

# City of Columbia

701 East Broadway, Columbia, Missouri 65201



**Agenda Item Number:** REP 42-15

**Department Source:** Water & Light

**To:** City Council

**From:** City Manager & Staff

**Council Meeting Date:** 4/6/2015

**Re:** Distributed Diesel Generation

## Documents Included With This Agenda Item

Council memo

**Supporting documentation includes:** None

## Executive Summary

Starting in 2000 the City of Columbia created a distributed generation program and entered into an agreements with selected customer locations to install diesel generators on their property. The initial purpose of these generators was to benefit both the City of Columbia's electric system by providing additional generation capacity and energy during times of peak electric demand and to provide the customer location with standby/emergency generation for their facility in the event of a loss of power on the City's electric distribution system. The City has entered into agreements with Shelter Insurance, Dana Corporation, State Farm Insurance and MBS Textbook Exchange for similar purposes.

In May of 2013 new environmental regulations for stationary Compression Ignition (CI) Reciprocating Internal Combustion Engines (RICE) went into effect. These new regulations limit the operations of CI-RICE engines like the diesel generators mentioned above. These new regulations remove the ability of the City to claim these generators as generation capacity and significantly limit the ability to produce energy for non-emergency purposes. The regulations do not limit the ability for these generators to be utilized as standby generation for end use customers.

Because of the loss of capacity and energy production capabilities, the City no longer receives its portion of the benefits from these diesel generators. Staff recommends that the City not renew these agreements. Because the generators may still be utilized as standby/emergency power sources, staff proposes to work with the customers stated above to either negotiate new agreements to transfer ownership of these generators to them or to remove the generators from their facilities in accordance with the existing agreements and relocate them to City properties that could benefit from having standby/emergency generation.

## Discussion

The initial purpose of this distributed generation program was to benefit both the City of Columbia's electric system by providing additional generation capacity and energy during times of peak electric demand and to provide selected customer locations with standby generation for their facility in the

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event of a loss of power on the City's electric distribution system. These agreements had an initial term followed by optional five year automatic renewals.

The City has entered into agreements with Shelter Insurance, Dana Corporation, State Farm Insurance and MBS Textbook Exchange. The table below highlights the terms of these agreements.

Customer	Number of Generators	Total Capacity	Initial Term	Expiration of Current Term
Shelter Insurance	2	2,500 kW	February 2000 – 7 Years	February 2017
Dana Corporation	1	2,000 kW	November 2003 – 5 Years	November 2018
MBS Textbook Exchange	2	2,000 kW	January 2009 – 7 Years	January 2016
State Farm Insurance	2	2,000 kW	July 2007 – 7 Years	July 2019

The National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines ("RICE NESHAP") limits emissions of toxic air pollutants from stationary reciprocating internal combustion engines. The pollutants emitted from stationary engines are known or suspected of causing cancer and other serious health effects.

The RICE NESHAP applies to stationary reciprocating internal combustion engines. Stationary engines are commonly used to generate electricity and to power pumps and compressors, and also in emergencies to produce electricity and pump water for flood and fire control. All sizes of stationary engines are covered by the rule.

The RICE NESHAP does not apply to existing residential, commercial, and institutional emergency stationary engines located at an area source of HAP emissions, provided that the engines do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for emergency demand response or voltage/frequency deviations and the engines do not otherwise operate in non-emergency situations as part of a financial arrangement with another entity. There is no time limit on the use of the engine in emergency situations.

These new regulations limit the operations of CI-RICE engines like the diesel generators used by the generators at the customer installations above. These new regulations remove the ability of the City to claim these generators as generation capacity and significantly limit the ability to produce energy. The regulations do not limit the ability for these generators to be utilized as standby generation for end use customers.

Because of the loss of capacity and energy production capabilities, the City no longer receives its portion of the benefits from these diesel generators. Staff recommends that the City not renew these agreements. Because the generators may still be utilized as standby/emergency power sources for end use customers, staff proposes to work with the customers above to either transfer ownership of these generators to them or plan to remove the generators from their facilities at the end of the current agreement term and relocate them to City properties that could benefit from having standby/emergency generation.

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## Fiscal Impact

Short-Term Impact: Minimal

Long-Term Impact: Minimal beyond what is already required of the existing agreements.

## Vision, Strategic & Comprehensive Plan Impact

Vision Impact: Not Applicable

Strategic Plan Impact: Not Applicable

Comprehensive Plan Impact: Not Applicable

## Suggested Council Action

None

## Legislative History

R48-00 Shelter Insurance Agreement

B150-03 Dana Corporation Agreement

B112-07 MBS Textbook Exchange Agreement

B131-07 State Farm Agreement

  
Department Approved

  
City Manager Approved