GAUTENG: NATIONAL POST CENTRE (NPC)

SPECIFICATIONS & SCOPE OF SUPPLY

STANDBY GENERATOR SERVICE MAINTENANCE REPAIRS & CIRCUIT BREAKER REPLACEMENT

NAME OF CONTRACTOR

1. SCOPE OF SERVICE SUPPLY AND SPECIFIC INSTRUCTIONS

1.1 Objective

1.1.1 The objective is to appoint a supplier for the period of 12 months (1 year) to service and repair standby generator at National Post Centre (NPC), Cnr. Jeff Masemola & Sophie De Bryun, Pretoria, Tshwane.

1.1.2 Furthermore, to repair the circuit breaker of the aforementioned standby generator located at the above mentioned address.

1.2 Legislative Requirements

1.2.1 The supplier must be CIDB 2ME and 2EP – Specifically GENSET & LV Panel Breaker Experienced.

1.2.2 The supplier must comply in full with all legislative and health and safety requirements relating to the service provision.

1.2.3 The Electrical installation must adhere to the SABS 0142 and in accordance with the ECB code of conduct.

1.3 Performance

1.3.1 The supplier will be responsible for servicing and repairs of the generator.

1.3.2 The supplier must be available for the duration of the contract to respond to generator and electrical equipment breakdowns or defects and complaints about any malfunctioning thereof.

1.3.3 The response time (from the time of the supplier's receipt of an official request, to his attendance on site) must be as follow:

- ❖ Emergencies - immediate and up to a maximum of 1 hour.
- ❖ Failure by the supplier to meet the above response times or equipment downtimes may result in contractual penalties.

1.3.4 The supplier shall provide the Post Office with a Risk Analysis, Safety plan and work schedule.

1.3.5 The supplier must be able to provide the maintenance services within the timelines indicated in this bid document and in accordance with SAPO's conditions and /or agreed changes.

1.3.6 The supplier must adhere to the following minimum service controls:

- ❖ Promptly submit to SAPO the worksheets and/or job cards of maintenance activities at contracted areas attended to.
- ❖ Proof of sign-off of service by duly authorised SAPO officials.
- ❖ All defects identified in the maintained generators must promptly be reported to the duly authorised SAPO official, in writing.

1.4 Replacement for Parts

1.4.1 The supplier must in the event of repairs or replacement of generator and electrical equipment and components, other than defined maintenance, submit a detailed quotation for such additional work to the duly appointed SAPO representative and obtain approval thereof from SAPO, before attending to the additional repairs or replacements.

1.4.2 Emergency repairs discovered by the supplier must promptly be reported to the responsible SAPO official for a decision to address the matter.

1.4.3 Any substitution for original replacement parts must be with an equivalent or a better product. The replacement part may be accepted by SAPO provided that it meets or exceeds all the requirements of the original part and that such substitute will not materially alter the original basic design.

1.4.4 All replacement parts, materials, and workmanship provided must be guaranteed by the supplier to perform the required services, to the full satisfaction of SAPO, in accordance with standards from the original generator manufacturer.

1.4.5 Warranty Period: Original OEM warranty certificate must be provided for each part or component replacement on equipment. If the same part or component of the same equipment has to be replaced within the warranty period, the cost of replacement will be for the supplier's account.

1.5 Public Liability Cover, Insurance and Compensation Commission

1.5.1 The supplier must provide proof of Public Liability Insurance in the amount of R5m.

1.5.2 The service provider must submit a Letter of Good Standing with the Compensation Commissioner

SPECIFICATIONS

1. SPECIFICATIONS (GENERAL SCOPE OF WORK) FOR GENERATOR SERVICE AND REPAIRS.

The Scope of Work for Generator service is as follows:

