



Bidding Document

**FOR THE PROCUREMENT OF
GENERATOR SETS FOR HEAD OFFICE AND BRANCHES THOROUGHOUT PAKISTAN
UNDER FRAMEWORK CONTRACT FOR TWO YEARS**

Last Date for Submission:	4th May, 2018 at 03.00 P.M.
Tender Opening Date:	4th May , 2018 at 03:30 P.M.

Note:

Bidders should read the Bidding Document carefully and comply strictly while submitting their tenders.

If the Bidder find any discrepancy, error, or omission in the Bidding Document, he may notify it to the Head Procurement in writing on or before the closing date for Tenders.

The Bid Opening Committee reserves the right to accept or reject any or all quotations without giving any reason.

Introduction

The Bank of Khyber was established in 1991 through an Act passed by the Provincial Legislative Assembly. It was awarded status of a scheduled bank in September 1994. The Bank enjoys a unique position and stands out amidst other banks operating within Pakistan with its significant presence in all major cities of the country.

The bank has long been associated with business and commercial circles and has been actively engaged in catering to the financial needs of all sectors. It has successfully been involved in extending funded and non-funded facilities to its customers for various business needs.

Today, BOK is an “A-1” rated commercial bank, operating across the country with a network of more than 160 branches and still expanding. The provincial government is the major stakeholder and during our 25 years history, the Bank has always played a vital role in the development of Khyber Pakhtunkhwa in particular and participated in the economic development of Pakistan in general.

In compliance with KPPRA Act 2012 known as the “Government Procurement Act”, The Bank of Khyber will be conducting a public bidding for The PROCUREMENT OF GENERATOR SET FOR Branches and Head Office (SUPPLY, INSTALLATION AND COMMISSIONING OF DIFFERENT BRANDS AS AND WHEN REQUIRED)

1. **Objective** This project aims to provide and purchase a back-up stand-by generator set intended for the branches and Head Office. This is one of the Bank’s emergency measures and protection support to our Information Technology in providing continuous service to our valued clients in case of power outage, hence, ensuring information system uptime, data integrity and business stability.
2. **Approved Budget for the Contract** The Approved Annual Budget for the Contract of Diesel Generator Sets Procurement is kept for branches and Head Office.
3. **GENSET Specification/s and Accessories** The Bank of Khyber shall purchase different capacities of *internationally renowned branded* gensets with imported soundproof canopy of below 95 db from 01 meter with following item descriptions and technical specifications:

PART I - GENERAL TECHNICAL REQUIREMENTS

1.0 Composition

The Diesel Generator Units (DG Unit) shall consist of the following;

- Diesel Generator Set
- Fuel Tank
- Exhaust System
- Outdoor Weather Protective and Sound Attenuating Enclosure
- Automatic Transfer Switch (ATS)

The DG Unit shall be supplied as a complete pre-integrated and pre-assembled unit.

2.0 Manufacture

The DG Unit shall be internationally reputed make. DG units shall be supplied from original suppliers and locally assembled units are not acceptable.

3.0 Service Conditions

The DG unit shall be designed to be operated at following worse case conditions;

Altitude	Up to 1000 meters above sea-level
Ambient temperatures – Outdoor:	
Maximum outdoor	+50 deg C
Maximum outdoor daily average	+40 deg C
Maximum outdoor yearly average	+30 deg C
Minimum outdoor	00 deg C
Highest one day variation	+25 deg C
Relative Humidity:	Considered as per Pakistan weather
Maximum	70 %
Minimum	30 %
Yearly average	45%

4.0 System Conditions

The DG sets shall be designed to be operated under following system parameters;

Nominal System Voltage	220 V
Highest / Lowest System Voltage	250 V / 180 V
Number of Phases	3 phase, 4 wire
Frequency	50-51Hz

Neutral Point	Solidly Earthed
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PART II - PARTICULAR TECHNICAL REQUIREMENTS

5.0 Standards

The DG Units shall be designed, manufactured and tested in compliance with the latest versions of the following standards or equivalent;

- IEC 60034 Rotating Electrical Machines
- IEC 60085 Thermal Evaluation and Classification of Electrical Insulation
- IEC 60529 Degrees of Protection provided by Enclosures (IP Code)
- ISO 10816 Specification for Mechanical Performance: Vibration
- ISO 3046 Specification for Reciprocating Internal Combustion Engines
- SI 426 European Commission (dangerous substances) (Classification, packing, labelling, and Notification of Regulations 1992.
- CIMAC Congress International des Machines a Combustion Recommendations for Diesel Engine Acceptance Tests
- ISO 9000 Quality assurance

6.0 Ratings:

Required rated Prime Power Capacities (kVA) at an outdoor operating temperature of 40 deg + is as follows.

