

**SCM SUBMISSION: SPECIFICATION / SCOPE OF WORK**

PURPOSE OF SUBMISSION	BID SPECIFICATION – APPOINTMENT OF A SERVICE PROVIDER FOR AS AND WHEN REQUIRED : SERVICING AND REPAIRING OF GENERATORS GAUTENG REGION.
DESCRIPTION OF GOODS / SERVICES / WORK	AS AND WHEN REQUIRED SERVICING AND REPAIRING OF GENERATORS GAUTENG REGION.
DIVISION	PRASA CRES
USER DEPARTMENT	PRASA CRES FACILITIES ( SGR )
DATE SUBMITTED	AUGUST 2023

## **Servicing and Repairs of Generators in Gauteng South region.**

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### **Annexure : A**

#### **SCOPE OF WORK**

1.1. The scope of the work / services to be provided by the contractor is as follows:

- Carry out preventative maintenance and corrective maintenance or repairs of Generators as listed in this Specification.
- The scope also includes a 24hr, Monday to Sunday emergency service as and when required by PRASA-CRES.
- The contractor will ensure that the unit assigned to him/her works effectively and will point out all equipment defects to PRASA-CRES.

1.2. The contract will be for a period of 36 months.

1.3. The scope of work shall be Repair & Maintenance of Generators listed in the BOQ below, and shall include the following:

- Provision of Repair and Maintenance services.
- Installation of spare parts for Generators as and when recommended by the contractor during quarterly review of repair & maintenance of Generators.
- Minor Service: All inspections, replacements, and procedures to be done during the Minor Service shall be carried out quarterly or as and when need arises.
- Major Service: All inspections, replacements, and procedures to be done during the Major Service shall be carried out quarterly or as and when need arises.

## **2. MAINTENANCE**

2.1. All planned work will be carried out during normal working hours at the cost tendered for in the Bill of Quantities. Visits to the premises will be as scheduled for the contractor to carry out maintenance work as per the specification. Sites have visitors book which is to be properly completed by the Contractor on every visit and the reason for the visit recorded in the book.

2.2. The Contractor shall produce and issue to PRASA-CRES a written report or service sheet of any testing, inspection, examination, investigation and/or assessment undertaken and execution of any repairs by the Contractor. Reports will highlight.

- the type of work or service done
- problems experienced.

- results of inspection
- faults found and their priority thereof.

Quotations for any corrective work required shall be submitted to PRASA-CRES and on the approval of such quotations the Contractor will correct or repair accordingly.

- 2.3. PRASA-CRES reserves the right to conduct an independent safety and quality audit to be carried out on the work completed by the contractor. The contractor shall provide his own quality controls to ensure compliance with the specifications and any changes to legislation or regulations applicable. Possible modernisation products to upgrade or to improve the reliability and performance of the installation will be brought to PRASA-CRES for consideration.

### **3. CONTRACT PERFORMANCE.**

- 3.1. The contractor will sign a service level agreement with the PRASA-CRES. The performance of the Contractor will be discussed on the monthly basis at meetings scheduled to sit at PRASA CRES offices. Performance Items to be discussed will include:

- the number of breakdowns for specific period.
- the turnaround time to attend to emergency callouts.
- planned vs. actual progress.
- submission of reports, invoices and other administration duties
- payment of invoices

### **3.2. SERVICES MEASURE AND EXPECTATIONS.**

Response Times for:

- Emergencies – within 2.5 hrs
- Urgent - within 5hrs
- Non-Urgent - within 24hrs

### **4. General Information**

- 4.1. The whole service shall be in accordance with the Occupational Health and Safety Act 85/1993 and all regulations framed shall be carried out to the satisfaction of Prasa Cres
- 4.2. The contractor shall be or have in his employment an accredited person. Proof must be supplied of the above requirements

- 4.3. The Contractor must have the capacity to be able to work on more than one site at any given time.
- 4.4. Where day to day repairs are to be undertaken, the Contractor shall first estimate the labor and material cost based on the schedule of prices, before proceeding with the job.
- 4.5. All material removed to be returned to PRASA-CRES unless otherwise stated.
- 4.6. Compliance certificates to be issued on completion of all new work done at no cost to PRASA-CRES. Compliance certificates required for existing installations to be priced out at the prescribed set rate.

## **5. SAFETY AND PROVISION OF MATERIALS:**

- 5.1. The contractor is responsible for supply of all material required to repair the faults as per job cards /work order.
- 5.2. All material used shall be of high standard (SABS approved)
- 5.3. The material item price shall be based on standard market related plus the percentage mark-up fee.
- 5.4. Prasa Cres Maintenance Manager /Supervisor reserve the right to query price of any material that is on the material list. He /she may request that the contractor justifies a copy of the material purchased, invoices or actual quotes from reputable suppliers.

