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

File #: 2018-0150, **File Type:** Contract **Agenda Number:** 23.

SYSTEM SAFETY, SECURITY AND OPERATIONS COMMITTEE
MAY 17, 2018

SUBJECT: P2000 AUXILIARY INVERTER ASSEMBLY OVERHAUL

ACTION: APPROVE CONTRACT AWARD

RECOMMENDATION

CONSIDER:

A. AUTHORIZING the Chief Executive Officer to award a 31 month, indefinite delivery, indefinite quantity Contract No. MA46603 to KB Powertech Corporation, USA for overhaul services of the Siemens P2000 Light Rail Vehicle (LRV) Auxiliary Inverter Assembly for a total not-to-exceed amount of $999,607, subject to resolution of protest(s), if any; and

B. AWARDING a sole source procurement, pursuant to Public Utilities Code Section 130237 for component overhaul services of the Siemens P2000 LRV Auxiliary Inverter Assembly Overhaul the Original Equipment Manufacturer (OEM), to KB Powertech Corp.

(REQUIRES TWO-THIRDS VOTE OF THE FULL BOARD)

ISSUE

The P2000 LRV fleet auxiliary inverter assembly is due for overhaul services as recommended by the OEM established guidelines. This procurement is for the sole purpose of purchasing overhaul services for existing equipment already in operational use. Execution of this component overhaul acquisition will safeguard passenger safety while maintaining equipment performance in a continuous State of Good Repair (SGR).

DISCUSSION

The Siemens P2000 LRVs are in its 17th year of operation and consists of a total of seven procurements for the overhaul of the major vehicle systems inclusive of power axle, gearbox, traction motors, couplers, friction brake & air compressor, auxiliary inverter, and the propulsion system (gate driver board) overhaul. The auxiliary inverter overhaul is sixth in succession of the seven component overhaul procurements requiring board approval. This procurement is for the professional services to complete the overhaul of up to 52 auxiliary inverter assemblies for the P2000 fleet as recommended

by the OEM established guidelines. In order to ensure continued safety and performance of the auxiliary inverter assembly, an overhaul of the equipment is required at the vehicle mid-life service interval. The auxiliary inverter is an integral vehicle system necessary for safe operation of the vehicle that inverts the overhead catenary supply voltage of 750 (VDC) to 208/110 (VAC) supplying interior lighting, power to auxiliary motors, and supplies power for the Low Voltage Power Supply charging the 37.5 VDC battery and numerous control systems.

The overhaul consists of disassembly of the entire assembly down to circuit board and component level, a thorough cleaning and inspection of components, load testing of modules, replacement of electrolytic capacitor and lithium batteries, component replacement as needed, replacement of seals and gaskets, and a comprehensive testing of the entire inverter assembly for sustained output voltages.

Rail Fleet Services (RFS) Engineering developed a Statement of Work (SOW) for the contractor to follow while performing the overhaul. The contractor will perform overhaul services in accordance with predefined schedule at two (2) inverters per month.

DETERMINATION OF SAFETY IMPACT

Passenger and employee safety are of the utmost importance to Metro and, therefore, it is imperative to maintain the P2000 fleet to a constant SGR. The auxiliary inverter assembly overhaul is in support of routine maintenance and an established component overhaul program. This effort will ensure that the fleet is maintained in accordance with OEM recommendations, regulatory standards, and within Metro's internal Corporate Safety policies and procedures.

FINANCIAL IMPACT

The approved Life-of-Project (LOP) budget for the P2000 Fleet Component Overhaul Program (number 206006) is $26,360,100 established in 2012. Funding of $999,607 for this Contract is included in the FY19 budget in Cost Centers 3941 and 3943, Rail Fleet Services Maintenance, account 50441, Parts - Revenue Service. Since this is a multi-year contract, the Cost Center Manager and Project Manager will ensure that the balance of funds are budgeted in future years.

Impact to Budget

The current source of funds for this action is Prop A Bonds. This will maximize funding leverage given allowable funding provisions.

ALTERNATIVES CONSIDERED

The auxiliary inverter assembly is a safety critical system that inverts the vehicle supply voltage of 750 VDC to 208/110 VAC critical for safe operation of the vehicle and is required to be overhauled per the OEM recommended interval and regulatory requirements. Deferring the auxiliary inverter

assembly overhaul is not recommended as vehicle performance and passenger safety could be adversely affected.

NEXT STEPS

Overhaul of the P2000 LRV auxiliary inverter assembly will continue in accordance with RFS Component Overhaul schedule requirements. Upon board approval staff will execute Contract No. MA46603 to provide overhaul services of the P2000 LRV auxiliary inverter assembly. The project is scheduled to commence July 2018.

