Revised Technical Specifications for PB 18-03-13

Item	Specification	Statement of Compliance
		Bidders must state here either "Comply" or "Not Comply" against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements of "Comply" or "Not Comply" must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer's un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidders statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the provisions of ITB Clause 3.1 (a)(ii) and/or GCC Clause 2.1 (a)(ii).
1	Supply, delivery and installation with testing and commissioning of Brand New Generator Set with Trailer House;	
	GENERATOR SET	
	A. One (1) Unit Brand New, Factory Assembled, Single Sourced, Packaged Diesel Engine Generator Set,	
	turbocharged rated at 800 kW/	

1000 kVA Standby rated, 60 Hz, 3 phase, 1800 rpm/ 240 V/ 0.8 Power Factor with complete and standard accessories.

- 1. Standard attachment/inclusion
 - Battery Charger
 - Batteries
 - Generator Set Controllers
 - Vibration Isolators
 - Electronic Governor
 - Digital Voltage Regulator
 - Locally Fabricated residential Type Muffler
 - Locally Fabricated Fuel Day Tank – 8 hour capacity
- 2. The unit comes with the following services:
 - Delivery to site
 - Testing and commissioning of unit, 8 hours (on site testing) at 100% of existing load (North Powerhouse)
 - Operation and Maintenance training regarding the genset main components with Certificate of Training.
 - Customer support agreement for one (1) year
- B. Unit mounted generator circuit breaker, 3200A, MCCB, Fixed type complete with extension busbar and short barrel type terminal lugs at load side.
- C. Installation Works (See Annex A)

D. Class A 20 Footer container (shipping type) with corner nodes for hooks with trailer at least 12 wheels (registered once required). Painted (both container & trailer.

With 2 years warranty.

CUSTOMER SUPPORT AGREEMENT (1 YEAR)

Preventive Maintenance Service

- Change Oil and filters
- Extract oil samples
- Check batteries
- Lubricate Grease fittings

Technical Analysis Level 2 (TA2) -

This will involve running the generator set with load and a system by system check-up using 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 (Megger) on generator

Technical Analysis Level 1 (TA1) –

This is a detailed inspection of the entire generator set 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 generator
- Sanitation

Scheduled Oil Sampling (SOS) -

will get oil samples every visit (PMS, TA2, TA1). This way, the engine's oil shall be analyzed by using the following test:

- Complete Testing (SOS-COMP)
- Wear Metals;
- Total Base Number for engine samples / Total Acid Number for non-engine;
- Viscosity (either V40 or V100);
- Flash Point (Open Cup);
- Water by Distillation;
- Soot:
- Sulfur Content;
- Oxidation;
- Nitration:
- Glycol for Engine Oil.

Other documentary requirements to be submitted as proof of evidence and part of the Technical Specifications:

- Manufacturer & Supplier Warranty = 2 years or 1000 running hours
- Certificate of Availability of Spare Parts for 10 years
- All parts of the generator set must have manufacturers' certificate
- ISO 8528 Certificate
- Service Center must be Exclusive Service Center. A certificate shall be required.
- Shop drawings and as-built plants

Others:

- Factory visit is required during the post-qualification.
- Testing is required to the winning bidder prior to the delivery of the item.
- Operation and maintenance manual
- Brand of wires as agreed during the pre-bid conference
- Software for the genset module