1.1 Major Annual Maintenance of Generator

Description
Maintenance and Servicing
Replace engine lubricating oil, remove and dispose used oil from the SAPO site in a regulatory compliant manner.
Replace oil, fuel and coolant filters and add corrosion inhibitor, as needed.
Replace lube oil in hydraulic governors (where applicable)
Replace all spark plugs, service ignition condenser, cap, rotor, wires and points, clean and adjust.
Service Cooling Systems
Radiator/ heating exchanger checks and servicing
Replace Coolant – Add corrosion inhibitor checks and servicing
Hose and connections checks and servicing
Replace all fan belts.
Jacket water heater checks and servicing
Water pump checks and servicing
Thermostat checks and servicing
Fuel Systems
Inspect Fuel Tank
Service fuel lines connections
Inspect Governor and Controls
Supply and install new fuel filters – Primary/ Secondary
Check fuel pressure pump
Air Intake and Exhaust System
Replace air filters.
Check and service air filter service indicator
Check and service air inlet system
Check and service turbocharger
Check and service exhaust manifold
Check and service exhaust system valves & valve rotators
Lube Oil System
Top up oils with new to the prescribed level
Engine oil to be changed when indicated to be necessary by result of oil analysis or when specified by engine manufacturer, which ever period occurs first.
Supply And Install New Engine Oil Components
Test oil pressure
Check crank case breather
Perform oil sample analysis
Check starting system
Batteries, Starters, Alternators & Engine Management

Batteries – specific gravity
Check, and service Battery charger
Check, and service Starter motor
Check, and service Alternator
Check, and service engine monitor & safety controls
Gauges
Check, and service Safety controls
Check, and service Remote annunciators/Alarms
Check and Service Bearings, Space Heaters and Vibration Isolators
Check and service bearings
Check and service space heater
Check and service vibration Isolators
Control panel
Check and service start control – manual/ Auto
Check and service voltmeter
Check and service ammeter
Check and service frequency meter
Check and service circuit breaker
Check and service auto transfer switch

1.2 Minor Maintenance of Generator

Description
Perform oil and coolant sample analysis. Test results must be provided to SAPO
Check engine coolant for proper levels and condition
Check air filter and crankcase breathers
Check and adjust belts as required
Check governor, stability, linkage and oil
Check fuel tanks, pumps and lines for leaks or damage
Check engine, heaters, radiator, hoses and heat exchanger (if applicable) for coolant
Check for leaks and condition
Check generator set and transfer switch for loose, bare, broken wiring or connections
Test transfer switches operation and time delays, where applicable.
Check unit for proper frequency/speed, voltage and amperage.
Submit a written report to SAPO and advice of any further work required.
Report to duly appointed SAPO representative and enter in the logbook in the Control room the date of the visit, the tests carried out, and the adjustments made and any other details that may be appropriate.
Clean the generator, its components and the generator room, as necessary. In major mail centres, the generator room should be cleaned more regularly (refer to detailed specifications).
Grease and oil moving parts, as necessary
Check the air filters and, when necessary, clean the filters and replace the filter oil, or alternatively change the filter elements.
On the first visit after the plant has run on one oil change for the requisite number of hours stipulated by the manufacturer of the engine of the plant, the sumps must be drained and refilled with lubricating oil of the correct grade. (The readings on the engine running hour meter must determine the number of hours run the plant between oil changes)
Check the lubricating oil level, top-up as necessary

Replace the lubricating oil filter elements at intervals recommended by the engine manufacturer
Check and adjust the valve settings and the fuel injection equipment, as required.
Check the batteries and top-up the electrolyte, at a maximum required level
Check the lubricating oil level, top-up at a maximum required level
Report to the duly appointed SAPO representative on any unserviceable part, and as soon as possible submit a quotation for the repair or replacement of the part
Advise the duly appointed SAPO representative when a minor or major engine / alternator overhaul is due and submit a quotation for this settings
Check and adjust battery charger voltage
Check and adjust alternator output voltage
Check operation and setting of cooling water pre-heater
Check operation of pre-lube pump
Check operation and setting of genset protections and alarms
Inspect the plant visually and report to SAPO any fault, which, in the opinion of the representative, cannot be left until the next maintenance visit, major faults would include: Mechanical damage to engine, alternator, or switchboard. major water, fuel or oil leaks, overheated cables, etc.
Check engine lubricating oil level and top up at a maximum required level
Check radiator water level and top up at a maximum required level
Check battery electrolyte level. If the level is very low of if the battery is gassing excessively, report to the company immediately
The supplier should conduct a full load test on a quarterly basis which should take place on Saturday after (2:00pm). To submit a report and PM to the duly appointed SAPO representative.
The supplier should at least give SAPO one week notice of such a load test. Where power shut downs are involved, the contractor must first obtain written approval from the building manager
Operate the plant off - load for 15 minutes at the end of each visit in close collaboration with the duly appointed SAPO representative.
Ensure that the bypass switch is set on “Standby” and that the duty selector switch is set to “Auto” before leaving the standby plant room.