## **6. QUALITY OF WORK AND WORKMANSHIP.**

- Works with poor workmanship will not be signed off and PRASA Cres reserve the right to hold payments until satisfied with the quality of the works.

## **7. Non-Compliance:**

- **Safety** – the contractor will at all times ensure that work is performed in accordance with all the prescribed legal prescripts.
- **NB:** No work is to be done without approval of Safety File and valid signed site access certificate being issued to the contractor. No Contractor will be allowed on site without having attended the safety Induction training and proof is to be submitted to the Project Manager
- **Response time** – if an appointed service provider as per the General provisions of the As and When fails to adhere to the priority levels as prescribed PRASA CRES Facilities department hereby reserves the right to penalise the service provider a penalty fee of 10% of the value of the work and if this provision is continually be violated the contract will be terminated.
- **Proof of Work done**> the contractor will provide photos of before/during and after work completed with claim submitted. Photos can be submitted electronically.
- **Qualified personnel**- It is a requirement that personnel performing/overseeing works issued to the contractor be qualified in specific Trade.

## **8. Pre-qualification requirements**

If you do not submit the following documents/information, your submission will be disqualified automatically.

- CIDB grade 4 ME or higher.

## **9. SAFETY PRACTICES AND PRECAUTIONS.**

### **9.1. General Safety.**

- 9.1.1. It is everybody's responsibility to ensure that safety practices are adhered to the maximum to prevent personnel injury and equipment failure.
- 9.1.2. Safety Definitions and Requirements found in operation rules and procedures (OR&P) and operation maintenance manual (O&MM) are designed to provide valuable source for safety. Use them to prevent injuries and illnesses resulting from unsafe acts or unsafe conditions.
- 9.1.3. The service technician must understand the operation of the equipment and the safety measures required to service this equipment.
- 9.1.4. Do not work on any equipment unless you understand how the equipment functions and you have been informed of potential hazards.
- 9.1.5. Barricades are to be use around where a service will be performed.

## **10. MAINTENANCE REFERENCES.**

10.1. All electrical and mechanical work will be in accordance with the following publications

- For Hazardous locations all electrical equipment to be supplied and fitted according to SANS 10086-1, SANS 10086-3, SANS 10089-1, SANS 10089-2, SANS 10089-3, SANS 10108 and ARP 0108:2007 regulations and is subject to testing and final approval by PRASA's electrical department.
- E7/1 or E7/2, E4E Specifications
- No. R828 OHS Act 85 of 1993 as amended.
- Applicable Municipal By-Laws and Regulations
- Electrical work completed to standard (SANS 10142)

## **11. Preventative Maintenance**

- 11.1. The service provider shall perform maintenance and part replacement in accordance with the Maintenance Service Schedules for Generators contained in this document, below, to ensure continued operation of the organization and compliance with the maximum downtime for all systems or equipment.
- 11.2. The service provider shall report any trends detected that reflect system or equipment degradation, loss of performance, or frequency of failure to the PM.
- 11.3. The service provider shall arrange with the PM and obtain approval for date, time and duration when equipment or systems shall be out of service for the purpose of performing preventive maintenance.

- 11.4. In the event of emergency repairs having to be carried out, the need for such repairs shall be reported immediately to the PM for further instructions.
- 11.5. The service provider shall furnish a report to the PM indicating the date and time of the failure, the reason for the failure, date and time when corrective action was completed, details of corrective action taken, and results of any post maintenance testing performed to ensure satisfactory operation.
- 11.6. The service provider shall draw up the necessary Job Cards from the Maintenance Programme, or in response to emergency call outs, or equipment failure, and hand the completed cards to the PM for verification and acceptance that the work has been duly executed.
- 11.7. Obtaining and recording of quotations for materials or equipment, selecting the most competitive supplier, obtaining approval from the PM before placing orders.
- 11.8. Record complaints and faults with date, time and details and corrective action taken.
- 11.9. Provide and maintain an up to date equipment inventory.
- 11.10. All planned work will be carried out during normal working hours at the cost tendered for in the Bill of Quantities. Visits to the premises will be as scheduled for the contractor to carry work on the maintenance units as per this specification.

