

ITEM #: 26
DATE: 11-14-23
DEPT: P&R

COUNCIL ACTION FORM

SUBJECT: AWARD CONTRACT FOR AMES/ISU ICE ARENA COMPRESSOR COMPLETE OVERHAUL

BACKGROUND:

The Ames/ISU Ice Arena opened in 2001. The ice making system was constructed with two compressors that circulate the refrigerant in order to make and keep ice year-round. Staff, along with Johnson Controls (JC), Urbandale, Iowa, has completed all manufacturer recommended preventative maintenance since opening the facility. One specific maintenance practice that is completed every four years, or 4,500 hours of operation, is a top end overhaul of each compressor. Typically, each compressor receives a top-end overhaul in alternating years, which allows the ice making system to remain in constant operation with at least one compressor available at all times.

This past June, the entire ice making system was shut off for the first time in order for the sand floor below the ice to be releveled. Once the sand was releveled, the ice making system was turned on so staff could begin flooding and making a new sheet of ice. JC was scheduled to complete a top-end overhaul during the shutdown but was unable to do so due to undisclosed reasons. In late October, JC started the top end overhaul. While JC was in the process of completing the top end overhaul, JC determined the internal parts of the compressor had worn so much that it was impossible to put the same parts back in the machine and have it operate to original manufacturer specifications. JC notified City staff in late October that they had contacted the compressor manufacturer to determine a solution to get the compressor operational again. Staff was notified on November 6, that in order for the compressor to be operational, it would have to undergo a complete overhaul which includes installing new OEM (Original Equipment Manufacturer) parts. The total cost to complete the overhaul is \$84,065.

Staff discussed with JC to determine why the compressor failed, as it has been serviced on a regular basis and all top-end overhauls had been completed every 4,500 hours. JC said the typical lifespan of a compressor is approximately 20 years even with regularly scheduled preventative maintenance. This lifespan is shorter than the 30+ year lifespan staff has been told in the past.

The compressor manufacturer no longer makes the Ice Arena's specific model or a comparable compressor. The manufacturer offers a larger compressor, but would require a redesigned ice making system which at this time is infeasible. Unfortunately, this means the only option is to undertake a complete overhaul of the existing compressor. The complete overhaul is expected to extend the lifespan of the compressor approximately another 20 years.

The Ames/ISU Ice Arena is operated as an Enterprise Fund and maintains an operational fund balance and a capital reserve fund (CRF) balance. The City and ISU annually contribute \$40,000 each to the CRF and as of June 30, 2023, there is \$240,353 available for capital replacements. A breakdown of the CRF for this fiscal year is shown below:

FY 2023/24 Ice Arena Capital Reserve Fund Summary

Beginning Balance	\$ 240,353
Interest Revenue	\$ 800
City and ISU Contribution	\$ 80,000
Scheduled Projects	(\$ 141,046)
Ending Balance	\$ 180,107

Since \$20,000 for the top-end overhaul is already included in this year's scheduled projects, an additional \$64,065 needs to be allocated to accomplish the complete overhaul of the compressor. With this reallocation, the ending balance in the CRF will be \$116,042.

ALTERNATIVES:

1. Waive the Purchasing Policies and Procedures requirement for competitive bids and award a contract to Johnson Controls, Urbandale, Iowa, to complete the Ames/ISU Ice Arena Compressor Complete Overhaul in the amount of \$84,065.
2. Do not waive the Purchasing Policy and direct staff to solicit bids for the Ames/ISU Ice Arena Compressor Complete Overhaul
3. Refer back to staff

CITY MANAGER'S RECOMMENDED ACTION:

The Ames/ISU Ice Arena has been a quality facility since 2001 that provides multiple programming opportunities for all age groups for individuals in Ames and central Iowa. Fortunately, there is redundancy with the ice making system that allows ice to still be maintained with one compressor. However, the system was designed to have two compressors to maintain the ice. The compressor that is currently in operation was also installed in 2001 and was not meant to operate by itself for long periods of time. **It is important that the compressor be fixed immediately because if the second compressor were to fail, the facility would not be able to make ice.**

The timeline to complete the work is approximately two to three weeks. JC is the most capable contractor to complete the work as it has been maintaining the ice making equipment since 2001. Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, as described above.