

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: October 6, 2025

Re: Authorizing an Engineering Services Agreement between the City of Columbia, Missouri

and Leidos Engineering, LLC to conduct Electric Stability Study

Executive Summary

Staff has prepared for Council consideration a resolution authorizing the City Manager to execute an agreement with Leidos Engineering, LLC to perform an electric utility dynamic study of the City's electric transmission system. The dynamic study should be completed before December 2025 so that the results can be included in the utility's Annual Transmission Planning Assessment. This agreement is for an amount not to exceed \$61,740.00.

Discussion

The City is required to be registered with the North American Electric Reliability Corporation (NERC) for several functional registrations including Transmission Owner and Transmission Planner. For compliance with NERC standard TPL-001-4 for Transmission System Planning Performance Requirements, Transmission Planners are required to prepare an annual Planning Assessment of their portion of the Bulk Electric System (BES).

The City is requesting expertise in local and regional electric transmission dynamic system modeling and transient stability analysis. The stability analysis must meet the requirements set forth in the North American Electric Reliability Corporation (NERC) Transmission Planning (TPL) and Critical Infrastructure Protection (CIP) Standards and will be conducted for both a near-term (one to five years) and long-term (six to ten years) planning horizon.

Water & Light's engineering staff currently has the ability to perform steady state and short circuit studies in house, but does not have the resources to perform stability analysis. NERC Requirement 2.6.1 requires that the studies be 5 years old or less, unless a technical rationale can be provided to demonstrate that the results of an older study are still valid. The last stability analysis was performed by Leidos in 2020.

Fiscal Impact

Short-Term Impact: \$61,740.00

Long-Term Impact: None

Strategic & Comprehensive Plan Impact

Strategic Plan Impacts:



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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
02/17/2020	R28-20: Authorizing an agreement for professional engineering services with Leidos Engineering, LLC for local and regional dynamic system modeling and transient analysis of the stability of the City's electric transmission system.

Suggested Council Action

Approve the resolution.