



Legislation Text

File #: 19-296, Version: 1

CITY COUNCIL AGENDA ITEM

ACTION REQUESTED:

Approve the award of sole source procurement 19-117, S&C Electric Switchgear Equipment, to S&C Electric Company for an amount not to exceed \$204,368

DEPARTMENT: Electric Utility

SUBMITTED BY: Mark Curran, Director

BOARD/COMMISSION REVIEW:

N/A

BACKGROUND:

As part of an efficient and safe electric power distribution and delivery system, a common industry practice is to install switches that allow customers to be connected to one of two or more redundant high voltage feeder lines. The Naperville Electric Utility uses 600-amp, two and three-way air insulated switches to connect customers to multiple primary feeder lines without cross-connecting the feeders to each other. These switches allow utility linemen to quickly isolate problem areas and to restore customer power by connecting them to a different supply line. Additionally, the air switches have replaceable fuses on the load side, to reduce the number of customers affected by outages, and which can be easily, quickly, and safely replaced by utility linemen.

In March 1994, the City Council approved the sole source award of Bid 93-122 for pad-mounted switchgear and allowed for future switchgear costs with S&C Electric Company to be negotiated taking into account material, labor and non-labor production indexes. Currently, the Naperville Electric Utility distribution system is comprised of 16 substations and 117 primary feeders. To connect these substations and feeders to customers, the Utility has installed 725, 600-amp manual air switches and 107 automated (DA) air switches, as provided by the S&C Electric Company in Chicago.

DISCUSSION:

This request will be used by the Electric Utility to replace damaged switch units and to address the needs of new construction within the city. Due to the long delivery time of four to six months, these units, when purchased, will be inventoried at the Naperville Electric Service Center until installed.

The Naperville Electric Utility proposes to purchase a quantity of 12, two-way S&C manual air switch units at the negotiated price of \$12,492 per unit and four, three-way S&C manual air switch units at the negotiated price of \$13,616 per unit for a total of \$204,368 on an as needed basis. Over the nine-year period from 2010 to 2019, the price for a two-way switch has increased an average of 1.03% per year and the price for a three-way switch has increased an average of .52% per year.

As part of this request, the Utility performed an analysis of the reasons to sole source and evaluated other manufacturers and comparable units. It was deemed that the reasons for sole sourcing, as highlighted below, are still valid. By standardizing the S&C equipment, Utility personnel are more confident and comfortable operating these high voltage devices in difficult situations, such as darkness, storms, next to busy city streets as well as in more ideal circumstances. Familiarity and consistency of operation enhances safety and can also be attributed to a decrease in outage duration for Naperville residents, and decreased costs to the Utility.

Additionally, S&C switches include features either not found on the other manufacturers' units, or deemed superior by the Utility staff, such as:

- The S&C switch provides a very clear view of the switch's open contacts and current switch configuration, which is a safety priority for operating personnel.
- The S&C gear has a grounded isolation barrier between the operation side and the high voltage buss work. All switch and fuse components are enclosed and protected within an inner, air-insulated steel compartment that keeps out foliage, wildlife, and contaminants, and reduces external exposure to energized components.
- The switching mechanism is mounted independently from the external shell. This minimizes switching problems that could occur if the ground shifts or the cabinet is struck by a vehicle.
- The location the of switch operating handles in the S&C unit contribute to the ease of operation and safety of operating personnel.
- The gear's cabinet door locking mechanism automatically latches when it is closed, providing security for Naperville residents.
- The S&C gear is designed to minimize the safety hazard for operating personnel while installing or removing fuses with a hot stick because the fuse rotates 180 degrees away from high voltage buss work. The fuse rotates away from equipment to a vertical position. This position enables personnel to pull the fuse straight out with a hot stick, rather than an up and out movement needed with other devices.
- Other manufacturers use different fusing hardware than S&C. Sole sourcing eliminates the need to carry additional unique replacement parts for different switchgear hardware configurations on all Utility vehicles.

These are the primary reasons the Electric Utility continues to see value in standardizing on the S&C equipment.

FISCAL IMPACT:

The cost for switch gear is budgeted in the Operating Supplies account listed below. The requested award of \$204,368. is within budget.

Account Number	Fund Description	Balance Amount
40101300-541407	Electric Utility Fund	\$3,500,150