



City of Denton

City Hall
215 E. McKinney Street
Denton, Texas
www.cityofdenton.com

AGENDA INFORMATION SHEET

DEPARTMENT: Procurement
ACM: Christine Taylor
DATE: July 15, 2025

SUBJECT

Consider adoption of an ordinance of the City of Denton, a Texas home-rule municipal corporation, ratifying the expenditure of funds by the City Manager for the repair and replacement of cylinder heads for the Denton Energy Center; and providing an effective date (File 8860 – awarded to Wartsila North America, Inc., in the not-to-exceed amount of \$188,483.04). [The Public Utilities Board recommends approval \(5 - 0\).](#)

STRATEGIC ALIGNMENT

This action supports Key Focus Area: Enhance Infrastructure and Mobility.

INFORMATION/BACKGROUND

The Denton Energy Center (DEC) provides power at times when renewable energy sources are not readily available. The DEC is a component of the City of Denton's future commitment to providing the citizens of Denton with 100% of electricity from renewable sources of energy. Recently, we declared an emergency purchase for repair services and replacement of cylinder heads from failure caused by premature valve recession on the exhaust valves of heads, causing forced outages on May 4, 2025.

During the forced outage, a complete inspection and valve recession check was performed, determining the cause of failure. The inspection determined that the engine has multiple cylinder heads that failed or are failing due to excessive valve recession. The recession resulted in the failed operation of the exhaust valves on E6 cylinder B1, not allowing the engine to operate.

Purchase order 211156 was issued to Wartsila on May 19, 2025, to release heads to be shipped. Repair of E6 cylinder B1 was started and completed on May 22, 2025. All onsite inventory has been exhausted; the unit has additional heads needing repair. Six (6) cylinder heads have been removed and are waiting to be picked up and sent to the manufacturer for inspection and repairs.

In order to promptly return the unit to service for the City of Denton energy demands and to fulfill our ERCOT obligations, the purchase of cylinder heads and the prompt repair of the cylinder heads are necessary to reduce the outage time, to replenish onsite spares. Additionally, Denton Municipal Electric is currently in the procurement process of repairing all DEC cylinder heads due to valve recession.

Wartsila North America, Inc. is the Original Equipment Manufacturer for the engines, as well as the only authorized sales and service representative of cylinder heads with upgraded 20-degree valves for valve

recession. Wartsila North America Inc. was able to provide the needed service and delivery for the DEC. The cylinder head spare purchase cost is \$74,414.

Wartsila North America, Inc. will also repair and return the failed cylinder heads to the DEC. The total repair cost was quoted at \$114,069.04 to have six (6) cylinder heads repaired to ensure spares are onsite to reduce unit downtime, ensuring availability for dispatch. Repair/delivery time is 7-30 days from the fully accepted order.

In efforts to outsource the components, it's been found that only Wartsila North America can provide the newly designed valve angles to install in cylinder heads. These components are manufactured by Wartsila and are not authorized for sale by other suppliers.

PRIOR ACTION/REVIEW (COUNCIL, BOARDS, COMMISSIONS)

On June 23, 2025, the Public Utilities Board (PUB) recommended this item to the City Council for consideration.

RECOMMENDATION

Approve the emergency repairs and replacement of cylinder heads for the Denton Energy Center in the estimated expenditure amount of \$188,483.04.

PRINCIPAL PLACE OF BUSINESS

Wartsila North America, Inc.
Houston, TX

ESTIMATED SCHEDULE OF PROJECT

Purchase Order #211156 was issued on May 19, 2025, for this single purchase processed as an Emergency Declaration to return the units from a forced outage once all on-hand parts were exhausted. The service took place immediately to repair the unit, and the parts requiring rebuilding were sent to the manufacturer. Delivery of the items will occur within 30 days after receipt of the order.

FISCAL INFORMATION

These items will be funded from Denton Energy Center account 600105.6525.5500. Purchase Order #211156 has been entered into the system. The budgeted amount for this item is \$188,483.04.

EXHIBITS

Exhibit 1: Agenda Information Sheet
Exhibit 2: Quote
Exhibit 3: Ordinance

Respectfully submitted:
Lori Hewell, 940-349-7100
Purchasing Manager

For information concerning this acquisition, contact: Arthur Pando, 940-349-8653.

Legal point of contact: Marcella Lunn at 940-349-8333.