

#13-0009

TO: Honorable Mayor & Members of the

Fort Lauderdale City Commission

FROM: Lee Feldman, ICMA-CM, City Manager

DATE: January 8, 2013

TITLE: Motion to approve the purchase of replacement battery backup power

supply systems for Police and Public Works Data Centers - \$240,537.40

Recommendation

It is recommended that the City Commission approve the purchase of replacement battery backup power supply systems (properly known as uninterruptible power supply or UPS) to replace the end of life systems located at the Police Department and expand the UPS at the Public Works data centers. This purchase will be made from GovConnection, Inc. utilizing the State of Florida Contract 250-000-09-1 for a total cost of \$240,537.40.

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 police data center 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. These standalone UPS devices only provide a few minutes of run time in case of loss of power and are supporting systems such as in-car video, security camera monitoring systems, Telestaff time keeping and other systems.

The current state of the data center UPS's not only put the police 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 \$240,537.40.

FUNDS AVAILABILTY LOCATION:

FISCAL		SUB				SUB OBJECT	SUBOBJECT	
YEAR	FUND	FUND	FUND NAME	INDEX#	INDEX NAME	#	NAME	AMOUNT
2013	581	02	CENTRAL SVS CAPITAL PROJECTS	P11815,581	CITYWIDE TELEPHONE SYSTEM UPGRADE PH2	6599	CONSTRUCTION	161,849.40
2013	581	01	CENTRAL SVS	ITS070101	POLICE ITS	6499	OTHER EQUIP	36,570.00
2013	450	01	WATER & SEWER	PBS670101	TREATMENT OPER	6499	OTHER EQUIP	42,118.00
							TOTAL	240,537.40

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