



Legislation Text

File #: 20-377, Version: 1

CITY COUNCIL AGENDA ITEM

ACTION REQUESTED:

Approve the award of Sole Source Procurement 20-143, Distribution Automation Upgrade, to Universal Utility Supply Company for an amount not to exceed \$297,000

DEPARTMENT: Electric Utility

SUBMITTED BY: Lucille Podlesny, Director

BOARD/COMMISSION REVIEW:

N/A

BACKGROUND:

The Electric Utility has S&C distribution automation (DA) switchgear installed at various points on the electric system. DA provides automatic 12.5kV feeder reconfiguration after a power line disturbance has occurred by isolating a faulted section of the feeder. Automatic reconfiguration reduces downtime and minimizes the number of affected customers during a power failure.

Naperville has a total of 48 DA teams which provide for 90% of automated protection of the 12.5kV feeders. The Utility began installing DA Teams in 1999 and each DA Team consists of multiple automated switchgear units which are automated by a controller that communicates via security control and data access (SCADA) to other automated switchgear in the team and back to the substation, routing to the Utility's fiber network and coming back to Electric Service Center (ESC). This allows for remote control of the units and provides feedback with pertinent data on the 12kV feeder back to ESC Control. DA Teams are added to feeders on an as needed basis based upon factors including customer load and distribution.

When originally purchased and installed, the DA teams used 2850 and 5800 series controllers in each automated switchgear. There are a total of 122 controllers in need of being upgraded. As part of CIP Project EU49, the Utility is upgrading to the 6800 series controllers because the 5800 series is no longer being manufactured and parts are not available for replacement.

This upgrade plan started in 2018 with a pilot and continued in 2019 with the purchase of 53 controller upgrades. In 2020, the Utility plans to upgrade 8 DA teams consisting of a total of 23 switchgear controllers. This will leave 46 controllers to upgrade in 2021 and 2022. To upgrade a DA team, all members of the team must be 6800 series controllers. Older controller units will be retained for use in event of failure for replacement of DA teams still using the older controllers.

DISCUSSION:

This sole source is requested to purchase hardware and services to upgrade the distribution

automation equipment for the 23 controllers in 2020 as part of an overall five-year upgrade plan.

The Utility has identified this purchase as a sole source because UUSCO has an agreement with the S&C Electric Company to be the chosen partner for all Northern Illinois electric municipal customers for distribution automated pad-mounted switchgear. A sole source letter from the manufacturer is attached.

If this purchase were not approved, the Utility would need to purchase used controllers to perform the repairs, which could lead to taking DA Teams out of service and leaving feeders without automated protection and increased outage time for customers.

FISCAL IMPACT:

CIP#: EU049 - Distribution Automation

Distribution Automation upgrades are expensed to the Infrastructure account listed below. This is related to CIP# EU049, Distribution Automation, for which \$375,000 was budgeted for in 2020. The requested award is within the budgeted amount for this expense.

Account Number	Fund Description	Total Budget Amount
40251300-551502	Electric Utility	\$12,982,000