

**COUNCIL ACTION FORM**

**SUBJECT:** RDF BIN TAPERED BUSHING REDUCER FOR ELECTRIC SERVICES

**BACKGROUND:**

Refuse-Derived Fuel (RDF) produced by the Resource Recovery Plant is stored in the RDF bin, where it is then conveyed into the Power Plant for combustion in one of the plant's two boilers. The bin is divided into two sides, with augers in each, to allow one side of the bin to be emptied while the other side is being repaired or filled.

A large 50 HP motor provides the energy to operate the augers. Each of the two augers has a large reducer attached to it, where the input power from the motor is converted to the appropriate speed and torque to drive the augers. The reducers are very large, and the lead time to procure a reducer is very long. The Power Plant does not have currently have a spare reducer in inventory. Therefore, if one of the reducers suffers a breakdown, one side of the bin could be unusable for several months.

To prevent delays, staff has solicited quotes for a reducer to place in inventory. Quotes were obtained from three companies:

<b>VENDOR</b>	<b>QUOTE</b>	<b>TAX</b>	<b>TOTAL</b>	<b>LEAD TIME</b>
APEX Industrial Automation LLC, Romeoville, IL	\$55,241.38	\$3,866.90	\$59,108.28	14-16 weeks
Motion Industries, Ankeny, IA	\$55,578.01	\$3,890.46	\$59,468.47	14-15 weeks
Applied Industrial Technologies, Des Moines, IA	\$59,803.67	\$4,186.26	\$63,989.93	8 weeks

The apparent low quote is from a company the Power Plant staff is not familiar with. The next lowest quote, at a total cost of \$360.19 higher than the low quote, is from Motion Industries, a company the Power Plant works with on a weekly basis. Staff has found Motion Industries to be very reliable and provide good quality parts. Considering the working relationship that the plant has with Motion Industries and the price difference being less than 1%, staff has determined it would be in the City's best interest to order the tapered bushing reducer from Motion Industries.

The FY 2022/23 Electric Production budget includes \$90,000 for RDF Bin Equipment Parts/Supplies.

**ALTERNATIVES:**

1. Award a contract for the tapered bushing reducer to Motion Industries, Ankeny, IA in the amount of \$59,468.47 (inclusive of Iowa Sales Tax).
2. Award a contract to the apparent low quote from APEX Industrial Automation LLC, Romeoville, IL in the amount of \$59,108.28 (inclusive of Iowa Sales Tax).
3. Award to another vendor.
4. Reject quotes and direct staff to bid the reducer.

**CITY MANAGER'S RECOMMENDED ACTION:**

This reducer is a critical part within the waste-to-energy system at the power plant. If either of the current reducers fail, the system's capacity will be substantially reduced, resulting in weeks-long diversions of solid waste to the landfill.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, as stated above.