GAUTENG REGION: GENERATOR

NOTE: all servicing and maintenance etc. to be priced inline with specifications

NATIONAL POST CENTRE (NPC)

Generator Details

Make/Brand	**400 PERKINS**
Model	**DGDF2389 U10974T**
Ratings [KVA]	**800KVA**

NOTE: All servicing and maintenance to be done in accordance with manufacturer [OEM] original equipment manufacture recommendation and set standards

SERVICE AND MAINTENANCE	UOM	QTY	RATE	TOTAL
Generator major service for one [1] year	No	1	R	R
Generator check-up and minor service for one [1] year	No	3	R	R

GENERATOR REPAIRS	UOM	QTY	RATE	TOTAL
Replace engine V-Bels.	Sum	3	R	R
Replace DC-31 Batteries	No	2	R	R
Replace battery stand, two clamps per baterry.	No	2	R	R
Replace thermostat	No	1	R	R
Replce 3kw Jacket heater	No	1	R	R
Replace 32mm rubber pipe. SABS approved.	No	4	R	R
Replace heavy duty clamps	No	12	R	R
Replace wire lugs connector.	No	2	R	R
Safety file all in accordance to the scope of electricla installation as required per the Occupationla Health and Safety Act.	Sum	1	R	R

Emergency callout
NOTE: to be charged on an as and when required basis.

PROVISIONAL SUMS AND CONTINGENCIES	UOM	QTY	RATE	TOTAL

Emergency call-out	Respo nses	10	R	R
Provisional Sum:	Sum	1	R65,000.00	R65,000.00

Repairs allowable generator
On an as and when required basis. Allowable amount to be spend as the Employer or Employer's Representative may direct and to be deducted in whole or in part if not required.

Total [excl. VAT] Carried to Summary	**R**
Value Added Tax (V.A.T) @ 15%	**R**
TOTAL AMOUNT	**R**

NATIONAL POST CENTRE (NPC)

Generator Details

Make/Brand	**400 PERKINS**
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Circuit Breaker Details

Make/Brand	Masterpact NW08 N1/ Ui 1000V Uimp 12 kV Ue Icu (V) (kA) 220/440 42 480/690 42 Ics = 100% Icu Icw 42 kA/1s cat.B ICE 60947-2 50/60Hz UTE VDE CEI UNE AS NEMA

CIRCUIT BREAKER	UOM	QTY	RATE	TOTAL
Replace damaged **Masterpac,** INW08 N1 circuit breaker as detailed above with current compatible technology, complete with all electrical and comms wiring, modification, etc. As shown on site. **Note: Replace entire breaker including cabling and required modifications.**	Sum	1	R	R

PROVISIONAL SUMS AND CONTINGENCIES	UOM	QTY	RATE	TOTAL
Provisional Sum:	Sum	1	R15,000.00	R15,000.00

Total [excl. VAT] Carried to Summary	**R**
Value Added Tax (V.A.T) @ 15%	**R**
TOTAL AMOUNT	**R**

TOTAL AMOUNT OF STANDBY GENERATOR SERVICE MAINTENANCE REPAIRS & CURCUIT BREAKER

A. Total of Standby Generator Service Maintenance Repairs[excl. VAT]	**R**
B. Total of Circuit Breaker[excl. VAT]	**R**
Total(A+B) [excl. VAT]	**R**
Value Added Tax (V.A.T) @ 15%	**R**
OVERALL TOTAL AMOUNT	**R**
Total Amount In Words:	

NB: Where figures are referred to in numerical and in words and there is a confilict between the two, **the words will prevail**

CALL OUT AND COMPONENT MARK-UP

NO	LABOUR	RATE PER HOUR
1	Labour	R
2	Semi-Skilled	R
3	Un-Skilled	R
4	Total mark-up on components/ replacement parts including handling cost, call out, travel, etc.	%.....

* Rates form part of price consideration. It is compulsory to submit bid with rates.

NOTE: REPAIRS
To be charged on an as and when require basis the utilization of this amount is for the sole discretion of the company Representativeand any unspend funds will be deducted on contract completion.