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A RESOLUTION
declaring the necessity for construction of upgrades to Boiler 8 at the Municipal Power Plant to reduce nitrogen oxide (NOx) emissions; stating the nature of and the estimate of the cost of the improvement; providing for payment for the improvement; providing for compliance with the prevailing wage law; and setting a public hearing.

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

SECTION 1. The City Council deems the construction of upgrades to Boiler 8 at the Municipal Power Plant to reduce nitrogen oxide (NOx) emissions, necessary to the welfare and improvement of the City.

SECTION 2. The nature and scope of the improvement shall consist of furnishing all labor, materials, transportation, insurance and all other items, accessories and incidentals thereto necessary for the complete construction of the improvements.

SECTION 3. The estimated cost of this improvement is $\$ 2,500,000.00$.
SECTION 4. Payment for this improvement shall be made from the Water and Electric Fund using funds appropriated in Capital Improvement Project No. EL0183 and such other funds as may be lawfully appropriated.

SECTION 5. Any work done in connection with the construction of the improvement specified above shall be in compliance with the provisions of the prevailing wage laws of the State of Missouri.

SECTION 6. A public hearing in respect to this improvement will be held in the Council Chamber of the City Hall Building, 701 E. Broadway, Columbia, Missouri, at 7:00 p.m. on March 3, 2014. The City Clerk shall cause notice of this hearing to be published in a newspaper published in the City.
$\qquad$ day of $\qquad$ , 2014.

## ATTEST:

## City Clerk

Mayor and Presiding Officer
APPROVED AS TO FORM:

City Counselor


Council Meeting Date: Feb 17, 2014

Re: Public Hearing - Municipal Power Plant Boiler 8 Upgrade

## EXECUTIVE SUMMARY:

Staff has prepared for Council consideration a resolution setting a public hearing on March 3, 2014 for upgrades on Boiler 8 at the Municipal Power Plant. The total estimated cost for this improvement project is $\$ 2,500,000$ and partial funding for this project has been appropriated in the 2014 Capital Improvement Program under project EL0183.

## 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 at an estimated cost of $\$ 2,500,000$ which would allow improved operational flexibility and improve the utility of the boiler in the new natural gas environment. W\&L established a Capital Improvement Project, EL0183, which has been partially funded for the current fiscal year. The Boiler 8 - Turbine 8 system has the capability of being used as either a base-load or peak-load power generation asset.

The project will be within the Municipal Power Plant grounds and building. Water \& Light held an interested parties meeting on February 3, 2014 at City Hall. At this meeting, staff presented plans to those in attendance, and no negative comments were received. After the Public Hearing and City Council's approval for a resolution declaring the necessity of the upgrades to Boiler 8, engineering services will be procured for the development of final plans, specifications and air permits at an estimated cost of \$365,000. Then the necessary equipment will be procured and installed.

## FISCAL IMPACT:

The total estimated cost for the NOx reduction upgrades to Boiler 8 is $\$ 2,500,000$. The project will take about two years to complete. Payment for the improvements identified in this project are proposed to come from funds already appropriated in the 2014 Capital Improvement Program under project ELO183, and future appropriations.

## VISION IMPACT:

## http://www.gocolumbiamo.com/Council/Meetings/visionimpact.php

This Project is necessary in order for Columbia to meet the needs of development by having a safe and reliable electric utility infrastructure, and to improve the environment by reducing emissions related to power production.

## SUGGESTED COUNCIL ACTIONS:

Staff recommends Council approve the resolution setting the Public Hearing on March 3, 2014. Following public input at the public hearing, a motion should be made directing staff to proceed with developing plans and specifications for the construction of the Boiler 8 NOx reduction upgrades at the Municipal Power Plant.

| FISCAL and VISION NOTES: |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| City Fiscal Impact Enter all that apply |  | Program Impact |  | Mandates |  |
| City's current net FY cost | \$0.00 | New Program/ Agency? | No | Federal or State mandated? | No |
| Amount of funds already appropriated | \$0.00 | Duplicates/Expands an existing program? | No | Vision Implementation impact |  |
| Amount of budget amendment needed | \$0.00 | Fiscal Impact on any local political subdivision? | No | Enter all that apply: Refer to Web site |  |
| Estimated 2 year net costs: |  | Resources Required |  | Vision Impact? | Yes |
| One Time | \$0.00 | Requires add'I FTE Personnel? | No | Primary Vision, Strategy and/or Goal Item \# | 5.1 |
| Operating/ Ongoing | \$0.00 | Requires add'I facilities? | No | Secondary Vision, Strategy and/or Goal Item \# |  |
|  |  | Requires add'I capital equipment? | No | Fiscal year implementation Task \# |  |

