

Introduced by \_\_\_\_\_ Council Bill No. R 119-12

### **A RESOLUTION**

declaring the necessity for the design and construction of an engine/generator set to provide additional capacity at the Landfill Gas Electric Generation Plant; 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 design and construction of an engine/generator set to provide additional capacity at the Landfill Gas Electric Generation Plant, 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 \$1,620,100.00.

SECTION 4. Payment for this improvement shall be made from Capital Improvement Project EL0155 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 August 20, 2012. The City Clerk shall cause notice of this hearing to be published in a newspaper published in the City.

ADOPTED this \_\_\_\_\_ day of \_\_\_\_\_, 2012.

ATTEST:

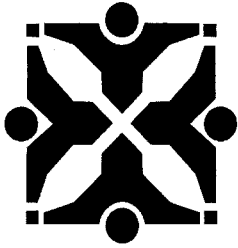
\_\_\_\_\_  
City Clerk

\_\_\_\_\_  
Mayor and Presiding Officer

APPROVED AS TO FORM:

---

City Counselor



Source: Water & Light *TAB*

Agenda Item No:

To: City Council  
From: City Manager and Staff *MM*

Council Meeting Date: Aug 6, 2012

Re: Public Hearing - Addition of Capacity at Landfill Gas Electric Generation Plant.

**EXECUTIVE SUMMARY:**

Staff has prepared for Council consideration a resolution setting a public hearing for August 20, 2012 concerning the addition of Capacity at the Landfill Gas Electric Generation Plant. Based on the type of project, the expertise in the area landfill gas electric generation and the project time goals, staff is recommending this project be executed through a design build contract.

**DISCUSSION:**

Columbia Water & Light (CWL) owns and operates an electrical production plant at the City Landfill that uses methane produced in the landfill to fuel two GE-Jenbacher reciprocating engine/generators. Each GE-Jenbacher set has a capacity of about 1 MW. The plant entered service in June 2008, and produced 13,684 MWHs in 2011. As the fuel for the engines is methane from the natural decay of material in the landfill, the energy produced in the Landfill Gas Electric Generation Plant is part of CWL's renewable energy portfolio. For 2011, the Landfill Gas Electric Generation Plant produced 1.2% of Columbia's total energy.

When the Landfill Gas Electric Generation Plant was constructed, provisions for future engine/generator sets were made. The landfill is currently producing sufficient methane to power an additional engine/generator and CWL has issued a Request for Proposals through the Purchasing Department. The best valued proposal received was a design-build contract in the amount of \$1,620,100. This project is currently funded in CWL's CIP in the amount of \$1,000,000. An additional \$650,000 needs be appropriated to complete the project.

Water & Light pays Public Works \$11.38 per MWh for the methane gas produced at the Landfill. This addition has a capital cost of \$1,620 per KW and with operating and maintenance costs, gives an all in cost of about \$47 per MWh which compares favorably to CWL's other base load and renewable resources. This project is estimated to have a .6% impact on CWL's renewable energy portfolio and a .01% impact on rates with respect to the 3% specified in the ordinance. In terms of the renewable energy portfolio, the Landfill Gas Electric Generation Plant will increase from 1.2% to about 1.8% of Columbia's total energy requirement. When complete, the project will increase the Landfill Gas Plant's capacity by 50% to 3.0 MW.

**FISCAL IMPACT:**

The engineer's estimate for the addition of 1MW of capacity to the the Landfill Gas Electric Generation Facility is \$1,620,100. Financing for this was previously appropriated as part of the FY12 CIP Budget. An additional appropriation of \$650,000 is necessary to cover the expected contract cost.

**VISION IMPACT:**

<http://www.gocolumbiamo.com/Council/Meetings/visionimpact.php>

9.3 Goal: Columbia will work toward achieving maximum energy efficiency and transition to renewable energy sources.

**SUGGESTED COUNCIL ACTIONS:**

**Declare a public necessity, schedule a public hearing, appropriate funds and authorize the City Manager to sign a contract for the addition of an engine/generator set at the Water & Light Landfill Gas 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	\$1,000,000.00	Duplicates/Epands an existing program?	No	Vision Implementation impact	
Amount of budget amendment needed	\$650,000.00	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'l FTE Personnel?	No	Primary Vision, Strategy and/or Goal Item #	9.3
Operating/ Ongoing	\$0.00	Requires add'l facilities?	No	Secondary Vision, Strategy and/or Goal Item #	
		Requires add'l capital equipment?	No	Fiscal year implementation Task #	