



TO: Honorable Mayor & Members
Fort Lauderdale City Commission

FROM: Lee Feldman, City Manager

DATE: September 18, 2012

TITLE: Motion to approve purchase of uninterruptable power supplies (UPS) – State Contract 250-000-09-1 - \$152,000

Recommendation

It is recommended that the City Commission approve the purchase of replacement battery backup power supply systems (properly known as uninterruptable power supply or UPS) to replace the end of life systems located at the City Hall and Public Works data centers. This purchase will be made from CDW Government LLC utilizing the State of Florida Contract 250-000-09-1 for a total cost of \$152,000.

Background

UPS's are used to protect sensitive data center systems, such as computer, telephone, and network communications equipment from abrupt loss of electricity, electrical spikes and brown-outs. Electrical fluctuations or an abrupt loss of electricity can cause major equipment failure as well as loss of critical data and/or the corruption of databases and applications. In addition to these protection features, a UPS provides temporary electrical power to keep critical systems online during power outages (usually from 30 minutes to 3 hours depending on the system).

The primary City Hall UPS is no longer supported by the manufacturer. It is over 10 years old and repairs are done on a "best effort" basis by third party vendors. The current UPS is a fixed capacity solution and is not expandable to provide UPS services for the increasing number of systems and equipment deployed in the data centers in recent years. This led to the installation of several small standalone UPS devices to meet the growing need. The Public Works data center does not have a centralized UPS and also depends on several small out of support standalone UPS devices to support systems such as Hansen, GIS, Email, network and the customer service call center. The call center system is critical during bad weather conditions for which loss of electrical power is typical.

The current state of the data center UPS's not only put the City's critical systems and communications equipment at risk but cost more to support the disparate UPS devices as they require separate maintenance functions and does not allow for the sharing of spare

parts and components.

Information Technology Services (ITS) staff is recommending a phased approach to replacing the aging and unsupported UPS systems with a supported, scalable and more cost effective UPS solution that is based on next-generation green technology. This solution provides an integrated system for mounting of UPS components, computer, telephone and network equipment; and reduces the amount of floor space required. The integrated solution optimizes cooling efficiency and effectiveness by using “In-Row” air conditioning units to cool only the servers and communications equipment rather than cooling the entire data center. The City will obtain long term energy savings by eventually replacing the current aging perimeter air conditioning cooling units with UPS technology that is greener and more energy efficient. The City will also obtain the following benefits after the complete implementation of the UPS solution:

- A more efficient and effective UPS solution that is greener and more energy efficient.
- One UPS with the appropriate level of temporary electrical power for all computer and communications equipment inside the data centers.
- A UPS solution that is scalable to support future needs without any major electrical or retrofitting work.
- Reduce staff maintenance duties associated with the management of the current disparate UPS devices.
- Reduce maintenance cost by allowing for the sharing of spare parts and components between data centers.
- Reduce the battery replacement cost by using advance batteries technology with a 5 to 8 years lifecycle instead of the current 2 to 5 years.
- Introduce hot-swappable battery and component technology that is very useful when powering critical systems and communications equipment.

Resource Impact

There is a fiscal impact to the City in the amount of \$152,000.

Funds for the City Hall portion of this purchase are listed in the first spreadsheet below. Funds for the Public Works portion of this purchase are contingent upon approval by the City Commission of the FY 2012 consolidated budget amendment scheduled for the September 5, 2012 agenda (detailed in the second spreadsheet below).

Funds Availability Location:							
SUB				SUB			
FUND	FUND	FUND NAME	INDEX #	INDEX NAME	OBJECT #	SUBJECT NAME	AMOUNT
581	01	CENTRAL SERVICES	ITS020102	TELEPHONE COMMUNICATIONS	3299	OTHER SERVICES	2,285.00
581	01	CENTRAL SERVICES	ITS020102	TELEPHONE COMMUNICATIONS	3404	COMPONENTS/PARTS	11,720.00
581	01	CENTRAL SERVICES	ITS020102	TELEPHONE COMMUNICATIONS	3999	OTHER SUPPLIES	8,250.00
581	01	CENTRAL SERVICES	ITS020102	TELEPHONE COMMUNICATIONS	6404	COMPUTER EQUIPMENT	49,545.00
TOTAL							71,800.00

FUNDS APPROPRIATION:							
Appropriate \$80,200 from Fund 454, Subfund 01, Index P11248.454-6599 to Fund 450, Subfund 01, Index PBS010601 - see below							
APPROPRIATE FROM:							
FUND	SUB FUND	FUND NAME	INDEX #	INDEX NAME	SUB OBJECT #	SUBOBJECT NAME	AMOUNT
454	01	Water & Sewer General Capital Projects	P11248.454	Utilities IT Special Projects/Replacements	6599	Construction	80,200.00
TOTAL BUDGET APPROPRIATION FROM:							80,200.00
APPROPRIATE TO:							
FUND	SUB FUND	FUND NAME	INDEX #	INDEX NAME	SUB OBJECT #	SUBOBJECT NAME	AMOUNT
450	01	Water & Sewer Operations	PBS010601	Communications Support	3299	OTHER SERVICES	2,285.00
450	01	Water & Sewer Operations	PBS010601	Communications Support	3404	COMPONENTS/PARTS	16,820.00
450	01	Water & Sewer Operations	PBS010601	Communications Support	3999	OTHER SUPPLIES	11,550.00
450	01	Water & Sewer Operations	PBS010601	Communications Support	6404	COMPUTER EQUIPMENT	49,545.00
TOTAL BUDGET APPROPRIATION TO:							80,200.00

Prepared By: Richard Ewell, Procurement Specialist II

Department Director: Mike Maier, Information Technology Services