

Memorandum

DATE: February 5, 2013
TO: City Council
THROUGH: City Manager Judie Zimomra
FROM: Public Works Director Keith Williams
RE: Donax 600 kW Emergency Generator

RECOMMENDATION: Approve Pantropic Power to perform an off-site overhaul of the subject generator for \$79,691.53 as a sole source vendor. Service to be paid from Utility Repair and Maintenance fund and will not impact sewer fees.

The Donax Wastewater Reclamation Facility has two Caterpillar generators which allow the plant to operate during power failures, as follows:

- A 2001 - 700 kW model that operates three irrigation pumps, three transfer pumps, two truck loading sludge removal pumps, and three high service disposal pumps.
- A 1994 - 600 kW model that runs three master pump station pumps, four plant air blowers, four waste activated sludge pumps, three return activated sludge pumps, and three internal recycling sludge pumps.

A life expectancy of 20 years is estimated for emergency generators, so the 700 kW generator should be scheduled for replacement in 2021 and the 600 kW generator should have been scheduled for replacement in 2014.

A recent analysis of the oil in the 600 kW generator revealed water, coolant, and iron in the oil, indicating serious issues with the generator engine. Three possible remedies were explored, namely:

1. Replacement at approximately \$200,000.
2. Off-site overhaul at \$79,691.
3. On-site overhaul at \$53,866.

Of these options, the off-site overhaul option is recommended since it is much less than the replacement option, but includes a 5-year warranty which the on-site overhaul doesn't. Specifically, the off-site overhaul would include:

- Overhaul of the engine using manufacturer's parts and materials and rebuilt to Caterpillar specifications.

- Dynamometer and load bank testing.
- 5-year, 2500 hour warranty.
- Removal and re-installation of generator.
- 4-week standby generator rental.

Since Pantropic Power is the only company authorized to work on Caterpillar generators (see attached letter from Caterpillar), it is recommended that the work be considered sole source.

Staff recommends that Council approve Pantropic Power to perform an off-site overhaul of the Donax 600 kW emergency generator for \$79,691.53 as a sole source vendor. Funding is available in the FY13 Utility budget to perform the work. Performing the work will have no impact on sewer fees.

cc: City Attorney Ken Cuyler
Finance Director Sylvia Edwards