

ITEM#: 15
 DATE: 1-10-23
 DEPT: Electric

COUNCIL ACTION FORM

SUBJECT: PRELIMINARY PLANS AND SPECIFICATIONS FOR FURNISHING 69kV AND 161kV SF6 BREAKERS

BACKGROUND:

Electric Services operates electrical transmission and distribution infrastructure to route electricity to customers in the community. Large circuit breakers are installed in the system’s infrastructure, which are utilized to disconnect portions of the electric transmission system when there is a fault on that portion of the system. This helps isolate and minimize the area effected by a system fault, prevents damage to property and equipment, and minimizes the risk to personnel and the public who may be near a fault.

Electric Services needs to procure 69kV SF6 circuit breakers to replace existing obsolete oil-filled circuit breakers at the Mortensen Road Substation, and for the installation of new breakers as part of a planned project at the Ontario Road Substation. Spare 69kV and 161kV breakers are also needed for Electric Services’ inventory, which will be kept on hand for the emergency replacement of a breaker in the event of a breaker failure.

The Engineer’s estimate of the cost of these circuit breakers is \$450,000, including tax and freight. The cost for the breakers will be divided among the following projects and funding sources:

FUNDING SOURCE	AMOUNT AVAILABLE
Ontario Road Substation CIP Project	\$ 1,300,000
Electric Operating Budget (Minor Transmission Substation Improvements)	380,000
TOTAL	\$ 1,680,000

The breaker needed for the Mortensen Road CIP project will be purchased and placed into the Electric inventory, where it will be reserved until construction occurs in FY 2024/25. At that time, the cost of the transformer will be assigned to the Mortensen Road CIP project account.

ALTERNATIVES:

1. Approve preliminary plans and specifications for Furnishing SF6 Circuit Breakers and set for February 1, 2023, as the bid due date and February 14, 2023, as the date of public hearing and award of contract.

2. Do not approve the plans and specifications at this time.

CITY MANAGER'S RECOMMENDED ACTION:

The purchase of this equipment is necessary to replace obsolete breakers at the Mortensen Road Substation, the Ontario Road Substation, and for system spares. **Lead time for this equipment has increased significantly making it more difficult to procure and repair obsolete or failed breakers. Combining these purchasing needs for all three purposes will help to advance the acquisition of these long-lead material items for installation.** Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1 as stated above.