



Department Source: City Utilities - Water and Light

To: City Council

From: City Manager & Staff

Council Meeting Date: May 16, 2016

Re: First Addendum to Agreement for Professional Engineering Services with SEGA, Inc

Executive Summary

Staff has prepared for Council consideration a resolution authorizing the City Manager to execute an Addendum to a Professional Engineering Services Agreement with SEGA, Inc. for the Boiler 8 NOx Reduction Project at the Municipal Power Plant. The total for this addendum is \$291,961.46.

Discussion

Water & Light owns and operates a 35 MW natural gas fired steam boiler and turbine at the Municipal Power Plant, Boiler 8 - Turbine 8, which began operation in 1970. The boiler was originally designed to burn natural gas. Since the cost of natural gas has historically been high relative to coal, the boiler does not have a high historical use rate. The unit uses older technology and currently has a high emission rate with respect to nitrogen oxides or NOx.

Water & Light recognized an opportunity with the recent availability of economically priced natural gas and conducted a preliminary study regarding upgrading Boiler 8 to reduce NOx emissions. The study, delivered in April 2012, determined that upgrades could be made which would allow improved operational flexibility and improve the utility of the boiler in the new natural gas environment. Water & Light established a Capital Improvement Project, EL0183. The Boiler 8 - Turbine 8 system has the capability of being used as either a base-load or peak-load power generation asset.

The City has entered into a professional engineering services agreement in March of 2014 with SEGA, Inc. to provide engineering support services for equipment procurement development and implementation for Boiler 8 at the Municipal Power Plant. An increased project budget is necessary to complete the Scope of Services set forth in Original Agreement due to additional, unforeseen regulatory requirements on permit applicants which required expanded support services and additional project coordination. Major equipment for Boiler 8, as outlined in Phase II and Phase III of the original agreement, has been procured. SEGA will provide professional engineering services to assist in fitting the equipment into the Municipal Power Plant. Section 7.5 of the Original Agreement permits the Parties to make changes within the general scope of SEGA's services upon execution of a mutually acceptable amendment.

Additional engineering and permitting support services are required for the City in obtaining an air construction permit. These are detailed in Change Order Request No. 1. The results of the project scoping and environmental/permitting portion of the original agreement require additional support beyond the original professional engineering services agreement and are



City of Columbia

701 East Broadway, Columbia, Missouri 65201

detailed in Change Order request No. 2. The total for this addendum is \$291,961.46 bringing the overall not to exceed amount to \$656,961.46 for this project and is already within the funds appropriated for Capital Improvement Project, EL0183.

Fiscal Impact

Short-Term Impact: The total for this addendum shall not exceed \$291,961.46

Long-Term Impact: None

Vision & Strategic Plan Impact

Vision Impacts:

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

Strategic Plan Impacts:

Primary Impact: 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
3/3/2014	R 38-14 Agreement for professional engineering services with SEGA Inc.

Suggested Council Action

Staff recommends Council approve a resolution authorizing the City Manager to execute an Addendum to a Professional Engineering Services Agreement with SEGA, Inc. for the Boiler 8 NOx Reduction Project at the Municipal Power Plant.