



Department Source: City Utilities - Water and Light

To: City Council

From: City Manager & Staff

Council Meeting Date: February 17, 2020

Re: Professional Engineering Services Agreement with Burns & McDonnell Engineering Company, Inc. to perform a Renewable Natural Gas Feasibility Study for the Columbia Landfill.

Executive Summary

Staff has prepared for Council consideration a resolution authorizing the City Manager to execute a Professional Engineering Services Agreement with Burns & McDonnell Engineering Company, Inc. to perform a Renewable Natural Gas Feasibility Study for the Columbia Landfill. The cost of this study is not to exceed \$160,500 and will utilize funds already appropriated to Capital Improvement Project E0175 Landfill Generator Unit 4.

Discussion

In February of 2006 the City Council adopted Resolution 28-06 which established a project partnership between the Electric Utility and Solid Waste Utility. One of the goals was to maximize the economic and beneficial use of landfill gas produced at the Columbia Landfill, while maintaining compliance with all regulations and laws governing the ownership and operation of the landfill.

The intent of this resolution was for:

- The Solid Waste Utility to operate and maintain the collection pipeline infrastructure to reliably harvest and deliver landfill gas to the Renewable Fuels Facility
- The Electric Utility to construct and operate a Renewable Fuels Facility including all equipment necessary to provide vacuum to the collection pipelines and condition the gas to produce electricity
- Costs related to the Renewable Fuels Facility would be a function of the electric utility
- Both utilities to actively work on developing utilization of the excess gas and secondary uses of the gas and energy by-products

A request for proposal RFP 30/2019 was issued for engineering services to study the possibility of processing landfill gas into renewable natural gas. As a result of this RFP, in September 2019 Burns & McDonnell completed a Preliminary Feasibility Study – Columbia Landfill Biogas to Renewable Natural Gas Upgrade Project. This study indicated that the landfill gas has the potential to be financially beneficial for the City.

This study was presented to the Water & Light Advisory Board at the October regular meeting with a follow-up presentation given by a representative from The Energy Authority at the November board meeting.



City of Columbia

701 East Broadway, Columbia, Missouri 65201

At the December Advisory Board meeting, staff recommended that the next step would be execution of an agreement to conduct a detailed feasibility study. Using the results of the RFP 30/2019, staff recommended that Burns & McDonnell conduct a detailed Renewable Natural Gas Feasibility Study. After discussion, the Advisory Board moved to endorse the RFP for a Renewable Natural Gas Feasibility Study. The cost of this study is not to exceed \$160,500 and will utilize funds already appropriated to Capital Improvement Project E0175 Landfill Generator Unit 4.

Fiscal Impact

Short-Term Impact: \$160,500 utilizing funds already appropriated to Capital Improvement Project E0175 Landfill Generator Unit 4.

Long-Term Impact: \$0

Strategic & Comprehensive Plan Impact

[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
February 6, 2006	R28-06 Landfill Gas Resolution

Suggested Council Action

Authorize the City Manager to execute a Professional Engineering Services Agreement with Burns & McDonnell Engineering Company, Inc. to perform a Renewable Natural Gas Feasibility Study for the Columbia Landfill.