



## Board Report

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### OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE SEPTEMBER 21, 2023

**SUBJECT: ENGINE ELECTRICAL WIRING HARNESS KITS**

**ACTION: AWARD CONTRACT FOR ENGINE ELECTRICAL WIRING HARNESS KITS**

#### **RECOMMENDATION**

AUTHORIZE the Chief Executive Officer to award a two-year, Indefinite Delivery, Indefinite Quantity (IDIQ) Contract No. SD105427000 to DSM&T Company, Inc. the responsive and responsible bidder for Electrical Wiring Harness Kits. The Contract one-year base amount is \$543,207.60 inclusive of sales tax, and the one-year option to extend the amount is \$543,207.60, inclusive of sales tax, for a total contract amount of \$1,086,415.20, subject to resolution of any properly submitted protest(s), if any.

#### **ISSUE**

This procurement is for the acquisition of Compressed Natural Gas (CNG) Engine Conversion Electrical Wiring Harness Kits that are required to maintain the safe and reliable operation of the bus fleet. The harness kits are required for the installation of newer model near-zero emission engines during the Midlife refurbishment of Metro's New Flyer Xcelsior bus fleet. The engine conversion program updates the bus fleet with lower emission and more efficient L9N engine, providing Metro's customers with safer and more reliable transportation. The three wiring harness assemblies included in the harness kits are installed on the new CNG engines and replace outdated harnesses used on the older engines that were originally installed in these buses. Awarding this contract will ensure that Bus Maintenance has adequate inventory for the Midlife Program to continue to repair and maintain buses according to Metro maintenance standards.

#### **BACKGROUND**

Transit bus engines, transmissions, cooling systems, air conditioning systems, doors, and numerous other systems and components are controlled electrically by switches, sensors, and computers located throughout the buses. Electrical harnesses provide the connection to allow communication through electronic signals to control these systems and components. The harnesses are a critical part of the bus electrical systems, and degradation of the harnesses can significantly impact the performance and reliability of the engine, transmission, and cooling systems. Corrosion or wear in electrical connectors can result in performance problems and unnecessary in-service failures and increased maintenance costs.

The midlife refurbishment program is replacing engines on New Flyer Xcelsior buses that have been in service for over eight years, with an average mileage on these buses approaching 300,000 miles. The Midlife Program replaces the older ISLG engine with an environmentally cleaner and more efficient L9N engine. The new engine improves the reliability of the bus fleet, results in fewer road failures, and provides better overall service for Metro customers and cleaner emissions for the greater Los Angeles County service area. The electrical wiring harness kits are required for the installation of the new CNG near-zero emission engines during the Midlife refurbishment of the Metro New Flyer Xcelsior bus fleet.

## **DISCUSSION**

The L9N Engine Conversion Electrical Wiring Harness Kits include three wiring harnesses specifically designed by Metro to interface with the New L9N engine, which are installed on the New Flyer bus fleet during the midlife refurbishment process. The three harnesses replace existing harnesses that provide electrical current to components for the Engine, OBD II diagnostics, and catalytic converter.

The replacement of older, high mileage engines with new engines covered by manufacturer warranties provides Metro with a more reliable transit bus fleet along with a reduction in exhaust emissions. The harness kits replace harnesses that have been degraded by engine compartment heat, water intrusion, and corrosion. Wiring harnesses that are degraded from extended use can often result in defects and engine performance issues. The replacement of the harnesses will improve the reliability and extend the service mileage of the vehicle.

The contract to be awarded is an Indefinite Delivery, Indefinite Quantity (IDIQ) agreement in which Metro commits to order only from the awardee, up to the specified quantity for a specific duration of time, but there is no obligation or commitment for Metro to order any or all of the Electrical Wiring Harness Kits that may be anticipated. The bid quantities are estimates only, with deliveries to be ordered and released as required.

Electrical Wiring Harness Kits will be purchased and maintained in inventory and managed by Material Management. As Electrical Wiring Harness Kits are issued, the appropriate budget project numbers and accounts will be charged.

## **DETERMINATION OF SAFETY IMPACT**

Award of the contract for Electrical Wiring Harness Kits will ensure that all operating divisions and the Central Maintenance Facility have an adequate inventory to maintain the equipment according to Metro Maintenance standards. This action will prevent service impacts, deferred maintenance, and ensure bus availability for revenue service.

## **FINANCIAL IMPACT**

Funding in the amount of \$543,207.60 for these Electrical Wiring Harness Kits is included in the

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FY24 budget under account 50441, Parts - Revenue Vehicle in multiple bus operating cost centers under project 306002 Operations Maintenance, and in the Central Maintenance Shops (CMS) cost center 3366 under project 203050 New Flyer / El Dorado Bus Midlife.

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

### **Impact to Budget**

The current sources of funding for this action are Federal, State, and Local including sales tax and fares. These sources are eligible for Bus Operating or Capital projects.

### **EQUITY PLATFORM**

This action will ensure that Metro's bus fleet which serves most regions in Los Angeles County can provide vital transportation services to neighborhoods, including many underserved communities where disparities within the region can exist between residents' access to jobs, housing, education, health, and safety. Bus transportation provides an important lifeline for the residents in underserved communities, and the Metro bus maintenance programs ensure the proper State of Good Repair of the bus fleet to provide transportation for these underserved communities. The L9N Near Zero natural gas engines that utilize the Electrical Wiring Harness Kits from this procurement reduces Nitrous Oxide (NOx) emissions by ninety percent (90%) and greenhouse gas emissions by nine percent (9%) compared to the standard ISL-G CNG powered engine currently installed in this bus fleet, which results in improvements in the air quality for underserved communities.

The Diversity and Economic Opportunity Department (DEOD) recommended a two percent (2%) DBE goal for this solicitation.

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

The Electrical Wiring Harness Kits supports Strategic Goal 1: Provide high-quality mobility options that enable people to spend less time traveling. The procurement of Electrical Wiring Harness Kits for inventory will help to ensure the reliability of the bus fleet and enable our customers to arrive at their destinations on schedule and without interruption.

### **ALTERNATIVES CONSIDERED**

The alternative is to not award the contract and procure Electrical Wiring Harness Kits on the open market on an as-needed basis. This approach is not recommended since it does not provide a commitment from the supplier to ensure availability and price stability. Not awarding the contract would negatively impact the Central Maintenance Midlife program and result in delays or deferral of the engine repower program. Additionally, Metro bus maintenance divisions and the fleet would be negatively impacted.

### **NEXT STEPS**

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Upon approval by the Board, staff will execute Contract No. SD105427000 for the procurement of Electrical Wiring Harness Kits with DSM&T Company, Inc., at the one-year base amount of \$543,207.60 inclusive of sales tax, and the one-year option to extend the amount of \$543,207.60, inclusive of sales tax, for a total contract amount of \$1,086,415.20.

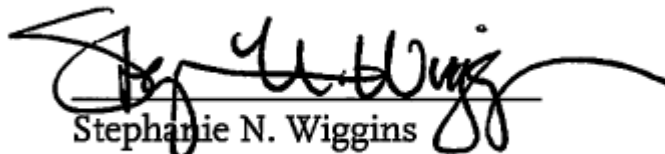
**ATTACHMENTS**

Attachment A - Procurement Summary

Attachment B - DEOD Summary

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