## TERMS OF REFERENCE PROCUREMENT OF GENERATOR SET AND ACCESSORIES FOR THE MARITIME INDUSTRY AUTHORITY CENTRAL OFFICE BUILDING

## A. Background

The Maritime Industry Authority (MARINA) is a government agency established pursuant toPresidential Decree No. 474 and attached to the Department of Transportation (DOTr). In compliance with Republic Act. No. 9184 known as the *"Government Procurement Reform Act"*, the MARINA Central Office will be conducting a public bidding for the SUPPLY, INSTALLATION AND COMMISSIONING OF ONE BRAND NEW GENERATOR SET (GENSET).

#### **B.** Objective

The new GENSET is to be installed at the newly constructed MARINA Central Office Building at Bonifacio Drive, South Harbor, Port Area, Manila in order to provide continuous service to MARINA's valued clientele in case of power outage.

## C. Approved Budget for the Contract

The Approved Budget for the Contract (ABC) is **Five Million Pesos** (**P5,000,000.00**), inclusive of all applicable taxes, insurances/bonds, permits, licenses and/or other miscellaneous expenses and cost on the required civil and mechanical works except for the electrical installation/cabling within the office building premises and will be sourced from the 2018 GAA.

## D. PRODUCT DESCRIPTION

- One (1) unit brand new GENSET
- With Soundproof and Weatherproof enclosure
- Will fit in an area of 2.5m width X 6m length x 3.5m height
- Must be in the market for at least ten (10) years
- Must comply with ISO 8528 regulation

## **1.** Technical Specifications:

- Packaged Diesel Engine GENSET
- Turbocharged rated at **600kW/750kVA Standby Rated**1800 RPM, 60 Hertz, 3 phase, 0.8 Power Factor
- 240 Volts complete with standard accessories

# 2. Soundproof and Weatherproof enclosure Specifications:

- With Doors/access and viewing glass that are properly located for easy access on engine during maintenance.
  - Includes lockable gasket door with stainless steel heavy type hinges.
  - Enclosure is designed to meet efficient ventilation.
  - Enclosure is collapsible type.

• Fire retardant foam insulation

# 3. Accessories/Inclusions:

- Main Line Circuit Breaker
- Battery Charger
- Batteries
- Exhaust Flexible Connection
- Base Mounted Fuel Day Tank
- The complete generator set is mounted as whole on a heavy-duty fabricated, steel base frame
- Anti-vibration pads fixed between the engine / alternator feet and base frame
- Start system with maintenance-free battery
- Automatic start / stop system
- 10% of rate output of overload for 1 hour in every 12 hours
- Spare parts shall be available in the Philippine market

# 4. Additional Value-Added Services (Free of Charge):

One (1) year Customer Service Agreement which are composed of:

- Two (2) times Technical Analysis 1 (Visual Inspection)
- Technical Analysis Level 1 (TA1). This is a detailed inspection of the entire GENSET systems to determine if each system is functioning within acceptable standards.
  - - Walk around inspection
  - Cooling system
  - Fuel system
  - - Air induction and exhaust system
  - Lube oil system
  - Starting system
  - Control panel
  - Power generation
  - - Sanitation
- One (1) time Technical Analysis 2 (Diagnostic Testing)

**Technical Analysis Level 2 (TA2)** – This will involve running the GENSET with load and a system-by-system check-up using the standard diagnostic instruments.

The following shall be included in the inspection:

- Cooling System. Perform radiator differential / ambient temperature test and radiator air flow test
- Fuel system pressure test
- Lubrication system pressure test
- Air induction and exhaust system. Perform inlet manifold pressure test (boost pressure test) and exhaust back pressure test
- Air filter restriction test. Perform exhaust stack temperature test and blow-by test
- Insulation test on generator

## 5. Other Services:

- Testing and Commissioning of unit on-site.
- Operation and Maintenance Training.
- Preventive Maintenance Service (PMS)
  - Change Oil and filters
  - Extract Oil Sample
  - Check Batteries
  - Lubricate Grease Fittings

## 6. BIDDER'S QUALIFICATIONS:

- Preferably with 5 years industry experience in the supply of generator set.
- Must secure the necessary Permits and Licenses for the permissible operation of the generator set (National/Local/Barangay/DENR, etc.)

## 7. Installation, Testing and Commissioning

The Unit's Installation, Testing and Commissioning, properly coordinated with the Contractor of the Building and MARINA, include the following:

• Complete installation, assembly and testing/commissioning on-site in thirty (30) calendar days upon delivery of the unit to the MARINA

• Chipping and restoration of wall to provide access for the hauling/positioning/repositioning of the unit onsite at the building's designated area

- Supply of liquid consumable (engine oil)
- Installation of power cable from GENSET to Automatic Transfer Switch (ATS), cable pulling and termination
- Installation of flexible pipe and ATS mounting
- Termination of control wires from GENSET to ATS
- Installation of exhaust pipe extension with testing port
- Installation of cladding at muffler and exhaust pipe exhaustion
- Labor and restoration onsite include civil and mechanical works (Unit must be elevated at a min. of 0.20 meter above the base ground level)
- Supply of rubber Vibro Isolators
- Hands-on training of at least two (2) authorized personnel from the MARINA on proper operation and preventive maintenance
- Comprehensive Operations and Maintenance Manual
- The GENSET should be tested by operating it continuously at a minimum of 4 hours but not to exceed 8 hours
- Provide supply of Diesel fuel to the GENSET during the entire duration of testing (free of charge)

• On-site commissioning and testing of the unit. Testing and commissioning shall be conducted by the supplier's technical representatives and must be witnessed by the MARINA's authorized/designated representatives

• During the testing and commissioning, the necessary readings for the required recordings should be set within the standard parameters, otherwise, the MARINA's authorized representatives may stop the testing and declare it as failed

• Installation of radiator ducting

## 8. Terms and Conditions

• The procuring entity shall impose penalty of 1/10 of 1% of the total value of the undelivered order for each day of delay as liquidated damages after the specified allowable number of days to deliver the unit/items.

• Non-availability of stock/item shall be made known to the procuring entity before the acceptance of the NTP.

• The MARINA shall have the right to reject and return the items and cancel the corresponding Contract if goods delivered are defective, incomplete or non-compliant to the specifications herein specified.

• Deliveries should be made within office hours and on regular working days on or before the stipulated date in the PO unless otherwise specified for valid reason why the same cannot be complied with.

#### 9. Warranty

The GENSET shall carry a one (1) year or twelve (12) months warranty on parts and services or 1500 hours of operation whichever comes first, commencing on the date of commissioning, against factory defects under normal operating conditions.

#### 10. Delivery

The generator set including all items and its accessories must be delivered within thirty (30) calendar days after receipt of the Notice to Proceed (NTP).

After Sales Service and Support during the warranty period, all reported defects shall be completely/satisfactorily repaired/replaced by the winning bidder/supplier within 72 hours after receipt of a verbal and/or written notice from the procuring entity.

## **11. Payment Terms**

The payment shall be done within thirty (30) working days upon submission of complete documents including, delivery, installation, testing, commissioning and upon issuance of Inspection and Acceptance Report by the authorized/designated representatives of MARINA subject to performance security retention.