ATTACHMENTS

Attachment A - Procurement Summary
Attachment B - DEOD Summary

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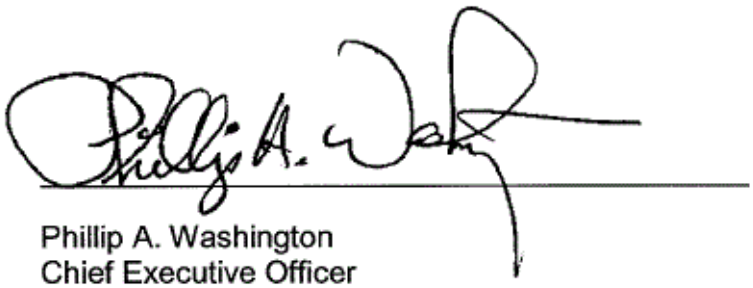

Phillip A. Washington
Chief Executive Officer

PROCUREMENT SUMMARY

P2000 AUXILIARY INVERTER ASSEMBLY OVERHAUL/MA46603

1.	**Contract Number**: MA46603	
2.	**Recommended Vendor**: KB Powertech Corp. USA	
3.	**Type of Procurement (check one):** ☐ **IFB** ☒ **RFP** ☐ **RFP–A&E** ☐ **Non-Competitive** ☐ **Modification** ☐ **Task Order**	
4.	**Procurement Dates**:	
	A. Issued: August 31, 2017	
	B. Advertised/Publicized: N/A	
	C. Pre-Proposal Conference: N/A	
	D. Proposals Due: September 29, 2017	
	E. Pre-Qualification Completed: January 25, 2018	
	F. Conflict of Interest Form Submitted to Ethics: October 19, 2017	
	G. Protest Period End Date: April 24, 2018	
5.	**Solicitations Picked up/Downloaded**: 0	**Bids/Proposals Received**: 1
6.	**Contract Administrator**: Lorretta Norris	**Telephone Number**: (213) 922-2632
7.	**Project Manager**: Nick Madanat	**Telephone Number**: (213) 617-6281

A. Procurement Background

This Board Action is to approve Contract No. MA46603 issued in support of Metro's P2000 Light Rail Vehicle (LRV) to procure services required for the overhaul of the auxiliary inverter assemblies on a sole source basis. The existing auxiliary inverter systems for the P2000 were designed and built by the original equipment manufacturer (OEM), KB Powertech Corp. USA, a Division of the Knorr-Bremse Group. It was determined by Metro's engineering, to ensure full operational capability, that the overhaul of Metro's P2000 railcar auxiliary inverter assemblies be overhauled by the OEM, KB Powertech Corp. USA.

The non-competitive Request for Proposal (RFP) was issued to KB Powertech Corp. USA on August 31, 2017, in accordance with Metro's Acquisition Policy and the contract type is a not-to-exceed Indefinite Delivery, Indefinite Quantity (IDIQ).

Two amendments were issued during the solicitation phase of this RFP as follows:

- Amendment No. 1, issued on September 8, 2017, extended the proposal due date from September 8, 2017 to September 15, 2017.
- Amendment No. 2, issued on September 14, 2017, extended the proposal due date from September 15, 2017 to September 29, 2017.

B. Evaluation of Proposal

This is a sole source procurement. This sole source procurement is consistent with Public Utility Code Section 130237, applied for the purpose of duplicating equipment already in existence at Metro. KB Powertech is the OEM and owns the data rights on the auxiliary inverter assembly. Metro's technical staff conducted technical fact-finding meetings which were a part of the comprehensive technical evaluation of the technical proposal. The technical evaluation consisted of reviews of the proposer's proposed management and quality assurance plans, and compliance to the technical specification. The proposal was found to be technically acceptable. Additionally, an evaluation of the proposed management and assigned technical/project resources was conducted and both were deemed acceptable.

The firm recommended for award, KB Powertech Corp. USA, was found to be in compliance with the RFP requirements.

C. Cost Analysis

Sole source acquisitions require a cost analysis to be performed to determine fair and reasonable prices. Due to proposer's unwillingness to provide essential company sensitive cost support data needed to adequately perform a cost analysis, staff performed a price analysis. The price analysis consisted of Metro's engineering and estimating price assessments, and historical price comparisons for similar purchases. Based on staff's price analysis, it was determined that the total proposed price was fair and reasonable.

Proposer Name	Proposal Amount	Metro ICE
KB Powertech Corp. USA	$999,607	$1,185,000

D. Background on Recommended Contractor

KB Powertech Corp. USA (KBPC) is located in Mount Olive, New Jersey and was acquired in 2014 by Knorr-Bremse Group, an international group of industrial companies that has been in business for over 30 years. KBPC specializes in designing, manufacturing, and overhauling energy supply systems. KBPC is the OEM of the auxiliary inverter assemblies for Metro's Siemens P2000 Green Line railcars. KBPC has current auxiliary inverter overhaul contracts with Metro of St. Louis and TriMet of Oregon. KBPC has existing and past contracts with Metro supporting other rail vehicle overhauls and its performance has been satisfactory.

DEOD SUMMARY

P2000 AUXILIARY INVERTER ASSEMBLY OVERHAUL/MA46603

A. Small Business Participation

The Diversity and Economic Opportunity Department (DEOD) did not establish a Small Business Enterprise/Disabled Veteran Business Enterprise (SBE/DVBE) goal for this sole source, non-competitive procurement. It was determined that KB Powertech Corp., USA is the Original Equipment Manufacturer (OEM) of the P2000 Auxiliary Inverters, and owns the data rights to the auxiliary inverter assembly. As such, there are no apparent subcontracting opportunities and the services will be performed with the prime's own workforces.

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.