### **13. Terms Of Payment**

- 13.1 The terms of payment will be monthly and upon receiving the invoice, PRASA-CRES shall pay the Contractor within 30 days. This is subject to the invoicing being both correct and free from anomalies.
- 13.2 All pricing information shall be exclusive of VAT.
- 13.3 No sub-contracting shall be permitted with the authority of a project Manager.
- 13.4 Invoices shall show the period, the lump sum for the maintenance work and the breakdown of all work for which the payment is being claimed for. All non-maintenance invoices shall be presented on a per maintenance unit basis and a fully itemized list of the work being charged for will be incorporated into the invoice. A photocopy of the worksheet which shall indicate entry and exit times from site which shall be signed by the PRASA-CRES representative shall be attached to the invoice and any invoices submitted without this attachment and fully completed to the satisfaction of the PRASA-CRES will be rejected.
- 13.5 Additional works shall be separately invoiced and these shall be submitted monthly. Where such works are covered by the Schedules of Rates the schedules shall be strictly adhered to in preparing the invoice. Works authorized by PRASA-CRES representative which falls outside the scope of the contract and the Bill Of Quantities shall be invoiced separately and fully detailed with the works involved and cross referenced to the issued order number. PRASA-CRES reserves the right to request the invoice for the material or spare parts purchased by the Contractor on the works done.
- 13.6 If invoices are presented which do not fully comply with the format as detailed, they will be rejected. All invoices shall portray the identity number of the maintenance unit involved and site location and VAT as a sum of money shall be included within the total monies being claimed. A schedule of accumulative costs shall be submitted each month showing the expenditure to date of non-contract repair works and misuse / vandalism as two separate totals. PRASA-CRES will accept no liability

and/or responsibility for the late payment of the invoices which have been incorrectly addressed by the Contractor.

- 13.7 **No** payment shall be made by PRASA-CRES for any unauthorized service performed by the Contractor.

#### **14. PRICING**

- 14.1 The Contractor shall familiarized himself/herself with the present conditions of the maintenance units and submit prices accordingly; changes to the maintenance contract rates will not be accepted.

- 14.2 The Contractor shall include for all costs associated with the works for his use to include plant, tools, test equipment, chemicals, sundry materials; temporary lighting, small plant and tools; temporary plant and equipment to maintain operations in breakdowns; off-loading, hoisting and handling of all materials and plant; access to the works, administration and security; transport for staff; protecting

the Works; safety, health and welfare of people; removing rubbish, protective casings and coverings away from the site and cleaning the works on completion; temporary screens, hoardings, guard rails, landing barriers, scaffolding and similar items; control of noise, pollution and all other statutory obligations; all necessary attendances in connection with examination and/or tests in compliance with OHS Act Regulations and all necessary management and supervision of the Works.

#### **15. Preventative Maintenance every three months (Shall include but not limited to the following) check, clean, repair or replace if necessary**

- **fan belt:** Check condition of fan belt, check tension of fan belt and adjust if necessary and check pulleys of fan belt
- Clean radiator air passage and check that the coolant is at the correct level
- Pressure Test Radiator
- Check that oil cooler air passage are clear- clean/replace if necessary
- Check alternator and fan belts
- Check all radiator hoses and clamps
- Check oil level of fuel pump cam box and governor, Drain and replace new engine oil if necessary
- Check fuel pump drive shaft and couplings
- Check oil levels and change oil if necessary
- Check fuel filters, primary fuel filters/water traps and replace of necessary
- Bleed fuel systems
- Replace air and oil filter
- Check engine crankcase breather
- Cooling system water temperature

- Fuel injectors and valves
- Cooling system coolant
- Cooling System Supplemental Coolant Additive (SCA) – Test and add
- Engine Air Cleaner Element (Dual Element) – Replace
- Engine Air Cleaner Element (Single Element) – Replace
- Change lubrication and cooling system
- All filters
- Check turbo for free rotation and bearing wear
- Check seal faces of elements, air cleaner hoses and clamps for dust ingress
- Fit new or clean air filters (washable air filters to be washed 3 times before discarding)
- Check jacket water heater is operating
- Check that all gauges are in position and secured
- Bearings
- Indicator lights, indicator lamps, gauges, switches, relays, contactors, solenoids, coils, voltage regulators, sensors, fuses, pressure sensing switches, transformers, power suppliers, battery cables and connections
- A.C wirings
- Check control panel
- Transfer panel
- Circuit breaker panel
- Check battery
- Check battery charger
- Check log volts and log amps
- Check battery water top up if necessary
- Check battery cable lugs, clean and tighten as required
- Start engine and run on load for 20 minutes and record the following **(Obtain permission before proceeding)**.
  - Check voltage
  - Check amperage
  - Check Hz
  - Check oil pressure
  - Check water temperature
  - Check oil temperature
  - Listen for unusual noises
  - Check for oil and water leaks and repair if necessary
  - Check alternator coupling and terminals
  - Blow dust out of alternator/generator
  - Check all air vents on alternator/generator are clean and secured



