

COUNCIL ACTION FORM

**SUBJECT: REHABILITATION OF WATER POLLUTION CONTROL FACILITY
METHANE ENGINE – GENERATOR SET NO. 2**

BACKGROUND:

The City's Water Pollution Control (WPC) Facility has a Caterpillar engine that drives an electrical generator. Currently, this engine-generator set is not operational. It was installed in the mid-1980s and has approximately 47,028 hours of service. Rehabilitation of the engine is not a routine maintenance task, but is something that can be expected approximately every 30,000 hours.

The engine drives a generator that is connected to the plant's electrical grid via automatic switchgear. Hot water from the engine is used to heat the primary digesters in order to treat the sludge generated by the WPC Facility. This process, in turn, produces methane that powers the Caterpillar engine that drives the electrical generator. Thus, electrical energy is generated by using byproducts from the treatment process.

On July 9, City Council granted approval to issue a Notice to Bidders for the WPC Methane Engine-Generator Set No. 2 Rehabilitation Project. On August 15, bids were received to provide all labor, equipment, materials, and other components necessary to complete this project according to the City's specifications.

One bid was received as follows:

	Lump Sum Bid
Ziegler Power Systems, Altoona, IA	\$176,608.00

The FY 13/14 CIP includes \$200,000 for one final overhaul of Unit #2 before its scheduled replacement in 2019. The engineer's estimate for the overhaul is \$185,000. An engineering services contract has already been awarded in the amount of \$2,000.

ALTERNATIVES:

1. Accept the bid from Ziegler Power Systems of Altoona, Iowa in the amount of \$176,608 to provide all labor, equipment, materials, and other components necessary to complete the WPC Methane Engine-Generator Set No. 2 Rehabilitation Project.
2. Do not accept bids at this time for the above-mentioned project.

MANAGER’S RECOMMENDED ACTION:

Methane Engine-Generator Set No. 2 is a primary component of the WPC Facility’s digester heating and electrical energy production systems. Sludge stabilization is an integral and vital part of the treatment process at the Facility. Production of electrical energy through the use of byproducts from the treatment process is an excellent example of “green energy.” It is in the City’s best interest to restore this unit to service as soon as possible.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, thereby accepting the bid of \$176,608 from Ziegler Power Systems of Altoona, Iowa.