

**SPECIFICATION
FOR THE**

**SERVICING AND MAINTANANCE OF GENERATORS**

**AT**

**CEDARA CAMPUS**

**Service and Maintenance on the Generators at Cedara Campus**

**CIDB grading 2EP is required**

KVA Ratings : 150KVA

Make and Model : Volvo

Quantity : 1 (One)

KVA Ratings : 8KVA

Make and Model : TURNER MORRIS S-TMGD8000SILE-380

Quantity : 3 (Three)

KVA Ratings : 5KVA

Make and Model : Honda ECG6500CXS

Serial : 2(Two)

1. **SCOPE OF WORK**
* Test and check alternators.
* Check and test the auto voltage regulator.
* Check the software and controller of the generators if present.
* Check the integrity of the generators. Check housing is secure and safe and check mounting of generators is firm and secure.
* Check exhaust for flow and blockage.
* Check the following items and keep in mind Clause A. Oil, water, filters, electric wiring in good state, radiator - and pressure test the radiator.
* Check voltage at unit under load.
* Check condensate drain for blockage. Clean as necessary.
* Check blower belt for condition, tension, and alignment.
* Lubricate all bearings where applicable.
* Check blower for cleanliness.
* Check all safety controls.
* Inspect contactor points.
* Check and clean thermostat.
* Check lockout control.
* Change all air, oil and water filters as necessary
1. **CLAUSE**

The service provider is required to make recommendations of any needed repairs to the Six (6) generator systems to ensure optimal and efficient generating power where needed when we do not have Eskom power running our campus. Keep in mind that all repairs need to be effected to bring the buildings, glasshouses, and tunnels to the point where adequate heating or cooling is present (hence we need electricity at all times whether Eskom or generators). A rapid response is critical for repairs to generators providing emergency cooling to the quarantine glasshouses, because the insect cultures contained therein cannot be removed and are extremely expensive and difficult to replace. These quarantine glasshouses are entirely reliant on electricity for their cooling. Temperatures in these glasshouses reach levels lethal to the insect cultures within an hour of an electricity failure.

1. **BILLS OF QUANTITIES**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Item Description** | **Quantity** |  | **Rate** | **Total** |
| Service of Volvo 150kVA diesel generator  | sum | 1 |  |  |
| Service of Turner Morris 8KVA diesel generator  | sum | 3 |  |  |
| Service of Honda 8kVA Petrol generator | sum | 2 |  |  |
| **Labour Rate** |  |  |  |  |
| Hourly Rate | sum | 1 |  |  |
| Saturday Rate  | sum | 1 |  |  |
| Sunday and Public Holidays  | sum | 1 |  |  |
| Travelling cost per km  | sum | 1 |  |  |
|  |  |  | **Sub-total** |  |
|  |  |  | **VAT @ 15%** |  |
|  |  |  | **Total** |  |

1. **GENERAL**
* Only qualified technicians will be allowed to work on the generator.
* ARC will supply no tools or workmanship.
* Any damages caused to the building during these repairs/installations must be repaired.
* The site must be left clean and tidy after completion of the project.
* All electrical work must be done according to the Standard Specification for Electrical Installation.
1. **INSPECTION OF SITE AND EQUIPMENT**

Before tendering, tenderers shall visit Cedara Campus to make themselves conversant with site and submit a quotation thereof.

All invited suppliers are kindly requested to attend a compulsory briefing session that will be held ARC-PHP Cedara Campus, Hilton, Pietermaritzburg.