

Background:**Purpose**

There are two projects underway at the Information Systems Department (I.S.D.) Data Center, which will help meet the short and long term needs of this critical County facility. One project will update and expand the cooling system for the Data Center and the other project will prepare a Ten-Year Plan to identify other facility modifications and replacements needed to meet future demands. The Ten-Year Plan is nearing completion and, in the process, a number of facility issues were identified that need immediate attention. The purpose of this Board item is to request a budgetary adjustment to provide funding to meet these recently identified immediate needs.

Data Center Cooling System Status

A project is currently under construction to meet the immediate cooling needs of the Data Center. This project has been funded through the Capital Project Budget and includes funding from the Comprehensive Energy Project to implement energy efficiency measures along with the replacement of old equipment. The project will replace the back-up chiller and cooling units serving the Data Center with larger, more energy efficient units that will meet the growing demand expected over the next 10 years. This project is expected to be completed by the end of November.

Ten-Year Plan

A consultant is developing a Ten-Year Plan to forecast the growth of the Center and identify the improvements to the Center's infrastructure to support that growth. The Plan includes energy audits, electrical systems evaluation, space utilization evaluation, feasibility studies for relocating the telephone equipment into the Center, and cost estimates for the recommended improvements. The Plan is nearing completion. In the process of developing the Plan, the consultant identified several measures that are recommended to be implemented as part of the current cooling system improvements. These measures address possible points of failure within the Data Center infrastructure and meet additional cooling needs that were identified in the planning. These measures include the following:

1. The Uninterrupted Power Supply (U.P.S.) transformer has been found to be too small for the Data Center and a new larger, more energy efficient transformer should be installed prior to the replacement of the new cooling units.
2. The cooling in the tape storage room is inadequate and a new cooling unit should be installed.
3. The Data Center cooling is powered through a single electrical panel. With this configuration, the entire Data Center cooling system will go down if the panel fails. A new electrical panel should be added so that if one panel fails only half of the cooling units would go down and the Data Center can continue to operate.
4. A new redundant breaker should be added for the U.P.S. system to prevent a Data Center shut down due to a breaker failure.

The total cost of these additional immediate measures is estimated to be \$80,000 over and above the current funding. The most time efficient and cost effective way to implement these additional measures is to include them in the current Cooling System Project. The completed Ten-Year Plan will identify other facility improvements to meet the projected ten year demand, but are not needed immediately.

Funding

The cooling and planning projects are funded by the Capital Projects Budget, Index #109959, and by the Comprehensive Energy Project, Index #109587. However, the additional measures are beyond the scope of work that can be achieved with the funding provided. I.S.D. has identified \$80,000 in their operating budget that is available for this additional work. Staff requests the Board approve the transfer of \$80,000 from the I.S.D. operating budget to the capital project budget to allow this work to move forward.

Schedule

The project to replace the backup chiller cooling units is now underway. Construction is expected to be completed by the end of November. The Ten-Year Plan is scheduled to be completed by the end of September.

Requested Board Actions

Adopt a resolution authorizing a budgetary adjustment to the Fiscal Year 2009-2010 Final Budget for the Information Systems Department (I.S.D.) Data Center Cooling and Ten-Year Plan in the amount of \$80,000 requiring four-fifths vote.

Attachments: Resolution - Budgetary Adjustment.

On File With Clerk: None.

CLERK OF THE BOARD USE ONLY

Board Action (If other than "Requested")

Vote: