



Legislation Text

File #: 24-0614, Version: 1

CITY COUNCIL AGENDA ITEM

ACTION REQUESTED:

Approve the award of Cooperative Procurement 24-164, Network Switch Upgrades, to CDW-G, for an amount not to exceed \$266,519.22

DEPARTMENT: Electric Utility

SUBMITTED BY: Brian Groth, Director

BOARD/COMMISSION REVIEW:

N/A

BACKGROUND:

The Naperville Electric Utility originally implemented a utility grade ethernet network in 2009. This network utilized existing Utility owned fiber optic cable throughout the City and now consists of 21 Hirschmann ethernet rack mount switches at various water and wastewater locations within the city. These network switches operate at a maximum potential link speed of one gigabit per second location to location.

Over time this link speed has become saturated due to increased network needs such as higher resolution video cameras, smart metering data traffic, SCADA communications and general internet usage. As a result, the aging infrastructure needs to be upgraded to a 10 gigabit per second network architecture.

DISCUSSION:

The Electric Utility recently upgraded the electric substations from the Hirschmann network to the Aruba network and have specified using the same equipment at the Water Department locations to maintain consistency and reduce maintenance costs throughout the city.

The new Aruba switches have a conformal coating which protects them from moisture and dampness which is a critical component to protecting the equipment. The new switches also conform to the IEEE 1613 standard to withstand the environmental constraints of the Water Department locations.

The upgraded network will keep the Water Department SCADA system in full operation while gaining the ability to add additional traffic.

Installation of the Aruba switches will be done by Electric Utility staff and is scheduled to be completed by March 31, 2025

Staff has identified an approved cooperative contract, Sourcewell Cooperative Contract 081419-

CDW through CDW-G, for the procurement of the Aruba network switches.

The network switches are expected to be delivered by September 30, 2024.

FISCAL IMPACT:

CIP#: EU044

Network switch upgrades are expensed to the Infrastructure account listed below. Network switch upgrades are done in coordination with EU044, the Fiber Optic Cable for Relay Protection and Communication project. In 2024, the Electric Utility included \$314,000 in the budget for EU044. The requested award is within budget for this expense.

Account Number	Fund Description	Total Budget Amount
40251300-551502	Electric Utility Fund	\$15,179,200