18, 2024, extended the proposal due date and critical dates;
- Amendment No. 4, issued on October 28, 2024, extended the proposal due date and critical dates;

- Amendment No. 5, issued on October 29, 2024, added SP-21 Metro Exemption from California Sales and Use Tax for Purchases of Rail Cars and Component Parts Clause;
- Amendment No. 6, issued on November 15, 2024, added Exhibit C-1, Milestone Completion Schedule and amended Article IV Compensation and Payment;
- Amendment No. 7, issued on November 21, 2024, added GC-45 Contractor’s Obligations Clause;
- Amendment No. 8, issued on November 21, 2024, revised Exhibit C and Exhibit C-1 ;
- Amendment No. 9, issued on February 28, 2025, BAFO.

The solicitation was advertised across four different platforms: The Asian Journal, Daily News Los Angeles, LA Opinion and Los Angeles Sentinel, along with an email postcard outreach to 291 prospective proposers. A total of 20 firms downloaded the RFP and were included in the planholder’s list. A virtual pre-proposal conference was held on September 5, 2024 and was attended by zero participants. The lack of attendance and proposals received prompted the Contract Administrator to conduct a market survey, reaching out to the 20 firms on the planholder’s list to ascertain the reasons for the lack of interest. One potential proposer indicated that they were still evaluating the solicitation, while another requested additional time to review the proposal requirements. Consequently, the proposal due date was extended to provide potential proposers with sufficient time to respond to the RFP. There were two questions received for this RFP and responses were provided prior to the proposal due date.

A total of one proposal was received on December 2, 2024.

B. Evaluation of Proposals

A diverse Proposal Evaluation Team (PET) consisting of staff from Transit Vehicle Engineering, Rail Vehicle Maintenance, and Rail Fleet Services was convened and conducted a comprehensive technical evaluation of the proposals received.

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

- | | |
|--------------------------|-----------|
| • Minimum Qualifications | PASS/FAIL |
| • Price | 20% |
| • Technical Capability | 25% |
| • Proposed Work Scope | 25% |
| • Past Performance | 15% |
| • Project Management | 15% |

The evaluation criteria are appropriate and consistent with criteria developed for other, similar overhaul project procurements. Several factors were considered when

developing these weights, giving the greatest importance to Technical Capability and Proposed Work Scope requirements.

The single proposer was determined to be responsive and met the minimum qualification requirements. The single responding firm is listed below:

1. Toyo Denki Railway Services, LLC.

During the week of December 9th, 2024, the PET met to discuss the scoring matrix and rules and regulations related to Metro’s evaluation process. On January 13, 2025, the PET met to review initial scores related to the Technical Proposal and the Contract Administrator disclosed the price proposal after evaluation scores were discussed. The PET had several questions and clarifications related to the Technical Proposal and Evaluation Criteria; therefore, the Contract Administrator scheduled a meeting with the proposer to discuss outstanding clarifications and advise the proposing team of requirements needed per the evaluation criteria. A Best and Final Offer (BAFO) was issued on February 28, 2025, requesting clarifications and a BAFO proposal. The PET met on March 14, 2025, to discuss and finalize the BAFO scoring and found Toyo Denki Railway Services, LLC., who is also the OEM, along with their proposed subcontractors to be capable of performing the necessary work as highlighted in our Scope of Services.

Qualifications Summary of Firms within the Competitive Range:

Toyo Denki Railway Services, LLC.

Toyo Denki is the OEM for the P3010 Light Rail Vehicle High Speed Circuit Breaker Overhaul. Toyo Denki has similar experience in overhauling high speed circuit breakers and other similar key safety components on rail vehicles throughout different transportation agencies within the United States. Toyo Denki has proposed a good staffing plan with experienced engineers and staff who will assist the subcontractor, AME Power, an SBE with Overhaul experience and supervision support from Toyo Denki Seizo K.K., which is the overseas project division responsible for all related drawings and documentation and supervision of overhaul work.

