



Heavy Rail Traction Motor Overhaul

Presented to: Organizational,
Services & Performance Monitoring
Committee

January 11, 2022

HRV Traction Motor



Traction Motor History

- Midlife overhaul 2008-2012
 - Traction motors restored to OEM conditions.
- 2012-present
 - RTA mechanics rebuild traction motors
- Present-future
 - Need to conduct extended life overhaul to restore to OEM conditions

Project Overview

- Increase in traction motor failures
 - 2021- 18 FTA reportable events
- Overhaul of 168 HRV Traction Motors
 - 4 motors per car
 - 2 spare sets
- Overhauls recommended every 360,000 miles

Project Benefits

- Restore motors to an OEM condition
 - Armature coils and commutators
 - Field coils renewed
 - Insulation applied
- All tolerances checked and corrected

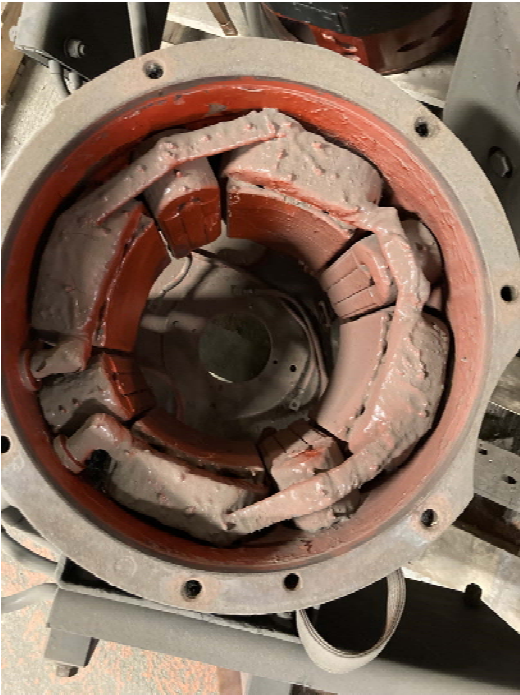
Project Overview

Armature



Project Overview

Field Coils



Procurement Overview

Sole source with Swiger Coil Systems.

- Procurement received proposal on Dec. 15, 2021
- 0% DBE Goal

Procurement Overview

Section 306.43 (H)(6) of the Ohio Revised Code states that a sole source procurement is authorized when “the purchase substantially involves the services of a personal, professional, highly technical, or scientific nature, including but not limited to the services of an attorney, physician, surveyor, appraiser, investigator, court reporter, adjuster, advertising consultant, or licensed broker, or involves the special skills or proprietary knowledge required for the servicing of specialized equipment owned by the regional transit authority.”

Procurement Overview

Sole source with Swiger Coil Systems.

- Proprietary tools, components and drawings for the HRV traction motor.
 - Own the OEM documentation
- Ensures operation of the system, so that it can operate as designed

Procurement Overview

Swiger Coil Systems strengths and Experience:

- Extensive work with public transit agencies
- Thorough understanding of transit motors and propulsion systems engineering
- Prior experience with GCRTA and successful performance of contracts
- Understanding of the Authority's needs and expectations

Procurement Overview

Swiger Coil Systems Experience:

- Clients include:
 - Greater Cleveland Regional Transit Authority (GCRTA)
 - Metropolitan Atlanta Rapid Transit Authority (MARTA)
 - New York City Transit (NYCT)
 - Bay Area Rapid Transit (BART)
 - Massachusetts Bay Transportation Authority (MBTA)
 - Southeastern Pennsylvania Transportation Authority (SEPTA)

Procurement Overview

Staff requests that the Organizational, Services & Performance Monitoring Committee recommend an award to Swiger Coil Systems for Heavy Rail Traction Motor Overhaul Services in an amount not to exceed \$2,210,344.00 for a period of two years.

Procurement Overview

Questions?