

# T Transportation Committee

For the Metropolitan Council meeting of December 14, 2011

**Date**  
**Prepared:** November 16, 2011  
**Subject:** Authorization to Purchase Light Rail Power Truck Brake Caliper Modification and Overhaul

## Proposed Action:

That the Metropolitan Council authorizes the Regional Administrator to purchase Knorr Brake Caliper Modification and Overhaul replacement parts for the Hiawatha Rail Line on a sole source basis in an amount not to exceed \$390,000 over a two-year period.

## Summary of Committee Discussion / Questions:

Ed Toomey Director of Light Rail Vehicle maintenance presented the request for authorization.

Funds available thru Rail Associated Capital Maintenance

Cost lower than we could rebuild in-house \$390,000 vs. \$550,000

Upgraded Parts / material provided at no cost (\$1300 per unit)

Warranty (extended from 2 years to three)

Replacement brake calipers units provide (at no cost), to be used as float during rebuild process

Brake Calipers will be rebuilt at Knorr facility, Maryland, USA

Emergency parts to rebuild calipers in Minneapolis provided at no cost, if required

After the presentation there was a discussion about the failure mode of calipers, it was pointed out that brake system fails in an applied mode to safeguard the LRV and passengers.

The question was also raised about sole source. It was explained that Knorr Brake does not sell to any rebuilder other than Transit Agency's due to the complex integration of the brake system with other components.

Gene Sheldon Manager Light Rail Maintenance, Mike DeWolf Manager Light Rail Q/A – Training and Don Pleau Manager Purchasing & Contracts, were available to answer questions.

**T** Transportation Committee  
Meeting date: November 14, 2011  
Metropolitan Council Meeting: December 14, 2011

**ADVISORY INFORMATION**

**Date:** November 14, 2011  
**Subject:** Authorization to Purchase Light Rail Vehicle Power Truck Brake Caliper Modification and Overhaul  
**District(s), Member(s):** All  
**Policy/Legal Reference:** Council Policy 3-3 Expenditures  
**Staff Prepared/Presented:** Brian Lamb, General Manager (612-349-7510)  
Vince Pellegrin, Chief Operating Officer (612-349-7511)  
Sheri Gingerich, Deputy Chief of Operations -Rail (612-341-5660)  
Ed Toomey, Director Rail Vehicle Maintenance (612-341-5605)  
Micky Gutzmann, Director Council Contracts and Procurement (651-602-1741)  
**Division/Department:** Metro Transit

**Proposed Action**

That the Metropolitan Council authorizes the Regional Administrator to purchase Knorr Brake Caliper Modification and Overhaul replacement parts for the Hiawatha Rail Line on a sole source basis in an amount not to exceed \$390,000 over a two-year period.

**Background**

Knorr Brake Corporation is the original manufacturer of the Type 1 LRV brake system and does not have a network of distributors; therefore, they provide sales and distribution directly to Metro Transit.

Components consist of materials, software, and computer boards that are protected due to proprietary rights.

Among the safety sensitive equipment critical to integrated system performance are the Powered Truck Brake Calipers. These assemblies are designed for integration into the vehicle brake system and are proprietary in nature. Procurement has obtained a letter from Knorr Brake Corporation outlining their sole source status and clarifying their relationship. This documentation is needed in order to prove that Knorr Brake Corporation is a sole source.

Over the course of the last few years, brake caliper operation has become problematic, due to winter operating conditions.

This was brought to the attention of Knorr and they have been acting in a very positive manner with a proposed corrective action.

Knorr has engineered an upgrade to the brake caliper which as part of the overhaul will be provided at no cost; in addition they will also supply Metro Transit with spare parts to be used to maintain the current design until the fleet is completely upgraded.

Warranty for this program will be extended from the normal two years to three.

**Rational**

The Minnesota climate, especially winter, is very hard on brake components due to the operating conditions of snow/ice, salt, and water. This exposure has resulted in increased failures.

The improved design should be beneficial in providing increased performance reliability which will have a positive impact on our customers. If Metro Transit were to just rebuild the calipers in house, it would cost approximately \$500,000.00, not including the design enhancements and the warranty provided in the Knorr Brake proposal.

**Funding**

Funding is available from the Rail Associated Capital Fund MN 05-0019-00.

**Known Support / Opposition**

There is no known opposition.