

City of Columbia

701 East Broadway, Columbia, Missouri 65201



Agenda Item Number: B 18-15

Department Source: Water & Light

To: City Council

From: City Manager & Staff

Council Meeting Date: January 5, 2015

Re: Electric Utility Five Year Revenue Bond Program

Documents Included With This Agenda Item

Council memo, Resolution/Ordinance, Exhibits to Resolution/Ordinance

Supporting documentation includes: Electric 5 Year Bond Funding Plan: FY15-FY19, 2015
Electric Bond Proposal - Project Descriptions list

Executive Summary

Staff has prepared for Council consideration an ordinance authorizing a special election on the question of whether to issue Water and Electric System Revenue Bonds in the amount of \$63,100,000 for the purpose of extending, expanding, improving, repairing, replacing and equipping the city-owned electric systems. Council is being asked to consider this referendum for the April 2015 election. Staff estimates that the rate increases needed to support debt service will total 6% for this issue. Funding major capital projects with revenue bonds provides the lowest rate impacts and supports rate stability for current and future electric customers.

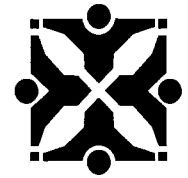
Discussion

As a result of a number of work sessions, staff has prepared the information necessary to place a Water and Light Revenue Bond Issue on the April 2015 ballot. The list of FY15-FY19 Capital Improvement Projects (CIP) was reduced by first determining if the project was critical to reliably providing electric service for all customers in the next five years. The list was further edited by staff to ensure only projects providing long-term benefits that fit this long-term funding philosophy were included for this financing. This funding approach is designed to assure future customers that benefit from the system are also the customers paying for the system projects. A list of the proposed projects is attached.

The proposed bond issue is for an electric construction program which is consistent with present policy for funding of electric infrastructure. A combination of borrowed money and current income from rates is used. This method of funding allows for minimal rate increases and ensures future customers help pay for the system upgrades they benefit from. The last electric bond issue for system improvements was in 2006 for \$60 million. This proposed bond issue is for \$63.1 million which will fund new transmission lines, a substation, burying of electric lines along the new transmission line route, replacement and upgrades to the existing system, upgrading power supply resources and

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projects to meet increased demand for electricity.

The electric projects in this list are located in various areas of the City and will provide improvements and continued electric service reliability to all areas of the community.

Electric flow and substation loading analysis has identified work that must be done to the electric system to meet our current reliability requirements and customers future electric service reliability expectations. The new transmission lines and substation must be added to meet federal reliability guidelines. While Columbia Water & Light staff members were developing the timeline for the project, it was determined that funding for the transmission line running from the new Millcreek substation on Peach Court, along Providence Road to McBaine could be postponed. Once the new transmission lines and substation are in place, there are many projects that will need to be completed to reduce the electric load running through the city's other substations. This work will also require extensions and reconfigurations of major substation feeders which will benefit all customers.

Also included in the bond proposal is the addition of renewable energy generation at Columbia's landfill gas facility, upgrading emission controls on the natural gas fueled steam turbine-generator at the Columbia Municipal Power Plant and upgrading the control systems on the natural gas fueled combustion turbine-generators at the Columbia Energy Center.

City staff has estimated that a total of 6% in rate increases will be needed to cover the debt service requirements of this bond issue. One 3% increase will be needed following the passage of the bond proposal. The remaining 3% increase would be proposed as increases in FY17 and FY18. Funding for these projects through enterprise revenue would result in higher rate impacts (20%-25%). Rate changes for future power supply or other operational needs will be addressed separately in future budgets.

Fiscal Impact

Short-Term Impact: A portion of the Election Costs

Long-Term Impact: A portion of the Election Costs

Vision, Strategic & Comprehensive Plan Impact

Vision Impact: Development

Strategic Plan Impact: Infrastructure

Comprehensive Plan Impact: Infrastructure

Suggested Council Action

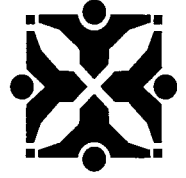
Adoption of the proposed legislation to place this referendum on the April 2015 ballot.

