

## STATE OF MISSISSIPPI

Phil Bryant Governor

# MISSISSIPPI DEPARTMENT OF MARINE RESOURCES

Jamie M. Miller, Executive Director

Amendment Two To:

**Invitation for Bids** 

RFx No. 3160001421

Smart No. 1450-17-I-IFBD-00006

Lyman Fish Hatchery Generator

**Specification Amendments** 



ENHANCE \* PROTECT \* CONSERVE

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THIS IS AMENDMENT TWO TO THE INVITATION FOR BIDS. YOU MUST ACKNOWLEDGE THIS AND ALL FUTURE AMENDMENTS WITH YOUR BID OR, IF YOUR BID HAS ALREADY BEEN SUBMITTED, BY LETTER. YOUR ACKNOWLEDGMENT OF ALL AMENDMENTS MUST BE RECEIVED BY THE MDMR BY THE DEADLINE FOR RECEIPT OF YOUR BIDS.

Posted on February 24, 2017

The purpose of Amendment Two to the Invitation for Bids for the Lyman Fish Hatchery Generator is to clarify two changes to the Scope of Work. These changes are:

<u>Change #1</u> The wrong information was listed in the original Scope of Work listing the building required 480Y/277 Volts AC. The correct building requirement is **208/120 Volts AC**. Therefore, we are deleting 480Y/277 Volts AC and adding **208/120 Volts AC**. Please only submit a bid for a generator compatible with the building.

<u>Change #2</u> We are adding the option of bidding a <u>digital or analog control panel</u>. All other requirements of the control panel remain the same.

Listed below is an updated Scope of Work with both changes reflected:

## Scope of Work

The MDMR requires the services of a contractor for the purchase and the installation of a permanently installed diesel fueled standby generator equipped with self-monitoring, self-diagnostic features, analog control panel, and emergency stop system for the Lyman Fish Hatchery, which is located at 16193 Fish Hatchery Road, Gulfport, Mississippi 39503.

The following specifications shall include minimum requirements, unless otherwise stated, to include all genuine parts, accessories, equipment and safety features considered standard whether mentioned herein or not. The generator shall comply with all applicable NEMA codes, NFPA fire prevention and electrical codes, and state and local regulations.

All work and installations performed shall be completed per the manufacturer's specifications and in accordance with applicable Uniform Construction Code.

# Outdoor Diesel Emergency Generator (1 each)

Furnish and install one (1) continuous, standby rated, outdoor, skid-mounted, diesel emergency generator set with sub-base fuel tank, weather-tight enclosure to be delivered to the Lyman Fish Hatchery at 16193 Fish Hatchery Road, Gulfport, Mississippi 39503. The incoming freight and placement of the generator at the Lyman Fish Hatchery shall be included in the bid price.

125kW (156kVA)

Delete 480Y/277 Volts AC and add 208/120Volts AC

Posted on February 24, 2017

3 phase, 60Hz, approximately 188 amps,

Warranty: Two (2) year parts and labor from the date of site start-up.

Manuals: Two (2) complete sets of Operators & Maintenance Manuals.

Without intending to limit and/or restrict the equipment and materials required by these specifications, the diesel generator system shall be provided with, but is not limited to, the following:

## Engine:

- Heavy Duty Air Cleaner with Service Indicator
- 50 C Ambient Radiator
- Electronic Isochronous Governor with 0.25% Frequency Regulation

### Alternator:

- Brushless Rotating Field Generator with Class H Insulation
- 0.25% AVR, 3 Phase Sensing w/PMG
- Tropical Coating

### Circuit Breaker:

 400 Amp, T5 Frame, 100% Rated, Electronic Trip (Long & Short), Main Line Circuit Breaker

# Add Digital or Analog Control Panel:

- <u>Add Digital or Analog Control Panel</u> must be equipped with AC Voltage Frequency, Percent of Load, Run Time Metering, Oil Pressure, Water Temperature, Battery Voltage and RPM Gauges.
- Three (3) position Auto-Off Manual Control Switch
- Manual key override by-pass switch

### Heater:

• 120 Volt, 1500Watt Block Heater

## Battery System:

- 12 Volt Lead Acid Battery
- 6 Amp/12 Volt Battery Charger

#### **Enclosure:**

- Rust resistant Steel
- Lockable Doors
- Stainless Steel Hinges and Hardware
- Powder Coat Finish

### Fuel Tank:

- 600 Gallon, UL 142, Sub-base Tank
- Emergency & Normal Vents (Internal)
- Low Fuel Level & Fuel in Basin Switch
- Mechanical Fuel Level Gauge
- Fuel Level Sender
- Manual Fill with Locking Cap
- Minimum 48 Hours at 100% Standby Load

## Complete Installation:

- Concrete Pad
- Offloading
- Install of Generator
- All Electrical Connections and all Control Wiring
- Block Heater Circuit and Battery Charger
- Startup Inspection Performed and Completion of Installation

### **Outdoor Service Entrance Automatic Transfer Switch (1 each)**

Furnish one (1) outdoor, service entrance rated automatic transfer switch to be utilized with the 125kW diesel emergency generator as described above. The incoming freight and placement of the automatic transfer switch, in addition to all required start-up and programming services, shall be included in the bid price.

The transfer mechanism of the switch shall be mechanically designed to prevent both the normal and emergency sources from being connected at the same time, and to prevent the contacts from stopping in-between, so that no source is connected.

The transfer switch/control panel for the automatic transfer switch shall be provided with, but is not limited to, the following:

• Engine starting contacts, with adjustable "Time Delay on Engine Starting" to override

- momentary normal source outages.
- Adjustable "Time Delay Normal to Emergency" load transfer.
- Adjustable "Time Delay Emergency to Normal" load transfer (i.e. retransfer back to normal).
- Unloaded running time delay for emergency engine generator cool-down after retransfer back to normal source.
- Test switch to momentarily simulate normal source failure.
- Adjustable close differential voltage sensing on all phases of normal source.
- Over and underfrequency sensing on one phase of the normal source, and overvoltage and overfrequency sensing on one phase of the emergency source.
- Phase rotation and phase loss monitoring.
- Automatic 7-day mode exerciser with LOAD / NO LOAD selector switch and an override circuit. The manufacturer or manufacturer's representative shall program the exerciser on the site start-up date to automatically perform a weekly thirty (30) minute no-load test on a particular day and time that is to the satisfaction of the Park Operations Manager.
- Hygrostat-controlled 120VAC strip heater to prevent condensation.
- Two auxiliary contacts: one relay auxiliary contact (normal source 2 NO and 2 NC) that is energized when normal power is available, and the other relay auxiliary contact (emergency source 2 NO and 2 NC) that is energized when emergency power is available.

The outdoor automatic transfer switch shall be compatible with the new emergency generator.