



## Board Report

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### OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE JUNE 20, 2024

**SUBJECT: EXERCISE OPTION FOR A650 HEAVY RAIL VEHICLE STATIC CONVERTER LOW VOLTAGE POWER SUPPLY (LVPS)**

**ACTION: APPROVE RECOMMENDATION**

#### **RECOMMENDATION**

AUTHORIZE the Chief Executive Officer to execute Contract Modification No. 2 to exercise an option for the purchase of 37 Static Converter Low Voltage Power Supply (LVPS) units under Contract No. OP82170000 to Kiepe Electric LLC in the amount of \$1,470,195, increasing the total Contract value from \$472,306 to \$1,942,501 and extending the period of performance by 18 months from October 5, 2024 to April 5, 2026.

#### **ISSUE**

The Breda A650 Heavy Rail Vehicle (HRV) option fleet consists of 37 married-pair vehicles and is in its 27<sup>th</sup> year of revenue service operations. The fleet is currently undergoing a Component Level Overhaul Program, overhauling five significant systems, including friction brakes, traction motor, gearbox coupler, semi-permanent coupler, and new LVPS equipment.

#### **BACKGROUND**

On August 18, 2022, the Metro Board awarded Kiepe Electric LLC for a firm fixed unit price Contract No. OP82170000 for the purchase of forty-two (42) new Low Voltage Power Supply (LVPS) units in support of the A650 Heavy Rail Vehicle (HRV) fleet overhaul. The contract consists of a base order of 5 units in the amount of \$472,306, with an available option order of 37 units in the amount of \$1,470,195 for a total contract amount of \$1,942,501. Of note, splitting the contract into base and option orders is mainly due to the complexity of original equipment that is with 25 plus year technology and is with parts therefore obsolescence with minimal risk to the agency should the new contractor not perform.

#### **DISCUSSION**

The Low-Voltage Power Supply is one of six vehicle systems within the Component Overhaul Program, which is managed and performed by Rail Fleet Services staff.

The LVPS equipment consists of low and high-voltage electronic components that convert traction supply power of 750 Vdc to 120 & 220 Vac for battery charging, emergency lighting, braking systems, and door operation supply source. The LVPS is considered vital and safety-critical equipment necessary to sustain the A650 fleet in revenue service operations in conjunction with the State of Good Repair (SGR) policy.

Rail Fleet Services (RFS) Engineering developed equipment overhaul specification(s) for all systems included in the Component Overhaul Program based on OEM recommendations and RFS maintenance experience. The contractor will design, manufacture, test, and implement the development of LVPS equipment units in accordance with Metro's technical specifications within the defined schedule requirements.

Of note, the Heavy Rail Modernization project does not include overhaul or the purchase of new LVPS equipment. This is a separate task managed by the Rail Fleet Services Component Overhaul Group.

### **DETERMINATION OF SAFETY IMPACT**

Purchasing new LVPS equipment ensures vehicle battery charging levels for friction braking, emergency lighting, doors, and other vital systems. In the event of LVPS equipment failure, the vehicle safety systems are compromised, and the vehicle will not operate.

### **FINANCIAL IMPACT**

Funding of \$1,470,195 for 37 LVPS equipment units is included in the Component Overhaul Life of Project Budget (LOP) CP number 206038. The delivery of the base order LVPS equipment is in production, followed by the option order delivery by the 1<sup>st</sup> quarter of FY26.

#### **Impact to Budget**

Current funding for this action is a combination of Federal and Local funds, primarily consisting of Federal Section 5337 and Measure M, which are not operating eligible funds.

### **EQUITY PLATFORM**

The Red (B) and Purple (D) rail lines utilize all of Metro's heavy rail fleet vehicles. Based on the 2019 Customer Survey, the Red (B) and Purple (D) rail lines serve the following ridership:

- 27.7% below the poverty line
- 56.4% had no car available
- Rider Ethnicity: Latino 38.9%; Black 13.1%; White 25.8%; Asian/Pacific Islander 15.2%; Other 6.5%

In addition, areas served include Union Station to Downtown LA, Koreatown (Wilshire/Western), Hollywood, Universal City, and North Hollywood, most of which include Equity Focus Communities. Sustaining revenue service operations within these communities provides equitable access to job

opportunities, commuting to and from work, and contributes to the local economy via shopping malls and restaurants.

No Disadvantaged Business Enterprise goal was established due to the lack of subcontracting opportunities.

### **IMPLEMENTATION OF STRATEGIC PLAN GOALS**

The recommendation supports Metro Strategic Plan Goal 5) Provide responsive, accountable, and trustworthy governance within the Metro organization. New LVPS will ensure fleet and equipment reliability, minimize vehicle maintenance needs, and provide safety for Metro's passengers in all operational modes.

### **ALTERNATIVES CONSIDERED**

Due to the OEM's inability to repair or overhaul the LVPS equipment, technology transfer, and parts obsolescence, it is imperative to procure new LVPS equipment utilizing current technologies and parts that will support vehicle operations for an estimated 15 years. As the A650 HRV fleet has over 25 years of revenue service without major overhaul the LVPS has remained in service and is now failing at an increased rate. Although there are alternatives for a new procurement the issue is the time required to do so including technical document resubmission and repeated procurement duration it is recommended to exercise the option thereby saving time and significantly reducing the risk of missed service therefore this alternative was not considered.

### **NEXT STEPS**

Upon Board approval, the contract awardee will continue the design, manufacturing, testing, and prototyping process as outlined in Metro's Technical Specification for new LVPS equipment. The Contractor shall provide a production schedule to identify milestones consistent with the scheduled delivery of the LVPS equipment.

### **ATTACHMENTS**

Attachment A - Procurement Summary

Attachment B - Modification Log

Attachment C - DEOD Summary

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