



# City of Columbia

701 East Broadway, Columbia, Missouri 65201

Department Source: City Utilities - Water and Light

To: City Council

From: City Manager & Staff

Council Meeting Date: August 7, 2023

Re: Public Hearing: Perche Creek Substation 161kV Bus Reconfiguration.

## Executive Summary

This is the public hearing concerning the reconfiguration of the 161kV bus at the Perche Creek Substation. The project location is shown on the attached Location Map. An interested parties (IP) meeting was held on May 17, 2023. The resolution estimate for this project is \$1,200,000 and will be paid from Project E0217 of the Electric Capital Improvement Program.

## Discussion

This project will replace inoperable circuit switchers on the Perche Creek Substation 161kV bus with new circuit breakers. Circuit switchers are protection devices meant to protect equipment from electric faults on the transmission line or bus. Circuit breakers are more reliable for this function and are planned to be installed to replace the failed circuit switchers. In order to replace the circuit switchers with breakers, the 161kV bus and transmission interconnection structures will need to be rebuilt. In addition to replacing the two circuit switchers, a third tie breaker will be added to the 161kV bus to increase reliability. Upgrading the configuration will provide more ability to efficiently maintain and repair of the system, thereby potentially reducing outage times for significant events. Additional work will also take place in order to accommodate a future 161kV transmission interconnection structure. There is sufficient space on the Perche Creek Substation property to accommodate this proposed reconfiguration. Existing and proposed project graphics are attached.

An Interested Parties (IP) Meeting was held on May 17, 2023, at City Hall. Three citizens attended the meeting and two expressed concerns that this project included proposed transmission line additions. This work is primarily to upgrade an existing substation to improve reliability. The resolution estimate for this project is \$1,200,000 and will be paid from Project E0217 of the Electric Capital Improvement Program. Funds for this project are proposed to be from electric revenue bond funds or electric enterprise revenue.

## 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 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
07/17/2023	R105-23 Setting a public hearing: Perche Creek Substation 161kV bus reconfiguration
05/17/2023	Interested Parties (IP) Meeting

Suggested Council Action

Direct staff to proceed with final design for the Perche Creek Substation 161kV bus reconfiguration.