

# **CITY COUNCIL AGENDA ITEM**

REQUESTED COUNCIL MEETING DATE 10/17/2006

Subject:	Florida Detroit Di	esel – Annual Preventative Mainten	ance on Generators.
Department:	Public Works.		
Recommended	Motion:		
		reement with Florida Detroit Diesel generators for an annual cost not to	
Summary:			
have the generators be operational duri agreement for an ar- detailed list of the g	s serviced and maintaing events such as hurn ng events such as hurn nnual cost not to exce generators and their lo	nance agreement with Florida Detroisin on a quarterly basis. This ensures ricanes. Florida Detroit Diesel is weed \$7,795.00. The quote letter attactoristion, the services to be performed eartments and is shown on comment	s the generators will ill to renew the ched provides a dand at which
		] Resolution [ ] Budget Res Contracts Available for Review in M t Diesel.	
Department He	ead Cu	Submitted	Date 10/5/06
	tment be A	Approved of to Budget Requirements  Approved of the Budget Requirements	Date 10/5/06
City Attorney		Approved as to Form and Legality	Date
City Manager	W	Approved Agenda Item For	Date 10 17 06
COUNCIL AC	TION: [ ] Approv	red as Recommended [ ] Disa	pproved
[ ] Tabled Indefinit	tely [ ] Continued	I to Date Certain [ ] Approve	ed with Modification
C:\Documents and Set	tings\Kynahc\My Docume	ents\DF Forms\generator maint.agreement	2006.doc

# MEMORANDUM

TO:

Kenneth W. Parker

**DATE:** October 5, 2006

City Manager

FROM:

Warren Pike

Public Works Director

**SUBJECT:** Agenda Item for October 17<sup>th</sup>.

Please place approval of generator maintenance agreement with Florida Detroit Diesel on the Council agenda for October 17<sup>th</sup>.

# **Commentary**

Staff has determined the need to have all generators, both fixed and portable, serviced by an outside contractor. By doing so, the same contractor will service all generators on a regular schedule, and this will ensure their proper operation during storms and hurricanes.

Florida Detroit Diesel provided this service during this past year and they are willing to renew the agreement for another year. Pricing will remain unchanged on the quarterly inspections (\$125.00/each). Annual inspections and service rates were increased \$20.00 each (see agreement attached). There are nine generators under the agreement and total annual cost should not exceed \$7,795.00. A copy of the maintenance agreement is attached for your review and it provides a detailed description of the generators covered and their location and the services that will be performed on a quarterly, semi-annual and annual basis.

# Funding is as follows:

Public Works	00143005414610	3450.00
Police Department	00132005214610	915.00
Fire department	00131005224610	2505.00
YMCA	00151005724610	925.00

# Recommendation

Staff recommends approval to have Florida Detroit Diesel perform preventative maintenance and service on the City generators for an annual cost not to exceed \$7,795.00.





HEADQUARTERS 5105 Bowden Road

5105 Bowden 14994 R.O. Box 16595 Jacksonville, Fl. 32245-6595 Tel: (904) 737-7330

BRANCHES

FT. LAUDEPIDALE 4141 G.W. 30th Avenue Ft. Lauderdale, Florida 38312. Tel: (954) 327-4440

FT. MYERS

2305 Proofdil Float Fort Myers, Florida 33916 Tel: (941) 332-3190

FT. PSERCE 3865 Selvitz Road Ft. Pierce, Florida 34961 Tel: (561) 464-8005

JACKSONVILLE

5040 University 6lvd. West Jecksonville, Florida 32216 Tel: (904) 737-7330

MAM

2277 N.W. 14th Street Mierni, Florida 35125 Tel: (306) 636-5300

DCALA

204 S.W. 62nd Avenue Ocala, Florida 34474 Tel: (362) 237-7977

ORLANDO

6860 President's Drive Oriendo, Fioride 32809 Tei: (407) 888-1700

ONO-WAS

1500 Dolgrer Place Seniord, Florida 82771 Tel: (407) 929-3610

TAMPA

8411 Adamo Drive Tempe, Fonda 39619 Tel: (813) 521-5551 October5, 2006

To: The City of Port Orange

Attn.: Mike Koch

Phone #: 386-756-5369

Fax #: 386-756-5365

RE: Scheduled Maintenance Program

Dear Mike,

Thank you for the opportunity to quote you our services for the scheduled maintenance on your emergency standby generators. For your convenience there are several programs available to best suit your needs. These ere classified as Annual and Quarterly/Semi-annual. Listed below is a brief explanation of the services provided.

# ANNUAL SCHEDULED MAINTENANCE

#### SERVICE:

- Analysis of engine lube oil. (Analysis of oil is maintained on record for future comparison, copies of record are provided on request at no additional charge.)
- · Change all lube oil and fuel oil filters.
- Drain and replenish engine lube oil.
- Testing coolant solution for proper freeze protection and corrosion inhibitors and recording results.
- Service battery(s) checking battery set(s) for proper electrolyte levels and replenishing as needed.
- Verifying specific gravity of battery(s) (lead acid only), Al-cad/Ni-cad battery's will be checked for proper volts per cell with results recorded.
- Inspect and clean battery connections and coat connections with applicable corrosion inhibitor.
- Verify proper operation of battery charger and record voltage and charging rate.
- Inspect and lubricate generator bearings.
- Inspect and lubricate sirflow louvers.
- Clean dirt and dust from unit.

