



Staff Report

File #: 17-294

Version: 1

Date: 6/12/2017

Item #: 3.2d.

TO: Mayor and City Council

THROUGH: Steve Powers, City Manager

FROM: Kacey Duncan, Deputy City Manager

SUBJECT:

Transfer of appropriation authority to replace the cooling system at the Civic Center.

Ward(s): All

Councilor(s): All

Neighborhood(s): All

ISSUE:

Shall the City Council adopt Resolution No. 2017-32 to transfer \$954,400 of appropriation authority from General Fund, Non Departmental, contingencies to Capital Improvements Fund, Non Departmental Construction, materials and services, to replace the cooling system at the Civic Center?

RECOMMENDATION:

Adopt Resolution No. 2017-32 to transfer \$954,400 of appropriation authority from General Fund, Non Departmental, contingencies to Capital Improvements Fund, Non Department Construction, materials and services, to replace the cooling system at the Civic Center.

SUMMARY AND BACKGROUND:

The City's budget needs to respond to unforeseen changes. State law allows the City Council to approve transfers of appropriations within the limits established by the adopted budget.

In April 2017, the City Council approved a \$63,250 transfer of General Fund contingencies to fund the design engineering for the potential replacement of the cooling system. The increased appropriation authority in the Capital Improvements Fund budget will allow the purchase and installation of a replacement cooling system to serve the Civic Center campus, including City Hall, Salem Public Library, and City Council Chambers.

FACTS AND FINDINGS:

The Civic Center cooling plant includes a Multistack 300-ton chiller, a water evaporating cooling tower, and seven water circulating pumps for moving chilled water to provide cooling to more than 200,000 square feet of occupied space. The cooling system has ten modules with two compressors in each module for a total of 20 compressors. Compressors 7 and 20 failed last spring and summer. The current 300-ton chiller was installed in FY 1999-2000 with a useful life of 16 years.

Recent maintenance and evaluation of the system concluded that additional module failures were likely and complete system failure probable within the next year or two. Due to the age and complexity of the system and the length of time required for replacement, the City's engineer of record recommended the City plan for replacement rather than wait for a system failure and the complete loss of cooling in all Civic Center buildings.

The design engineering provided a recommendation for replacement of the chiller, water evaporating cooling tower, and circulating pumps. The proposed replacement system will be two 150-ton energy efficient chillers, a closed loop cooling tower, and variable speed pumps. The two chillers and variable speed pumps will provide for a more energy efficient cooling operation. The closed loop cooling tower will reduce water consumption by over one-half million gallons a year, decrease operational maintenance, and eliminate the possibility of outside contaminants from entering into the system.

The new highly efficient chiller system is also eligible for the Energy Trust of Oregon incentive program. The engineer's estimate is approximately \$204,500 in incentives returned to the City upon completion of the project equaling a net replacement cost of \$749,900 (excluding the design engineering). The new system has an estimated life of 25 years and will result in an estimated 40 percent reduction in electricity usage or an annualized savings of \$82,230. The potential return on investment for the chiller system is 9.1 years.

For the recommended project to be accomplished during the winter 2017-18, project bidding process needs to begin immediately.

Kelley Jacobs
Budget Officer

Attachments:

1. Resolution No. 2017-32, Cooling System Replacement
2. Resolution No. 2017-32, Exhibit A, Contingency Status