



Department Source: City Utilities - Water and Light

To: City Council

From: City Manager & Staff

Council Meeting Date: May 15, 2017

Re: Wind Energy Contract with Missouri Joint Municipal Electric Utility Commission

Executive Summary

Staff has prepared for Council consideration an ordinance authorizing the City Manager to execute a contract with Missouri Joint Municipal Electric Utility Commission for the purchase of wind energy. This contract allows for the purchase of wind energy, from 35 MW's of wind turbine generators. This wind resource contract anticipates a start date in 2021 with a contract cost estimated to start close to \$21 per MWH. The generation source for this project is Iron Star Wind project, LLC in western Kansas that will use the Grain Belt Express transmission line project.

Discussion

Chapter 27-106 of the City Ordinance details the required purchase of electricity generated from eligible renewable energy sources at the following levels:

- 2% by 2008
- 5% by 2013
- 15% by 2018
- 25% by 2023
- 30% by 2029

A department objective is to regularly evaluate the opportunity for additional renewable energy resources. At the November 2, 2016 Water & Light Advisory Board meeting staff reviewed this potential wind energy resource available through the Missouri Joint Municipal Electric Utility Commission (MJMEUC). At the April 12, 2017 Water & Light Board meeting staff presented commercial information regarding a 35 MW involvement in the Missouri Joint Municipal Electric Utility Commission KWP1 wind contract. After consideration staff requested and board recommended City Council approval of participation in the KWP1 wind project.

This project is intended to provide Missouri Joint Municipal Electric Utility Commission (MJMEUC) members with access to wind energy from western Kansas, where wind power can be produced at some of the lowest costs in the country. Access to this wind resource is provided by coupling a MJMEUC purchase power agreement with a MJMEUC transmission service contract to secure delivery of wind energy. At this time MJMEUC has assembled a Purchase Power Agreement with Iron Star Wind and a Transmission Service Agreement with Grain Belt Express Clean Line which allows for the delivery of wind energy from western Kansas at a proposed converter station in northeast Missouri with a projected delivery date starting in 2021.



City of Columbia

701 East Broadway, Columbia, Missouri 65201

Based on the pricing received for this project at this time a 35MW participation in this proposed wind energy project is being recommended. This MJMEUC contract has similar terms to other purchase power agreements the City has executed with MJMEUC.

Upon execution of the contract, the wind developer or MPUA will function as the Market Participant for Water & Light's portion of the project. This proposed contract includes an annual 2% price escalator and deemed energy.

To estimate the financial impact of the contract for this proposed wind resource we used information from our existing wind resources to estimate production, then applied the renewable rate impact methodology detailed in the annual renewable energy report. While the contract does represent a starting year investment of \$3 million in purchased power, use our current methodology the estimated impact on electric rates is projected to be negligible.

Fiscal Impact

Short-Term Impact: NA

Long-Term Impact: \$3 million purchased power contract with a price escalation of 2% per year with an estimated impact on electric rates projected to be negligible.

Vision & Strategic Plan Impact

Vision Impacts:

Primary Impact: Environment, Secondary Impact: Secondary, Tertiary Impact: Tertiary

Strategic Plan Impacts:

Primary Impact: Primary, Secondary Impact: Secondary, Tertiary Impact: Tertiary

Comprehensive Plan Impacts:

Primary Impact: Environmental Management, Secondary Impact: Livable & Sustainable Communities, Tertiary Impact: Tertiary

Legislative History

Date	Action
N/A	

Suggested Council Action

Staff recommends Council approve an ordinance authorizing the City Manager to execute a contract with Missouri Joint Municipal Electric Utility Commission, for the purchase of wind energy.