

FOOD TERMINAL, INCORPORATED
FTI-Special Economic Zone, Taguig City

July 30, 2019

TERMS OF REFERENCE

- A. PROJECT TITLE: **Supply and installation of one (1) unit brand new Generator Set and Automatic Transfer Switch (ATS) for FTI Cold Storage**
- B. IMPLEMENTING AGENCY: Food Terminal, Incorporated
- C. LOCATION: Electronics Avenue, FTI- Special Economic Zone, Taguig City
- D. PROJECT DESCRIPTION :
- The project is about the procurement of one (1) unit generator set and automatic transfer switch (ATS) including supply, installation and commissioning and all other items, consumables and accessories to be installed at the FTI Cold Storage.
- The project also includes the construction of foundation for the mounting pad and a building to house the genset.
- E. OBJECTIVES:
1. Provide electrical power source for stand-by or continuous use to meet customer reliability for the duration of a power outage.
 2. Provide Automatic Transfer Switch (ATS) to transfer electrical load from the utility lines to the emergency generator set whenever a utility power outage occurs and to transfer back to the utility when it returns to normal.
- F. APPROVED BUDGET for the CONTRACT:
- The approved budget for the contract is P2, 000, 000 .00 inclusive of VAT.
- G. DURATION, COMPLETION/COMMISSIONING TIME: 28 Calendar days
- H. SCOPE OF WORK:
- Product Description, Specifications and Features
1. ✓ Supply, delivery, offloading on-site and installation of one (1) unit brand new 150 kVA Generator Set and all its accessories.
 2. ✓ Supply and installation of Automatic Transfer Switch and all its accessories, 400 amp, 220 Volts, 3-phase, change over switch type.
 3. ✓ Supply and installation of THHN wire 200 mm² from genset to ATS, cable pulling and termination. Installation of flexible pipe and ATS mounting. Termination of control wires from genset to ATS.
 4. ✓ Supply and installation of one (1) set distribution panel, main 400 Amp., 3 phase, Branches:
 - 1 pc. 225 Amp. 3 phase,
 - 1 pc. 100 Amp. 3 phase.
 - 4 pcs. 60 Amp. single phase,
 - 2 pcs. 30 Amp. single phase,
 - 2 pcs. 20 Amp. single phaseWith NEMA 3R Enclosure
 5. ✓ Supply and installation of THHN wire 200 mm² from main circuit breaker to ATS.
 6. ✓ Supply and installation of THHN wire 200 mm² from ATS to distribution panel.
 7. ✓ Supply and installation of additional wire THHN 50 mm² from main circuit breaker to distribution panel.

8. ✓ Extra set of consumables for the genset and ATS, cables, utility cable, including all necessary lugs, sleeves, cable conduits, cable trays and all other consumables needed.
9. Complete installation, assembly and testing/commissioning on-site of genset and ATS to be done within two (2) calendar days upon delivery of the unit on-site including operation and maintenance training.
10. The genset should be tested by operating it continuously at a minimum of 4 hours but not to exceed 8 hours.
11. The Contractor shall provide supply of diesel fuel free of charge to the genset during the entire duration of testing/commissioning.
12. Construction of building to house the genset including excavation for foundation of mounting pad, backfill and compaction, ramp, concrete works, plastering, roofing, ceiling, door, air intake/exhaust grills, painting, wiring, lightings.
(Refer to separate page for Scope of Works, plans and specifications).
13. Place of Origin: Designed to be in conformance with the standards from Europe, USA, Australia, Japan
14. Rated Power: 150 kVA
15. Rated Speed: 1800 rpm
16. Output Type: AC Three Phase
17. Rated Voltage: 220 Volts
18. Fuel: Diesel
19. Permissible power output over 24 hours operations shall not exceed 70% of the emergency standby power.
20. Silent Type or soundproof
21. NEMA 3R enclosure suitable for outdoor use
22. The genset and ATS units and spare parts shall be available in the Philippine market. Availability of the units shall be made known to FTI before the acceptance of the Notice To Proceed.
23. Comply with ISO 8528 rating regulations
24. Delivery. Free Delivery and should be made within office hours and on a regular working days on or before the stipulated date in the contract unless otherwise specified for valid reason why the same cannot be complied with.
25. Warranty. The genset shall carry a one (1) year warranty on parts and services or 1000 hours of operation whichever comes first, commencing on the date of commissioning, against factory defects under normal operating conditions.
26. FTI shall have the right to reject and return the unit/items and cancel the corresponding Contract if goods delivered are defective, incomplete or non-compliant to the specifications specified herein.
27. 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.

I. QUALIFICATION of BIDDERS

1. At least one (1) year industry experience in the supply of generator set.
2. Must secure the necessary Permits and Licenses for the permissible operation of the generator set (National/Local/Barangay/DENR, etc.)

L. TERMS and CONDITIONS

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 FTI subject to performance security retention.

SCOPE OF WORK

For Construction of Building to House the Generator Set

1. Mobilization of materials, manpower and tools needed.
2. Ground excavation for column footing and zocalo.
3. Fabrication of steel reinforcement, formworks.
4. Pouring of class "A" concrete mix for footings and columns as shown in the plan.
5. Laying of 5" thick concrete hollow blocks (CHB) with 12 mm Ø vertical deformed bar spaced at 0.60m on center and 12mmØ horizontal deformed bar at every 3 layers of CHB.
6. Plastering of CHB walls (both sides).
7. Steel works:
 - a. Supply and installation of 2 pcs 3"Ø galvanized iron pipe for column (see detailed plan).
 - b. Fabrication and installation of three (3) sets steel half trusses using 3/16 thick x 1 ½" angular bar for top and bottom chord and secondary members.
 - c. Supply and installation of ga #18 x 2" x 3" Cee purlin spaced at 0.70m on center.
 - d. Installation of corrugated galvanized iron sheet (to be provided by FTI).
 - e. Supply and installation of ga #24 x 1 1/2' x 8' machine bended galvanized sheet for wall flashing (see shop drawing detail).
 - f. Fabrication and installation of steel frame using 2"Ø galvanized iron pipe with 3mmØ x 2" hole welded wire attached on 10 mm Ø plain round bar. (see shop drawing detail).
 - g. Fabrication and installation of double steel door to be framed using 2"Ø galvanized iron pipe with 3mmØ x 2" hole welded wire with 4 sets ¾"Ø machine hinges.
8. Construction of reinforce concrete mounting pad (foundation) for genset using class "A" concrete mixture 0.20m thick. (As shown in the plan).
9. Construction of concrete catch basin canal with 10mmØ steel cover and pouring of 0.10m class "A" concrete for flooring.
10. Painting works:
 - a. Application of cement neutralizer for all concrete walls.
 - b. Painting of concrete walls using one (1) coat flat latex paint and two (2) coats gloss latex paint color gray.
 - c. Application of red oxide primer for all steel surfaces.
 - d. Application of two (2) coats quick dry enamel paint color gray.
11. Demobilization, hauling of waste outside of FTI, clean-up

Prepared by:



RONALDO R. OLIVARES
Project Engineer

Checked by:



HERMENEGILDO P. VILLARUEL
EEMU Officer

Recommending Approval:



JOHN GABRIEL BENEDICT C. TRINIDAD III
OIC, Vice President for Operations

Approved by:



ARIEL P. BUENAVENTURA
President and CEO