



Department Source: City Utilities - Water and Light
To: City Council
From: City Manager & Staff
Council Meeting Date: November 21, 2016
Re: Wind Energy Contract with Crystal Lake Wind III, LLC

Executive Summary

Staff has prepared for Council consideration an ordinance authorizing the City Manager to execute a contract with Crystal Lake Wind III, LLC, for the purchase of wind energy. Delivery of wind energy, from 27 MW's of wind turbine generators, will begin in January 2017 at a price of \$19.55 per MWH. The generation source is Crystal Lake III Wind Energy Facility in northern Iowa and is same source as an existing wind energy contract executed on February 7, 2012. It is estimated that the additional wind energy will increase the energy from renewable sources to over 12% of total energy required for calendar year 2017.

Discussion

As part of the Water & Light Strategic Plan one of the Department Objectives is to regularly evaluate renewable energy resources. During fiscal year 2016 a request for proposal, for wind energy resources, was issued. The proposed contract is the result of an evaluation process and contract negotiations.

This contract represents an extension of Columbia's involvement with the Crystal Lake III Wind Energy Facility located in Northern Iowa. This facility has been operational since April 2009 and Columbia has had a contract for 21 MW's of generation with this facility since 2012. The facility is interconnected with a 161KV transmission line located within MISO. The new contract will consist of two implementation phases

1. Will be for 27 MW of wind turbine production, starting 2017.
2. Will be for 45 MW of wind turbine production, starting 2023.

Upon execution of the contract, the developer will function as the Market Participant for Water & Light's portion of the project. This relationship was established with the 2012 contract. The main differences between this proposed contract and the existing contract with Crystal Lake III is

1. the Purchase Price is lower
2. there is a 2% price escalator on the planning year anniversary (June 1)
3. and, there is a Deemed Energy Credit

The existing contract price is \$45 per MWH and is fixed for the remainder of the contract. The new contract will start at \$19.55 per MWH with an escalator of 2%. The new contract will terminate at the same time as the 2012 contract and the final price will be \$26.31 per MWH.



It should be noted that negotiations included an option that would have combined the contracts; however, staff determined that separate pricing would result in a better life-of-contract benefit.

Under both contracts, Columbia may establish a market price point at which generation will be curtailed. In those situations, Columbia is responsible for paying for the wind energy that would have been generated had production not been curtailed. This is called deemed energy. Under the new contract, Columbia will receive a credit for up to \$250,000 of deemed energy during phase I and up to \$500,000 of deemed energy during phase II.

Fiscal Impact

Short-Term Impact: Fiscal year 2017 impact is estimated at \$1 million for contracted energy over an eight month period; however, Columbia will receive energy market payments that will reduce that amount. Funds for this contract will be paid from existing purchased power budget. If addition funds are needed an appropriation request will be forthcoming at a later date.

Long-Term Impact: Fiscal year 2018 impact is estimated at \$1.5 million for the full year of contracted energy. Actual contract cost will increase 2% per year. Market price offset will depend on actual market prices at the time of generation.

Vision & Strategic Plan Impact

Vision Impacts:

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

Strategic Plan Impacts:

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

Comprehensive Plan Impacts:

Primary Impact: Environmental Management, Secondary Impact: Livable & Sustainable Communities, Tertiary Impact: Not Applicable

Legislative History

Date	Action
February 2, 2012	B19-12 Authorizing a power purchase agreement with Crystal Lake Wind III, LLC.



City of Columbia

701 East Broadway, Columbia, Missouri 65201

Suggested Council Action

Staff recommends Council approve an ordinance authorizing the City Manager to execute a contract with Crystal Lake Wind III, LLC, for the purchase of wind energy.