The DG Units shall be Prime Rated for: 20, 30, 45, 100, 200, 500, 650 & 1000 KVA with 3 phase, 50-51 Hz.

Bidder should propose generator capacity (KVA) to obtain required prime KVA ratings of 500 KVA and above, at the maximum outdoor operating temperature. Bidder should also provide calculations and reference graphs, etc, to confirm that the proposed generator is capable of providing the required prime KVA rating.

7.0 Performance

The DG sets shall be capable of delivering rated kVA indicated under item 6 at Prime Power under the service conditions specified in section

Voltage regulation: $\pm 0.5\%$

Frequency regulation: Random frequency variation with any steady load from no load to full load shall not exceed $\pm 0.25\%$.

8.0 Diesel Engine

The diesel engine shall comply with the specified International IEC Standards or an equivalent international standard and shall be of the four-stroke, multi-cylinder, water-cooled, cold start, direct fuel injection, compression ignition, and preferably turbo-charged above 200 KVA type.

Speed Governor:

The diesel engine shall be fitted with a speed governor capable of accuracy to Class A2 of ISO 3046/IV. The governor is to be fitted with speed control facilities to enable the engine speed to be adjusted from the local control panel.

Shutdown System: The engine shall be fitted with a mechanically operated device which will shut off the fuel supply to engine when any of the specified alarm conditions occur.

Cooling System: The cooling system shall be filled with chemically treated water mixture by the equipment supplier. Rotating parts shall be guarded against accidental contact in accordance with standard requirements.

A vertical fan cooled sectional radiator, rated for the tropical site conditions shall be mounted at the end of the combined under base and driven from the diesel engine. The radiator shall be arranged to cool the engine jacket water and lubricating oil. The radiator must be generously sized to permit operation at full load and overload in the specified ambient conditions. The radiator shall be integral with the generating set. The radiator shall be provided complete with fan claw and guards.

Pumps : Cooling water, lubricating and fuel oil pressurizing pumps shall be provided and mounted on the engine and shall be gear driven from the crankshaft.

Lubrication : Lubrication shall be by means of an engine-driven gear pump and the system shall include full flow oil filters with replaceable elements.

Safety Guards : All moving parts shall be adequately guarded, in order to prevent danger to personnel.

Fuel : The engine shall be designed for operation on diesel fuel.

Lubricating and Fuel Oil Filters : The lubricating and fuel oil filters shall be of the fuel flow type.

Air Filters : Air filters shall be suitable for use in the environmental conditions which are likely to arise locally and the service conditions described in Part 1.

Starting System : The set shall be supplied with a completely self-contained starting system consisting of an engine driven dynamo, a lead acid battery and battery charger.

The starting system shall be designed such that at engine speeds in excess of the minimum firing speed it shall be impossible to complete the starting circuit. The starting system shall preclude excessive consecutive starting attempts.

Exhaust System : The engine shall be efficiently silenced and be complete with primary and terminal silencer arrangements.

9.0 Alternator

The alternator, of internationally renowned brand, shall be synchronous, four pole and brushless excitation type and shall comply with the relevant requirements of Specification IEC 60034 or an equivalent international standard.

The alternator shall be designed for operation of 10% engine overload at any power factor between unity and rated power factor for a maximum period of one hour in any 12 hour period as permitted by ISO 3046/II.

The alternator shall be rated for design rating protection. The insulation of the winding shall be class H. All winding shall be tropicalized and suitably impregnated to withstand the site ambient conditions. The alternator shall be complete with all necessary cooling fans, excitation and voltage regulating equipment.

The alternator shall be capable of maintaining its continuous maximum rated output when operating within + 5% of rated voltage and at rated power factor.

