



Department Source: City Utilities - Water and Light

To: City Council

From: City Manager & Staff

Council Meeting Date: October 2, 2023

Re: Authorizing construction of the addition of two (2) new 161 kV station class transformer and switchgear lineups at the Bolstad Substation, calling for bid through the Purchasing Division, authorizing a contract for work using a term and supply contract, or performing the work using city forces; amending the FY 2024 Annual Budget by appropriating funds.

Executive Summary

Staff has prepared for Council consideration an ordinance authorizing construction and issuing a contract for the work through use of a term and supply contract, a bid call through the Purchasing Division or utilizing city forces for the addition of two (2) new 161 kV station class transformer and switchgear lineups at the Bolstad Substation, shown on the attached Location Map. A public hearing was held on August 7, 2023. The resolution estimate for this project is \$1,200,000. This ordinance includes an appropriation for \$1,200,000 to complete the project and will be reallocated from Electric Utility bond funded capital improvement projects.

Discussion

This project will add two new 161/13.8kV transformer and switchgear lineups to the Bolstad substation 161kV bus. This project will utilize the transformers and switchgear purchased with 2016 electric revenue bond funds for the proposed Mill Creek Substation. Currently, the Bolstad existing 69/13.8kV transformers and switchgears are 20MVA each and connected to the 69kV bus and will be retired. One of the lineups has reached the end of its useful life and will be scrapped. The other 69/13.8kV transformer and switchgear lineup may be available as a spare or replacement for existing substations. An examination of the equipment will be required after it has been taken out of service to determine if that is possible. The two new 161/13.8kV transformer lineups are 25MVA each and will result in a net gain of two electric distribution feeders to accommodate growing load in the area of northeast Columbia as well as improving redundancy and reliability for the substation. Two new 13.8kV distribution feeders will be constructed from the new switchgear lineup as separate projects in the future. Provisions will be made with this project to ensure a future expansion of a third transformer lineup at the Bolstad Substation can be accommodated. Adding these two 161/13.8kV transformer lineups will require an extensive reconfiguration of the 161kV bus at the Bolstad Substation. There is sufficient space on the north side of the existing Bolstad Substation property to accommodate this reconfiguration.

An Interested Parties (IP) Meeting was held on May 17, 2023, at City Hall and a public hearing for this project was held on August 7, 2023. This ordinance authorizes construction through use of the City's term and supply contracts, construction by city forces, or by bidding through the Purchasing Division. The resolution estimate for the project is \$1,200,000. The ordinance includes an appropriation of \$1,200,000 to provide the necessary funding to



City of Columbia

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cover the cost of the project. As directed by City Council at the public hearing, transformers originally purchased for the E0121 New South Side 161/13.8 kV Substation will be used for this project. Additionally, funds will be reallocated from the following bond funded capital improvement projects to complete this improvement:

- \$67,627 from E0179 College Avenue Undergrounding – University to Bouchelle
- \$959,837 from E0194 Substation Upgrades – Grindstone and Perche
- \$172,536 from E0121 New South Side 161/13.8 kV Substation

Fiscal Impact

Short-Term Impact: The resolution estimate is \$1,200,000.

Long-Term Impact: Minimal impact to operations costs.

Strategic & Comprehensive Plan Impact

Strategic Plan Impacts:

Primary Impact: Reliable and Sustainable Infrastructure, Secondary Impact: Not Applicable, Tertiary Impact: Not Applicable

Comprehensive Plan Impacts:

Primary Impact: Infrastructure, Secondary Impact: Not applicable, Tertiary Impact: Not Applicable

Legislative History

Date	Action
08/07/2023	PH30-23 Proposed addition of two (2) new 161 kV station class transformer and switchgear lineups at the Bolstad Substation.
07/17/2023	R104-23 Setting a public hearing: proposed addition of two (2) new 161 kV station class transformer and switchgear lineups at the Bolstad Substation.
05/17/2023	Interested Parties (IP) Meeting

Suggested Council Action

Approval of the ordinance.