#### VISUAL CHECKS:

- Inspect radiator/ heat exchange assemblies (condition and leaks).
- Inspecting air cleaner assemblies (cost of replacing air cleaners IS NOT INCLUDED should it be necessary).
- Inspect air inlet piping.
- Inspect exhaust manifold and piping.
- Inspect water hoses for pliability, tighten clamps as needed.
- Inspect engine mounts, vibration isolators.
- Inspect electrical wiring for loose connections, frayed wires.
- Inspect fuel system, which includes verification of proper day tank operation, priming pump operation, and fuel injection system (condition and leaks).
- Inspect and adjust all belts (cost of replacing belts IS NOT INCLUDED should it be necessary).
- Inspect and clean crankcase breather.
- Inspect generator field and stator windings (megachm testing of windings can be done
  at additional cost).
- · Clean and inspect rectifier bridge.
- Police engine room for trash/loose debris.

#### PERFORMANCE EVALUATION:

- Check operation of starter motor (cranking ability, voltage drop on start).
- Check engine smoke at start and during operation.
- Verify proper operation of gauges, metering, indicators (operation, condition and adjustments as needed).
- Check and record battery charge rate from unit mounted alternator (if applicable).
- Check fuel transfer pump (PSI, valves, conditions, and leaks).
- Check lubrication system (leaks, PSI).
- Check Jacket water heater (operation/condition).
- Check temperature regulators (operation, record temperature).
- Verify governor settings (operation, stability, and response).
- Check turbocharger (operation).
- · Check aftercooler (condition, leaks).
- Verify safety devices (operation, condition, record results).
- Check control panel (operation, condition).
- Test electric power generation via Automatic Transfer Switch (operation, record voltage, amperage, and frequency).

## QUARTERLY INSPECTIONS

#### SERVICE:

- Verify proper oil level in sump. (Make up oil in excess of 1 gallon will be involced as an additional charge.)
- Testing coolant solution for proper freeze protection and corrosion inhibitors and recording results.
- Service battery(s) checking battery set(s) for proper electrolyte levels and replenishing as needed.
- Verifying specific gravity of battery(s) (lead acid only), Al-cad/ Ni-cad battery's will be checked for proper volts per cell with results recorded.
- Inspect and clean battery connections and coat connections with applicable corrosion inhibitor.
- Verify proper operation of bettery charger and record voltage and charging rate.
- · Clean dist and dust from unit.

## VISUAL CHECKS:

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- Inspecting air cleaner assemblies (cost of replacing air cleaners IS NOT INCLUDED should it be necessary).
- Inspect air inlet piping.
- · Inspect exhaust manifold and piping.
- Inspect water hoses for pliability, tighten clamps as needed.
- Inspect engine mounts, vibration isolators.
- Inspect electrical wiring for loose connections, frayed wires.
- Inspect fuel system, which includes verification of proper day tank operation, priming pump operation, and fuel injection system (condition and leaks).
- Inspect and adjust all belts (cost of replacing belts IS NOT INCLUDED should it be necessary).
- Inspect and clean crankcase breather.
- Inspect generator field and stator windings (megachm testing of windings can be done at additional cost).
- · Clean and inspect Rectifier Bridge.
- Police engine room for trash/loose debris.

## PERFORMANCE EVALUATION:

- Check operation of starter motor (cranking ability, voltage drop on start).
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- Check and record battery charge rate from unit mounted alternator (if applicable).
- Check fuel transfer pump (PSI, valves, conditions, and leaks).
- Check lubrication system (leaks, PSI).
- Check Jacket water heater (operation/condition).
- Check temperature regulators (operation, record temperature).
- Verify governor settings (operation, stability, and response).
- Check turbocharger (operation).
- Check aftercooler (condition, leaks).
- Verify safety devices (operation, condition, record results).
- Check control panel (operation, condition).
- Test electric power generation via Automatic Transfer Switch (operation, record voltage, amperage, and frequency).

Your cost to perform these services is as follows:

	Quarterly	
	Inspections	Annual PM
Public Works - Stationary Unit	\$125.00 each	\$ 460.00
Public Works – Kohier Portable	\$125.00 each	\$ 440.00
Public Works - ONAN Portable	\$125.00 each	\$ 510.00
Police Department	\$125.00 each	\$ 540.00
Fire Station 1	\$125.00 each	\$ 490.00
Fire Station 2	\$125.00 each	\$ 420.00
Fire Station 4	\$125.00 each	\$ 470.00
YMCA	\$125.00 each	\$ 550.00
City Hall	\$125.00 each	\$ 540.00
Sub-Totals	\$3,375.00	\$ 4,420.00
Annual Maintenance Costs	\$ 7,795.00	

Any additional repairs needed will be quoted and approved by The City of Port Orange before work proceeds.

Resistive load bank test for units requiring certification of NFPA, AHCA, or other local requirements can be performed upon request for an additional charge.

The technician performing the maintenance service at the completion of the job will submit a report with any recommendations.

## Schedule of Services:

1<sup>st</sup> quarterly inspection - October 2006 2<sup>nd</sup> quarterly inspection - January 2007 3<sup>rd</sup> quarterly inspection - April 2007 2007 Annual PM - July 2007

Again, thank you for the opportunity to quote our services. Should you have any questions regarding this matter please feel free to contact me at 407-948-7402.

Singerely,

Jenny Jacobs // Generator/Fire Pump

Field Service Sales Representative