

City of Naperville

Legislation Text

File #: 23-1060, Version: 1

CITY COUNCIL AGENDA ITEM

ACTION REQUESTED:

Approve the award of Change Order #1 to Contract 21-355, Tollway Substation Reliability Upgrade, to Sargent & Lundy, LLC for an amount not to exceed \$902,000 and a total award of \$1,241,240 and for an additional 12 months

DEPARTMENT: Electric Utility

SUBMITTED BY: Brian Groth

BOARD/COMMISSION REVIEW:

N/A

BACKGROUND:

The Naperville Electric Utility (Utility) - Tollway Substation has experienced several 34.5kV bus flashovers in recent years. These flashovers cause extended outages to critical industrial and commercial customers along the I-88 corridor. The primary cause of these failures is due to salt contamination from the tollway. Relocating the 34.5kV bus indoors will eliminate the primary cause of failures.

In February 2022, the City Council awarded Contract 21-355, Tollway Substation Reliability Upgrade, to Sargent & Lundy with a completion date of December 31, 2025. The purpose of this contract is for the development of a complete engineering design, construction support, and as-built incorporation for the Tollway Substation to address the reliability concerns.

This Change Order is requested to support a scope change from the original award.

DISCUSSION:

The original award to Sargent and Lundy was to create the specifications for bid of a prefabricated aluminum control building to house indoor 34kV switchgear. Once the specification was created and indicative pricing was received for the control house from vendors, it was determined that an aluminum building is not the best design choice for the price. In particular, the project team was concerned salt spray will corrode the control building causing leaks at building seams. Members were also concerned the overall higher-than-expected cost of the aluminum control building suggests that another approach would better suit the Utility. The project team now believes that, for a similar cost, a building constructed from tip-up concrete walls and/or brick and mortar would provide better protection from the unique environment present at the station.

Whereas the building vendor would have performed this work previously, in addition to the original scope of integrating the building with the existing and new system protection schemes; this change in

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scope requires Sargent and Lundy to design the architectural, mechanical, and electrical elements of the new control building.

The project team has also determined it would be in the Utility's best interest to have all of the 34kV relays housed in the new building. Originally, some of the existing 34kV relaying located in the existing south control building were going to remain in place. This situation would lead to a unique operation issue in which someone responding to an outage would need to know the correct building to enter to address the issue. Housing all the 34kV in the new house addresses this by making the new building the single point to address all issues.

The change in scope will delay the completion date to December 31, 2026.

FISCAL IMPACT:

CIP#: EU086

Tollway Substation Reliability Upgrades are expensed to the below Infrastructure account. These upgrades are done in association with EU086; in 2023, \$2,000,000 was budgeted for work related to EU086. Additionally, the Electric Utility budgeted \$3,738,000 for EU086 in 2024. This change order extends the contract to the end of 2026, staff will ensure sufficient funds are budgeted in 2025 and 2026 to accommodate this change order in future years.

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