

INDEX

HO 3/2023: SUPPLY AND DELIVERY, INSTALLATION AND COMMISSIONING OF A 650kVA,400V,50Hz STANDBY DIESEL GENERATOR SET INCLUDING MAINTANANCE IN ACCORDANCE WITH SOUTH AFRICAN NATIONAL SPECIFICATION SANS 8528 AND COMPLY WITH THE OCCUPATIONAL HEALTH AND SAFETY ACT NO. 85 OF 1993 AND CURRENT REGULATION OF ALL OTHER CODES APPLICABLE: DELIVERY IN TWO (02) PHASES: DEPARTMENT OF CORRECTIONAL SERVICES: ZONDERWATER TRAINING COLLEGE (GAUTENG PROVINCE)

DOCUMENTS	DESCRIPTION	PAGES
BD 2.3	BID INVITATION LETTER	2
SBD 1	INVITATION TO BID	3
GCC	GENERAL CONDITION OF CONTRACT	15
SPEC	TECHNICAL SPECIFICATION	37
SCC	SPECIAL CONDITION OF CONTRACT	15
SBD 3.1	PRICING SCHEDULE- NON-FIRM PRICES (PURCHASES)	5
BD 27	CONFIRMATION OF SUPPLY AND FINANCIAL ARRANGEMENTS BETWEEN THE BIDDER AND THIRD PARTY	3
SBD 6.1	PREFERENCE POINTS CLAIM FORMS IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2017	5
SBD 4	BIDDER'S DISCLOSURE	3
BD 6.2	BRIEFING SESSION	1



Private Bag X136, Pretoria, 0001 or 124 Church Street, Poyntons Building West Block, Pretoria, 0001
 Tel (012) 307 2431, Fax (012) 323 5621, mavhungu.mudau@dcs.gov.za

Ref : 6/1/3/
 Enq : M Mudau

The Manager

.....

Sir

BID HO 3/2023: SUPPLY AND DELIVERY, INSTALLATION AND COMMISSIONING OF A 650kVA, 400V, 50Hz STANDBY DIESEL GENERATOR SET INCLUDING MAINTANANCE IN ACCORDANCE WITH SOUTH AFRICAN NATIONAL SPECIFICATION SANS 8528 AND COMPLY WITH THE OCCUPATIONAL HEALTH AND SAFETY ACT NO. 85 OF 1993 AND CURRENT REGULATION OF ALL OTHER CODES APPLICABLE : DELIVERY IN TWO(02) PHASES : DEPARTMENT OF CORRECTIONAL SERVICES: ZONDERWATER TRAINING COLLEGE (GAUTENG PROVINCE)

The Department of Correctional Services requires the item(s)/service(s) as described per attached bid invitation.

You are requested to complete the bid documents and submit it to the address indicated in the SBD 1.

Bidders must take note of the following:

- The closing date of the bid will be at **11h00 am on 04 December 2023** and will be valid for a period of **hundred and twenty (120) days** after the closing date.
- **Bidders must take note of the compulsory briefing session that will take place on 20 November 2023 at 10:00 am. The compulsory briefing session will be held at Zonderwater Training College (Gauteng Province) R515 Rayton Rd Cullinan, Mass VIP Room: Department of Correctional Services. Please refer to BD 6.2 for further information regarding this meeting.**
- Bids must be submitted in sealed envelope. The name and address of the bidder, the bid number and closing date must be indicated on the envelope. The envelope must not contain documents relating to any other bid.
- It is the responsibility of bidders to ensure that bids reach the address indicated on the SBD 1 before the closing date and time. **No late bids will be accepted.**

**correctional services**

Department:
Correctional Services
REPUBLIC OF SOUTH AFRICA

- Bidders need to acquaint themselves with the contents of the attached General and Special Conditions of Contract.
- It is the responsibility of bidders to ensure that they are registered on the National Treasury Central Supplier Database (CSD).

It will be expected of the successful bidder to sign a formal contract at this office after being notified of the acceptance of his/her bid.

Yours faithfully

.....
For National Commissioner: Correctional Services

Acting Director : Procurement

E.L. Motoma

Date: 2023/11/08

PART A INVITATION TO BID

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE (NAME OF DEPARTMENT/ PUBLIC ENTITY)