Legislative History

12/03/14 Water & Light Advisory Board recommendation for project approval to City Council

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Department Approved


City Manager Approved

Introduced by _____

First Reading _____

Second Reading _____

Ordinance No. _____

Council Bill No. B 18-15

AN ORDINANCE

calling a special election in the City of Columbia, Missouri, to be held on Tuesday, April 7, 2015, on the question whether to issue the Waterworks and Electric System Revenue Bonds of the City of Columbia, Missouri, in the amount of \$63,100,000 for the purpose of extending, expanding, improving, repairing, replacing and equipping the City-owned electric system; designating the time of holding the election; describing the form of the notice of election; authorizing and directing the City Clerk to give notice of the election; and fixing the time when this ordinance shall become effective.

BE IT ORDAINED BY THE COUNCIL OF THE CITY OF COLUMBIA, MISSOURI, AS FOLLOWS:

SECTION 1. A special election is hereby ordered to be held in the City of Columbia, Missouri, on Tuesday, April 7, 2015, on the following question:

PROPOSITION 1

Shall the City of Columbia, Missouri issue its Waterworks and Electric System Revenue Bonds in the amount of \$63,100,000 for the purpose of extending, expanding, improving, repairing, replacing and equipping the City-owned electric system?

YES ()

NO ()

The authorization of the bonds will authorize the City to fix, establish, maintain and collect rates and charges for the use and service provided by the City through its Waterworks and Electric Systems, including all extensions and improvements thereto hereafter constructed or acquired by the City, in addition to the other rates and charges for such services provided by law, as will produce income and revenues sufficient to provide funds to pay the costs of operation and maintenance of the Waterworks and Electric Systems and the principal of and interest on the bonds as they become due and to retire the same within thirty-five (35) years from the date thereof, and to provide for the establishment of reasonable reserves therefor.

SECTION 2. The form of the Notice of Special Election shall be substantially as set forth in "Exhibit A" attached hereto and made a part hereof.

SECTION 3. The City Clerk is hereby authorized and directed to notify the Clerk of the County Commission of Boone County, Missouri, of the passage of this ordinance no later than 5:00 o'clock p.m. on January 27, 2015, and to include in the notification all of the terms and provisions required by Chapter 115, RSMo. as amended.

SECTION 4. This ordinance shall be in full force and effect from and after its passage.

PASSED this _____ day of _____, 2015.

ATTEST:

City Clerk

Mayor and Presiding Officer

APPROVED AS TO FORM:

City Counselor

NOTICE OF SPECIAL ELECTION

City of Columbia, Missouri

Notice is hereby given to the qualified voters of the City of Columbia, Missouri, that the City Council of the City has called a special election to be held on Tuesday, April 7, 2015, commencing at six o'clock a.m. and closing at seven o'clock p.m., on the question contained in the following sample ballot:

OFFICIAL BALLOT
Special Election
City of Columbia, Missouri
Tuesday, April 7, 2015

PROPOSITION 1

Shall the City of Columbia, Missouri issue its Waterworks and Electric System Revenue Bonds in the amount of \$63,100,000 for the purpose of extending, expanding, improving, repairing, replacing and equipping the City-owned electric system?

YES ()
NO ()

The authorization of the bonds will authorize the City to fix, establish, maintain and collect rates and charges for the use and service provided by the City through its Waterworks and Electric Systems, including all extensions and improvements thereto hereafter constructed or acquired by the City, in addition to the other rates and charges for such services provided by law, as will produce income and revenues sufficient to provide funds to pay the costs of operation and maintenance of the Waterworks and Electric Systems and the principal of and interest on the bonds as they become due and to retire the same within thirty-five (35) years from the date thereof, and to provide for the establishment of reasonable reserves therefor.