ITEM	DESCRIPTION	UNIT	YEAR 1 RATE (Excl Vat)	YEAR 2 RATE (Excl Vat)	YEAR 3 RATE (Excl Vat)
<b>1.0</b>					
1.1	Electrical wire	M			
1.2	Fasteners	Ea			
1.3	Plugs	Ea.			
1.4	Injector	M			
1.5	Oil filter	Ea			
1.6	Generator valve	Ea			
1.7	Piston pin	Ea			
1.8	Valve collector	Ea			
1.9	Cylinder liner	Ea			
1.10	Valve seat	Ea			
1.11	Water horse	M			
1.12	Alternator	M			
1.13	Bearing	Ea			
1.14	Exhaust pipe	Ea			
1.15	Electric starter	Ea			
1.16	Fuel tank	Ea			
1.17	Control door	Ea.			
1.18	Primary filter	Ea.			
1.19	Secondary filter	Ea.			
1.20	Breaker	Ea.			
1.21	Hoses and Clamps	Ea.			
1.22	Fan Belt	Ea.			
1.23	12V Battery	Ea.			
1.24	Battery charger	Ea.			
1.25	Oil pump	Ea.			
1.26	Air filter	Ea.			
1.27	Fuel filter	Ea.			
1.28	Radiator	Ea.			
1.29	Fan	Ea.			

1.30	Recirculating pumps	Ea.			
1.31	Thermostat	Ea.			
			<b>Carried to final summary</b>		
<b>2.</b>					
6.1	BATTERY 12VOLT 1250 AH	Ea.			
6.2	RIMULA R4 DIESEL OIL	Liter			
			<b>Carried to final summary</b>		
			<b>SUB TOTAL</b>		
			<b>VAT @ 15%</b>		
			<b>TOTAL</b>		

- Check fuel tanks.
- Drain off water.
- Check level control switch.
- Check electric pump.
- Check hand pump.
- Check low fuel alarm
- Check engine cut out alarm

**SUBMIT THE REPORT FOR PREVENTATIVE MAINTENANCE TO DEPOT SUPERINTENDED FOR APPROVAL**

16. **MATERIAL LIST PRICING BILL (Rates to include testing and commissioning)**

## 17 SCHEDULE OF RATE

**Table 1: Provision for Health and Safety File**

Item No	Description	Unit	Amount Year 1	Amount Year 2	Amount Year 3
1	Provisional cost associated with compiling a Safety File as per the requirements of Annexure 2: <b>Health Safety Requirements Template for Issuing of Site Access</b>	Sum	R4000.00	R5000.00	R 6000.00

**Table 2: Maintenance, Service and Repairs Work Rates.**

				Year 1 Rates		Year 2 Rates		Year 3 Rates	
Item	Description	Unit	Unit	Rate (Excl. VAT)	Amount (Excl. VAT)	Rate (Excl. VAT)	Amount (Excl. VAT)	Rate (Excl. VAT)	Amount (Excl. VAT)
2	Provisional (Material) Sum	Material	Sum						
3	Percentage mark-up for materials that are not listed	Material	%	%	R	%	R	%	R
4	The Service Provider is to tender their total cost per hour on site per qualified Artisan and an assistant to perform service and repairs during <b>Normal working hours (07:00 – 17:00)</b> .	Artisan	Rate/hour	R	R	R	R	R	R
5		General Worker	Rate/hour	R	R	R	R	R	R

6	The Service Provider is to tender their total cost per hour on site per qualified Artisan and an assistant to perform service and repairs during <b>After working hours and Saturdays (17:00 – 07:00)</b> .	Artisan	Rate/hour	R	R	R	R	R	R
7		General Worker	Rate/hour	R	R	R	R	R	R
8	The Service Provider is to tender their total cost per hour on site per qualified Artisan and an assistant to perform service and repairs during <b>Sunday and Public Holiday</b> .	Artisan	Rate/hour	R	R	R	R	R	R
9		General Worker	Rate/hour	R	R	R	R	R	R
11	Travel cost		Rate/ km	R	R	R	R	R	R
				<b>Year 1 Total (Excl. VAT)</b>	R	<b>Year 2 Total (Excl. VAT)</b>	R	<b>Year 2 Total (Excl. VAT)</b>	R

**Table 3: FINAL SUMMARY****Service and Repairs of Generators in Gauteng South Region.**

	STATION NAME	TOTAL YEAR 1	TOTAL YEAR 2	TOTAL YEAR 3
1	Material List	R	R	R
2	Provision for Health and Safety	R 4,000.00	R 5,000.00	R 6,0000
3	Maintenance, Service and Repair work Rates	R	R	R
TOTAL		R	R	R
VAT @ 15 %		R	R	R
TOTAL		R	R	R

## **ANNEXURE 1: Health Safety Requirements Template for Issuing of Site Access.**

### **CONTRACTOR SAFETY FILE CONTENTS LIST**

The purpose of this checklist is to guide the contractors and their sub-contractors as to what documents are required for them to prepare a safety file that must be issues to PRASA Cres Regional Departments or Head Office for evaluation before a site access is issued.