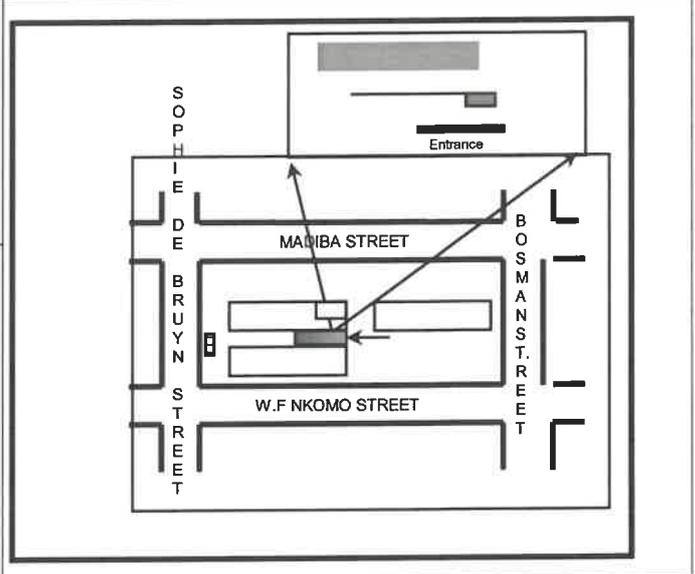
BID NUMBER:	HO 3/2023	CLOSING DATE:	04 DECEMBER 2023	CLOSING TIME:	11:00am
-------------	------------------	---------------	-------------------------	---------------	---------

DESCRIPTION
SUPPLY AND DELIVERY, INSTALLATION AND COMMISSIONING OF A 650kVA,400V,50Hz STANDBY DIESEL GENERATOR SET INCLUDING MAINTANANCE IN ACCORDANCE WITH SOUTH AFRICAN NATIONAL SPECIFICATION SANS 8528 AND COMPLY WITH THE OCCUPATIONAL HEALTH AND SAFETY ACT NO. 85 OF 1993 AND CURRENT REGULATION OF ALL OTHER CODES APPLICABLE: DELIVERY IN TWO (02) PHASES: DEPARTMENT OF CORRECTIONAL SERVICES: ZONDERWATER TRAINING COLLEGE (GAUTENG PROVINCE)

BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)

BID RESPONSE DOCUMENTS MAY BE POSTED TO:

**THE NATIONAL COMMISSIONER
 DEPARTMENT OF CORRECTIONAL SERVICES
 PRIVATE BAG X136
 PRETORIA
 0001**



BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT:

**POYNTONS-BUILDING
 WEST BLOCK
 124 W.F. NKOMO STREET (C/O SOPHIE DE BRUYN AND W.F. NKOMO STREET)
 PRETORIA
 0002**

BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO	TECHNICAL ENQUIRIES MAY BE DIRECTED TO:
---	--

CONTACT PERSON	Mudau Mavhungu	CONTACT PERSON	
TELEPHONE NUMBER		TELEPHONE NUMBER	
FACSIMILE NUMBER	012 323 8041	FACSIMILE NUMBER	
E-MAIL ADDRESS	Mavhungu.mudau@dcs.gov.za Jacob.Sibanyoni@dcs.gov.za	E-MAIL ADDRESS	

SUPPLIER INFORMATION

NAME OF BIDDER			
POSTAL ADDRESS			
STREET ADDRESS			
TELEPHONE NUMBER	CODE	NUMBER	
CELLPHONE NUMBER			
FACSIMILE NUMBER	CODE	NUMBER	
E-MAIL ADDRESS			
VAT REGISTRATION NUMBER			
SUPPLIER COMPLIANCE STATUS	TAX COMPLIANCE SYSTEM PIN:	OR	CENTRAL SUPPLIER DATABASE No: MAAA
B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE	[TICK APPLICABLE BOX] <input type="checkbox"/> Yes <input type="checkbox"/> No		B-BBEE STATUS LEVEL SWORN AFFIDAVIT [TICK APPLICABLE BOX] <input type="checkbox"/> Yes <input type="checkbox"/> No

[A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE/ SWORN AFFIDAVIT (FOR EMES & QSEs) MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR B-BBEE]

ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES ENCLOSE PROOF]	ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES, ANSWER THE QUESTIONNAIRE BELOW]
---	--	--	---

QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS

IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)? YES NO

DOES THE ENTITY HAVE A BRANCH IN THE RSA? YES NO

DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA? YES NO

DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA? YES NO

IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION? YES NO

IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 BELOW.

**PART B
TERMS AND CONDITIONS FOR BIDDING**

1. BID SUBMISSION:
1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
1.2. ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED—(NOT TO BE RE-TYPED) OR IN THE MANNER PRESCRIBED IN THE BID DOCUMENT.
1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT, 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.
1.4. THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (SBD7).
2. TAX COMPLIANCE REQUIREMENTS
2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
2.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VERIFY THE TAXPAYER'S PROFILE AND TAX STATUS.
2.3 APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE WWW.SARS.GOV.ZA.
2.4 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.
2.5 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.
2.6 WHERE NO TCS PIN IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.
2.7 NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE, COMPANIES WITH DIRECTORS WHO ARE PERSONS IN THE SERVICE OF THE STATE, OR CLOSE CORPORATIONS WITH MEMBERS PERSONS IN THE SERVICE OF THE STATE."

