



Legislation Text

File #: 23-0432, Version: 1

CITY COUNCIL AGENDA ITEM

ACTION REQUESTED:

Approve the award of Cooperative Procurement 23-101, 138kV Hitachi Circuit Breakers, to Wesco for an amount not to exceed \$860,220

DEPARTMENT: Electric Utility

SUBMITTED BY: Brian Groth, Director

BOARD/COMMISSION REVIEW:

N/A

BACKGROUND:

Circuit breakers are a major component of the 138kV transmission system. Their purpose is to trip/open under the control of a relay to interrupt power flow. This occurs when there is a system problem or when directed by a system controller to isolate parts of the system for safety.

The Electric Utility (DPU-E) currently operates 36 138kV circuit breakers in ten of the electric substations. 18 of the circuit breakers in the system were built in 1990 by Siemens in the Siemens TCP style and are beyond their 30-year life span. Shortly after they were purchased and deployed, this style of circuit breaker was discontinued. Although the circuit breakers have not had any major failures, malfunctions or flaws, their complex hydraulic energy storage system has become difficult to maintain now that they are beyond their expected life span.

Modernization of these circuit breakers is critical to maintaining the reliability of the 138kV transmission system.

DISCUSSION:

DPU-E Engineering, supported by Sargent and Lundy (Consultant), developed a technical specification for the next generation of breaker to replace the Siemens TCP.

DPU-E engaged with Wesco through their Sourcewell Cooperative Contract to source breakers per our specification. Wesco used their extensive network of suppliers to find the most cost-efficient breaker to meet the DPU-E technical specifications.

The Hitachi 145PM40-20SD met all said technical specifications and was presented to DPU-E and Sargent and Lundy for technical approval. The Hitachi 145PM40-20SD, was determined to be compliant with the specifications and came with a long list of other utilities, including ComEd, that use this type of breaker on their systems.

Staff has identified an approved cooperative contract, Sourcewell Cooperative Contract 091422WES through Wesco, for the one-time purchase of the 138kV breakers and are expected to be delivered July 2024.

FISCAL IMPACT:

CIP#: EU022

Circuit Breakers are expensed to the below Equipment Parts and Infrastructure accounts. A total of \$10,000 was budgeted in account 40251300-541402 for Substation Circuit Board replacements. These circuit breakers are also related to CIP # EU022 which has a budget of \$460,000 in 2023. The request award exceeds the budgeted amount, however anticipated underspending in other areas will allow this award to be accommodated within the 2023 budget.

Account Number	Fund Description	Total Budget Amount
40251300-541402	Electric Utility	\$265,000
40251300-551502	Electric Utility	\$15,096,000