If you are in favor of the question, place an "X" in the box opposite "Yes." If you are opposed to the question, place an "X" in the box opposite "No."

The election will be held at the following polling places in the City:

[polling places to be added by election authority]

Dated this _____ day of _____, 2015.

Wendy Noren
Clerk of the County Commission

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SUPPORTING DOCUMENTS INCLUDED WITH THIS AGENDA ITEM ARE AS FOLLOWS:

Electric 5 Year Bond Funding Plan: FY15-FY19
2015 Electric Bond Proposal - Project Descriptions list

Electric 5 Year Bond Funding Plan: FY15 - FY19

CIP Number	PROJECT DESCRIPTIONS	FY15	FY16	FY17	FY18	FY19	PROJECT TOTAL
Replacement & Upgrade of Existing Infrastructure							
EL0021	Distribution Transformers and Capacitors	\$600,000	\$800,000	\$800,000	\$800,000	\$800,000	\$3,800,000
EL0101	Replacement of Existing Transmission System	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000
EL0107	Replacement of Existing Underground	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,250,000
EL0118	Replacement of Existing Overhead	\$350,000	\$600,000	\$600,000	\$600,000	\$600,000	\$2,750,000
EL0153	Replace Circuit Breakers	\$0	\$0	\$0	\$250,000	\$250,000	\$500,000
EL0189	Replace Substation Switchgear	\$0	\$0	\$0	\$350,000	\$0	\$350,000
EL0192	Substation Transformer Replacement	\$300,000	\$300,000	\$0	\$300,000	\$300,000	\$1,200,000
Total		\$1,600,000	\$2,050,000	\$1,750,000	\$2,650,000	\$2,300,000	\$10,350,000
New Transmission & Substation Project							
EL0121	Mill Creek 161/13.8 kV Substation	\$5,000,000	\$0	\$0	\$0	\$0	\$5,000,000
EL0148	Mill Creek, Grindstone & Perche Interconnection	\$5,000,000	\$5,000,000	\$8,000,000	\$0	\$0	\$18,000,000
EL0194	Substation Upgrades-Grindstone & Perche	\$1,000,000	\$0	\$0	\$0	\$0	\$1,000,000
EL0198	Underground Distribution in Transmission Corridor	\$0	\$2,500,000	\$2,500,000	\$0	\$0	\$5,000,000
EL0201	Substation Feeders Reconfiguration	\$1,400,000	\$1,450,000	\$4,300,000	\$0	\$0	\$7,150,000
Total		\$12,400,000	\$8,950,000	\$14,800,000	\$0	\$0	\$36,150,000
System Modernization							
EL0151	Power Plant Substation Upgrades	\$1,500,000	\$0	\$0	\$0	\$0	\$1,500,000
EL0183	Natural Gas Boiler 8 Upgrades	\$1,500,000	\$400,000	\$0	\$0	\$0	\$1,900,000
EL0186	Columbia Energy Center - Controls Upgrade	\$1,500,000	\$0	\$0	\$0	\$0	\$1,500,000
Total		\$4,500,000	\$400,000	\$0	\$0	\$0	\$4,900,000
System Expansion							
EL0175	Landfill Generator Unit 4	\$0	\$0	\$1,600,000	\$0	\$0	\$1,600,000
EL0193	Extend Hinkson Creek Substation Feeders	\$0	\$0	\$0	\$5,000,000	\$0	\$5,000,000
Total		\$0	\$0	\$1,600,000	\$5,000,000	\$0	\$6,600,000
EL0009	Contingency Funds	\$700,000	\$400,000	\$300,000	\$300,000	\$300,000	\$2,000,000
Total Bond Funding for Projects		\$19,200,000	\$11,800,000	\$18,450,000	\$7,950,000	\$2,600,000	\$60,000,000
First Sale		\$31,000,000		Second Sale		\$29,000,000	