1	Firm	Average Score	Factor Weight	Weighted Average Score	Rank
2	Toyo Denki Railway Services, LLC.				
3	Minimum Qualifications	PASS	PASS/FAIL	PASS	
4	Price	100.00	20%	20.00	
5	Technical Capability	87.52	25%	21.88	
6	Proposed Work Scope	84.44	25%	21.11	

7	Past Performance	93.33	15%	14.00	
8	Project Management	90.00	15%	13.50	
9	Total		100.00%	90.49	1

C. Cost/Price Analysis

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

	Proposer Name	Proposal Amount	Metro ICE	Negotiated or NTE amount
1.	Toyo Denki Railway Services, LLC.	\$2,878,290	\$2,000,000	\$2,721,997.50

The Contract Administrator led discussions with Toyo Denki to address questions and obtain clarifications on their technical proposal, the evaluation criteria requirements and proposed price. Following discussions, Toyo Denki made technical, evaluation criteria and price adjustments and submitted a BAFO which included a reduced proposal price in the amount of \$2,721,997.50.

The negotiated BAFO price is a 5.4% reduction from the initial proposed amount; however, it is still 36% higher than the ICE. The primary contributing factor to this variance is attributed to the evaluation criteria requirement that mandates the overhaul work must be performed in the US and the additional costs associated with that requirement:

1. The Contractor and its subcontractors must have an existing repair/overhaul facility and be capable of performing and sustaining overhaul work of High-Speed Circuit Breakers (HSCB) of similar size and capacity as described in the Scope of Work. If the contractor does not have an existing repair/overhaul facility or certified repair/overhaul subcontractor in the US, then the Contractor must provide a plan to implement one.

Due to this requirement, Toyo Denki (which does not have a US based overhaul facility), was required to identify a subcontractor within the US to partner with for the overhaul of the High-Speed Circuit Breaker. As a result, AME Power, located domestically, was selected for this work.

As the OEM of the HSCB, Toyo Denki is fully capable of self-performing the overhaul work, however, the work would have to be performed overseas. Toyo Denki must provide oversight over its domestic subcontractor which added additional costs that were not contemplated in the ICE amount. The proposed oversight cost from Toyo Denki was \$426,800 and if eliminated from their proposal would result in a reduction in their proposal to \$2,295,197, which would reduce the ICE differential

from 36% to 13.7%. However, it is in Metro's best interest to proceed with the overhaul work performance in the U.S. in order to mitigate delays on this time-sensitive project, unobserved quality and workmanship concerns, warranty returns, and increased logistical and administrative issues associated with an overseas contractor.

This contract type is a firm-fixed price. A firm-fixed price contract establishes a set price for the work to be performed and does not fluctuate if a contractor's costs change. The Metro solicitation specified the contract type as a firm-fixed price contract so the proposer can build this risk factor into its price. In regards to tariffs, Toyo Denki has been informed that the firm fixed price contract is not subject to price adjustments based on the contractor's cost experience in performing the contract. Metro would like to continue its partnership with Toyo Denki and find solutions to mitigate this issue.

D. Background on Recommended Contractor

The recommended firm, Toyo Denki Railway Services, LLC., located in Cranberry Township, PA, has been in business for 107 years and is a leader in the field of railway electrical equipment manufacturing. As a supplier to the U.S. market, Toyo Denki has worked on other Metro projects such as the new P3010 Light Rail Vehicle design and production of its propulsion system. The firm has also provided similar overhaul work and supplies for other transit agencies across the nation. Toyo Denki Railway Services, LLC., has provided previous services for Metro and its performance has been satisfactory.

DEOD SUMMARY

P3010 LIGHT RAIL VEHICLE HIGH-SPEED CIRCUIT BREAKER OVERHAUL SERVICES / OP123944000

A. Small Business Participation

The Diversity and Economic Opportunity Department (DEOD) did not recommend a Small Business Enterprise (SBE)/Disabled Veteran Business Enterprise (DVBE) participation goal for this procurement due to the lack of certified small businesses that perform this service. Toyo Denki Railway Service, LLC made a 29.20% SBE commitment.