This checklist was revised to cater for **COVID 19** requirements as per RSA Government Disaster Management Act as amended and its Regulations.

Human Coronaviruses are common throughout the world. There are many different coronaviruses identified in animals but only a small number of these can cause disease in humans.

On 7 January 2020, 'Severe Acute Respiratory Syndrome Coronavirus 2' (SARS-CoV-2) was confirmed as the causative agent of 'Coronavirus Disease 2019' or COVID-19. The majority of the case-patients initially identified were dealers and vendors at a seafood, poultry and live wildlife market in China. Since then, the virus has spread to more than 100 countries, including South Africa.

The spread of the disease is thought to happen mainly via respiratory droplets produced when an infected person coughs or sneezes, similar to how influenza and other respiratory pathogens spread. Thus far, the majority of cases have occurred in people with close physical contact to cases and healthcare workers caring for patients with COVID-19.

Current symptoms reported for patients with COVID-19 have included mild to severe respiratory illness with cough, sore throat, shortness of breath or fever.

The complete clinical picture with regard to COVID-19 is still not fully clear. Reported illnesses have ranged from infected people with little to no symptoms to people being severely ill and dying.

**Name of the Contractor:**

**Project:**

**Safety File Assessor and Date:**

#	Requirement(s)	Compliance Status (Yes / No)	Comment(s)
1	Scope of works and Project Duration		

#	Requirement(s)	Compliance Status (Yes / No)	Comment(s)
2	Notification to DOL (If applicable and as defined in the 2014 Construction Regulations)		
3	Registration of the project with DOL for the construction permit if the total project value is more than R45 Million  (If applicable and as defined in the 2014 Construction Regulations)		
4	Valid Letter of Good Standing		
5	Employee List and Certified Copies of their Identity Documents (RSA Citizens) or Passports or Work Permits for foreign Nationals (Employee register); Home address; Contact Numbers; Residential Address; Name of Next of kin with Contacts  (Very critical issue for contact tracing)		
6	Approved Organizational Structure		
7	Approved S/HE Policy		
8	Approved COVID 19 Policy / Declaration		
9	Approved S/HE Plan		
10	Risk Assessments for the projects as per project scope approved by the Risk Assessor and they should cover COVID 19 related risk and mitigation measures.		
11	Proof of medical fitness of employees who will be working on the project and they should be from the Occupational Health Practitioner not a General Practitioner.  <ul style="list-style-type: none"> <li>• Protocols for dealing with COVID 19 positive cases.</li> <li>• Screening of contractors employees including sub-contractor</li> <li>• The type of thermometer that will be utilised and its calibration status.</li> </ul>		
12	Statutory Appointments including competency		



#	Requirement(s)	Compliance Status (Yes / No)	Comment(s)
	certificates and CVs e.g. COVID 19 Compliance Officer; First Aider and etc  (Signed by the appointer and accepted by appointee's include CV's and competency certificates)		
13	Tool inspections Checklists and Register		
14	PPE Matrix and Records include COVID 19 PPE Requirements and list of the PPE to be provided.		
15	Safe Working Procedures or Method Statements Including COVID-19 control measures. A list of the documents required here is identified as a minimum <ul style="list-style-type: none"> <li>- Waste management protocol on how COVID 19 related waste will be managed.</li> <li>- Incident reporting procedure.</li> <li>- Emergency procedure.</li> <li>- COVID 19 case handling.</li> </ul>		
16	Tool box Talks Templates to include COVID 19 information for awareness purposes. Include induction material covering COVID 19		
17	Equipment Maintenance (Calibrations, Safe Working load certificates and Decontamination or Sanitation Records etc) if applicable		
18	Chemicals substances list; MSDSs for chemicals to be used (14 point format) including Proof of training on MSDS if applicable.		
19	Excavation plan (when applicable)		
20	Scaffolding plan (when applicable)		
21	Declaration of Sub-contractors (when applicable)		

#	Requirement(s)	Compliance Status (Yes / No)	Comment(s)
22	Proof of Third-Party Liability Cover		
	<b>Conclusion / Statement of Compliance</b>		