APRIL 2015 ELECTRIC BALLOT

Bond Funding \$60,000,000
 Estimated Bond Cost of Issuance \$620,000
 Estimated Bond Reserve Requirement \$2,480,000

Total Electric Bond Proposal \$63,100,000

2015 Electric Bond Proposal – Project Descriptions

MAINTENANCE & UPGRADE OF EXISTING INFRASTRUCTURE	
EL0021 – Distribution Transformers and Capacitors:	This is an annual project that covers additions and replacements of existing distribution transformers and capacitors. Total five year request is for \$3,800,000.
EL0101 – Replacement of Existing Transmission System:	This is an annual project that covers replacement of existing transmission infrastructure. Total five year request is for \$500,000.
EL0107 – Replacement of Existing Underground Distribution Lines:	This is an annual project that covers the cost of replacement of existing underground distribution line infrastructure. Total five year request is for \$1,250,000.
EL0118 – Replacement of Existing Overhead Distribution Lines:	This is an annual project that covers the cost of replacement of existing overhead distribution line infrastructure. Total five year request is for \$2,750,000.
EL0153 – Replace Circuit Breakers:	This is an annual project that covers the cost of replacing station class circuit breakers with more modern technology. Total five year request is for \$500,000.
EL0189 – Replace Switchgear at Substations:	This is an annual project to modernize switchgear at electric substations. This will improve system performance and response. Total five year request is for \$350,000.
EL0192 – Substation Transformer Replacement:	This is an annual project to replace large substation transformers. Substation class transformers cost \$500,000 to \$600,000 each. During the five year period it is estimated that two transformers will be replace. Total request for this project is \$1,200,000. Any addition funding required will come from enterprise revenue.
NEW TRANSMISSION AND SUBSTATION PROJECT	
EL0121 – Construction of Mill Creek Substation:	This project is to build a new 161/13.8 kV Substation on the South side of Columbia. Total request for this project is \$5,000,000.
EL0148 – Mill Creek, Grindstone, & Perche, Substation Interconnection:	This project is to address transmission system requirements. While primarily focused in southern and western areas of Columbia, the project will help balance the entire electrical system by extending the 161 kV transmission system. Total request for this project is \$18,000,000.
EL0194 – Substation Upgrades at Grindstone and Perche Substations:	This project is to make upgrades necessary to interconnect with new transmission lines from Mill Creek Substation. Total request for this project is \$1,000,000.
EL0198 – Underground Distribution Lines in Transmission Corridor:	This project is to underground distribution lines in the new 161 kV transmission corridor. Total request for this project is \$5,000,000.
EL0201 – Substation Feeders Reconfiguration:	This project covers the cost of addition replacement and extension of distribution feeders to connect to the new Mill Creek Substation. As usage patterns change throughout the City, substation feeders must be reconfigured to meet the changing load. Total five year request is for \$7,150,000.
SYSTEM MODERNIZATION	
EL0151 – Power Plant Substation Upgrades:	This project is to address required changes to the central-city electric distribution system due to changes at the Municipal Power Plant (MPP). Retirement of the coal units at the MPP will require a reconfiguration of current circuits being

supported by the coal-fired units. Total request for this project is \$1,500,000.
EL0183 – Boiler 8 Upgrades: This project is to upgrade natural gas boiler number 8 at the Municipal Power Plant with modern systems that will allow it to operate more efficiently and meet environmental regulations. Total request for this project is \$1,900,000.
EL0186 – Columbia Energy Center Distributed Control Systems: This project is to modernize the control systems at the natural-gas fired units of the Columbia Energy Center. Total request for this project is \$1,500,000.
System Expansion
EL0175 – Landfill Generator Unit 4: This project is to install the last of four 1 MW generators at the Columbia Landfill for renewable energy. Installation will be determined by availability of gas and is currently targeted for 2017. Total request for this project is \$1,600,000.
EL0193 – Extend Hinkson Creek Substation Feeders: This project is to extend feeders to address load growth in the downtown area. Total request for this project is \$5,000,000.