The alternator shall be brushless rotating field, self-exciting and self-regulating type complete with permanent magnets and fully connected damper windings. The stator winding shall be star connected and shall be brought out together with the neutral point to terminals located in a sheet steel box mounted on top of the generator to facilitate connection of a power cable of suitable capacity.

The following protection shall be provided for the alternator:

- a. Over Current Protection
- b. Earth Fault Protection.

10.0 Automatic Transfer Switch (ATS)

The ATS shall comply with IEC 60947 or equivalent international standard. The separately mounted generator control cubicle and ATS panel shall be of sheet steel vermin proof with lockable hinged front doors.

A Four pole circuit breaker and auto transfer switch should be provided rated for full load of the current (+ 10% overload).

The ATS equipment shall be of 3 attempt type and capable of sensing single phase and three phase failure of main supply or any variation in main supply voltage. The main supply and generator supply contactors or Solenoid/Motor operated change over switch shall be of fool proof design with mechanical and electrical interlock.

11.0 Mounting

Complete unit to be mounted on robust skid frame. Vibration mountings to be used where required.

Skid frame to be dimensioned to accommodate generator/alternator assembly, all accessories, sound proof canopy. Skid frame to be of rigid construction suitable for locating on level ground surfaces ranging from compacted earth, crushed rock or a concrete pad.

12.0 Fuel Tanks Built-in Fuel Tank:

A minimum capacity of not less than 12-15 hours full running time built in fuel tank shall be provided. Design shall be capable of preventing accidental spilling of fuel and hand pump feeding on emergencies is possible.

13.0 CONCRETE FOUNDATION / PAD DRAWINGS

Detailed drawings of the concrete/pad foundations required for mounting/installation of all equipment shall be provided with all necessary details within three (03) weeks of award of contract.

14.0 Outdoor Weather Protective Sound Attenuating Enclosure

The generator set shall be provided with a sound attenuated housing which allows the generator set to operate at full rated load in the ambient conditions. The enclosure shall reduce the sound level of the generator set while operating at full rated load to below 95 dBA at 1 meter from the generator set. Housing configuration and materials used may be of any suitable design which meets application needs, except that acoustic materials used shall be oil and water resistant. No foam materials shall be used.

The enclosure shall include hinged doors for access to both sides of the engine and alternator, and the control equipment. A panel viewing window shall be provided. Key locking door latches shall be provided for all doors. Door hinges shall be stainless steel.

The enclosure shall be provided with an exhaust silencer, which is mounted outside of the enclosure, and allows the generator set package to meet specified sound level requirements. Silencer and exhaust shall include a rain cap and rain shield.

15.0 Fire detection

Diesel generators housing shall have fire detection system suitable for use in an area containing diesel fuel. The fire detection system shall cut off the fuel supply from the tank in the event of a fire. The fire detection system shall operate an alarm system.

16.0 Type tests

Factory test reports/certificates of generators need to be submitted with the installation. Type tests shall be carried out at an independent laboratory or witnessed by a representative of such laboratory.

18.0 Testing at manufacture's works

The complete diesel generator sets shall be subjected to routing tests as per the standards specified, at the manufacturer's Works to verify that its performance is in accordance with the specifications.

20.0 Other requirements

(a) Generator set shall have the following facility. Forklift Pockets within Base Frame

(b) The control panel shall have the following provisions for the control of DG Set:

- Master engine control which for OFF/AUTO/MANUAL/TEST with a facility for starting and stopping of the set.
 - Manual Change Over Switch
- Selectable Multifunction meter
- Engine control monitor.
- Alternator voltage monitor.
- Engine hours run counter.
- Voltmeter and Ammeter
- Combined frequency and tachometer (c) The diesel generator shall automatically shut down under following conditions.
 - Low Oil Pressure
 - High Engine Temperature
 - Low Fuel Level
 - Over/Under Speed
 - Battery Charge Fail (d) Earthing studs need to be provided.

21.0 Warranty

Warranty period shall be for one and a half year /1500 hours operation whichever occurs first

Payment Terms

The payment shall be done within Forty Five days (45) working days upon submission of complete documents including import and landing documents, delivery, installation, testing, commissioning and acceptance of the unit by the authorized/designated representatives of the Bank subject to performance security retention, if any.