Small Business Goal	0% SBE	Small Business Commitment	29.20% SBE
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	SBE Subcontractors	% Committed
1.	AME Power	29.20%
	Total SBE Commitment	29.20%

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.

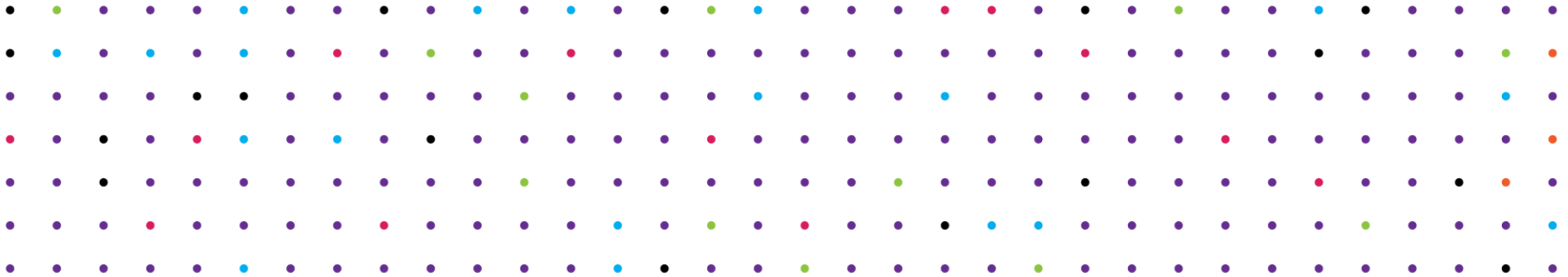
C. Prevailing Wage Applicability

Prevailing Wage is not applicable to this contract.

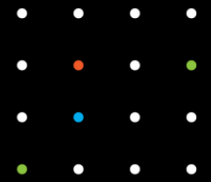
D. Project Labor Agreement/Construction Careers Policy

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

P3010 Light Rail Vehicle High Speed Circuit Breaker Assembly Component Overhaul Services

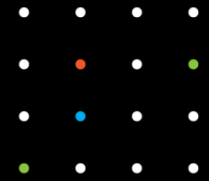


RECOMMENDATION



AUTHORIZE the Chief Executive Officer to award a firm fixed price Contract No. OP123944000 to Toyo Denki Railway Services, LLC., in the amount of \$2,721,997.50 to transport, inspect, overhaul and test Metro's P3010 High Speed Circuit Breaker (HSCB) assembly, subject to the resolution of any properly submitted protest(s), if any.

ISSUE & DISCUSSION



AWARDEE

Toyo Denki Railway Services, LLC.

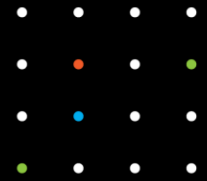
NUMBER OF BIDS/PROPOSALS

Bidders	Bid Amount
Toyo Denki Railway Services, LLC	\$2,721,997.50

DEOD COMMITMENT

The Diversity and Economic Opportunity Department (DEOD) did not recommend a Small/Disabled Veteran Business Enterprise (SBE/DVBE) participation goal for this procurement; however, Toyo Denki Railway Services, LLC. made a 29.20% SBE commitment.





ISSUE

The Original Equipment Manufacturer (OEM) identified and established a component overhaul schedule for all vehicle systems occurring at the 600,000-mile interval. The HSCB provides electrical isolation between the vehicle propulsion and braking controls to the Overhead Catenary System (OCS).

DISCUSSION

The HSCB is a safety component preventing catastrophic failure in the event of electrical overcurrent situations. Overhauling the HSCB at the recommended interval ensures continued safe operation minimizing equipment damage while ensuring train operator and passengers safety.