TEREMS AND CONDITIONS

The Bank of Khyber invites sealed quotations from authorized Sole dealers/distributors for purchase / installations of the Branded Diesel Generating Sets ranging from 20, 30, 45, 100, 200, 500, 650 and 1000 KVA in Branches / offices with imported coupling and imported sound proof canopy by an internationally certified / authorized coupler.

MANDATORY REQUIREMENTS

Quotations should be submitted in a single package containing separate technical proposals and financial proposals duly completed in all respects along with call deposit in the name of The Bank of Khyber amounting Rs. 250,000/- as earnest money. Bidder is required to submit its Technical Proposal in accordance with the **Mandatory Requirements** as mentioned below. Failing to which the proposal will not be considered.

#	Mandatory Requirements	Proof to be submitted for fulfilling Eligibility Criteria
1	The bidder/firm must be well reputed and authorized sole distributor of branded Generator Sets only.	Sole Distribution Ship letter from concerned firm must be submitted.
2	The bidder should be an Active Tax Payer and must be registered with FBR	.Valid GST Registration and Income Tax Certificate should be provided. The bidder should provide its FBR registration certificate (NTN)
3	The bidder should have at-least 5 years' experience in the business and has corporate status.	Registration of Incorporation under the laws of Pakistan
4	The bidder should not have been blacklisted by any of the Provincial / Federal Government or organizations of the State / Federal Government in Pakistan	Affidavit / Undertaking on stamp papers should be submitted by the bidder
5	The bidder must have audited its accounts.	Annual Audit Report/Financial Statements for the last 3 years should be provided
6	Bidder must have executed similar/equivalent contracts.	Valid documentary evidence must be submitted(Preference will be given to Work Order/contracts issued by Financial Institution)
7	The bidder must have legal presence in Pakistan and having Offices in major cities.	Valid documentary evidence must be submitted. And should submit list of Offices across Pakistan
8	The bidder should not be in litigation with its customers/clients.	Affidavit that the bidder/firm / company is not in litigation with any client to be submitted.
9	The bidder must have arrangements for import of the DG Sets in its own name.	Valid documentary evidence in shape of import documents to be submitted

GENERAL REQUIREMENTS

- Confirmation letter by the bidder that bidder has carefully read the tender document and have understood its contents.
- Bid must be typed written, acceptance or rejection of hand written bid shall be sole discretion of the bank. There should not be errors and / or over-writings. Corrections if any should be made clearly and initiated with dates.
- All rates to be quoted in Pak Rupees and inclusive of all applicable Government taxes.
- Bids must be enclosed in a properly sealed envelope.
- Quoted Engine should be well populated internationally with at least 10 years feedback and parts availability should be ensured in the local market. Moreover quoted brand of Engine / Alternator should be same for all the capacity of the DG Sets.
- The price of Sound Proof Canopy (sound level 65 DB at 1m) and ATS Panel (showing detail of parts) should be quoted separately.
- The standard installation requirement i.e. construction of C.C. Foundation Pad, Earthling Rod Type System, Transportation and loading/unloading on green field should be quoted separately.
- Per meter rates of Power Cable, Control Cable and Earth Cable must also be quoted for above mentioned installations of D.G. Sets. (Pakistan Cable only)
- The supplier must have backup offices in all major cities of Pakistan and should ensure regular supply of spares (if needed) for repair maintenance of DG Sets.
- Supply / installation time should not exceed two weeks from the date of placing of purchase order.
- The supplier shall be responsible for the installation/commissioning of the generator, ATS Panel and cabling with its first service.
- The technical evaluation will be based on the comparison of specification/ model/ makes and expiry. The Bank of Khyber reserves the right to choose the specification/ models/ makes at its discretion. The bidder must submit all the relevant documents to fulfill detail evaluation of the bid conforming the specifications/requirements mentioned in bidding document. Successful bidder will be informed after approval of bid by the competent authority.
- Quoted amount will remain valid up to two years i.e. from 1st July 2018 till 30 June 2020.
- The rates shall be provided on the attached Performa / sheet.
- Quotations complete in all respects should reach on or before 04.05.2018, up to 3 p.m. and will be opened on same date at 03.30 p.m.
- The Bank of Khyber reserves the right to accept/cancel the tender/bid without assigning any reason.

For any clarification/information, contact person is:

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