NB: FAILURE TO PROVIDE / OR COMPLY WITH ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID.

SIGNATURE OF BIDDER:

CAPACITY UNDER WHICH THIS BID IS SIGNED:
(Proof of authority must be submitted e.g. company resolution)

DATE:

GOVERNMENT PROCUREMENT

GENERAL CONDITIONS OF CONTRACT

NOTES

The purpose of this document is to:

- (i) Draw special attention to certain general conditions applicable to government bids, contracts and orders; and
- (ii) To ensure that clients be familiar with regard to the rights and obligations of all parties involved in doing business with government.

In this document words in the singular also mean in the plural and vice versa and words in the masculine also mean in the feminine and neuter.

- The General Conditions of Contract will form part of all bid documents and may not be amended.
- Special Conditions of Contract (SCC) relevant to a specific bid, should be compiled separately for every bid (if applicable) and will supplement the General Conditions of Contract. Whenever there is a conflict, the provisions in the SCC shall prevail.

TABLE OF CLAUSES

1. Definitions
2. Application
3. General
4. Standards
5. Use of contract documents and information; inspection
6. Patent rights
7. Performance security
8. Inspections, tests and analysis
9. Packing
10. Delivery and documents
11. Insurance
12. Transportation
13. Incidental services
14. Spare parts
15. Warranty
16. Payment
17. Prices
18. Contract amendments
19. Assignment
20. Subcontracts
21. Delays in the supplier's performance
22. Penalties
23. Termination for default
24. Dumping and countervailing duties
25. Force Majeure
26. Termination for insolvency
27. Settlement of disputes
28. Limitation of liability
29. Governing language
30. Applicable law
31. Notices
32. Taxes and duties
33. National Industrial Participation (NIP) Programme

General Conditions of Contract

1. Definitions

1. The following terms shall be interpreted as indicated:
 - 1.1 "Closing time" means the date and hour specified in the bid documents for the receipt of bids.
 - 1.2 "Contract" means the written agreement entered into between the purchaser and the supplier, as recorded in the contract form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
 - 1.3 "Contract price" means the price payable to the supplier under the contract for the full and proper performance of his contractual obligations.
 - 1.4 "Corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution.
 - 1.5 "Countervailing duties" are imposed in cases where an enterprise abroad is subsidized by its government and encouraged to market its products internationally.
 - 1.6 "Country of origin" means the place where the goods were mined, grown or produced or from which the services are supplied. Goods are produced when, through manufacturing, processing or substantial and major assembly of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or utility from its components.
 - 1.7 "Day" means calendar day.
 - 1.8 "Delivery" means delivery in compliance of the conditions of the contract or order.
 - 1.9 "Delivery ex stock" means immediate delivery directly from stock actually on hand.
 - 1.10 "Delivery into consignees store or to his site" means delivered and unloaded in the specified store or depot or on the specified site in compliance with the conditions of the contract or order, the supplier bearing all risks and charges involved until the supplies are so delivered and a valid receipt is obtained.
 - 1.11 "Dumping" occurs when a private enterprise abroad market its goods on own initiative in the RSA at lower prices than that of the country of origin and which have the potential to harm the local industries in the RSA.
 - 1.12 "Force majeure" means an event beyond the control of the supplier and not involving the supplier's fault or negligence and not foreseeable. Such events may include, but is not restricted to, acts of the purchaser in its sovereign capacity, wars or

Amendment 1 of 2010

revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.

- 1.13 "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of any bidder, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the bidder of the benefits of free and open competition.
- 1.14 "GGC" means the General Conditions of Contract.
- 1.15 "Goods" means all of the equipment, machinery, and/or other materials that the supplier is required to supply to the purchaser under the contract.
- 1.16 "Imported content" means that portion of the bid price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or his subcontractors) and which costs are inclusive of the costs abroad, plus freight and other direct importation costs such as landing costs, dock dues, import duty, sales duty or other similar tax or duty at the South African place of entry as well as transportation and handling charges to the factory in the Republic where the supplies covered by the bid will be manufactured.
- 1.17 "Local content" means that portion of the bid price which is not included in the imported content provided that local manufacture does take place.
- 1.18 "Manufacture" means the production of products in a factory using labour, materials, components and machinery and includes other related value-adding activities.
- 1.19 "Order" means an official written order issued for the supply of goods or works or the rendering of a service.
- 1.20 "Project site," where applicable, means the place indicated in bid documents.
- 1.21 "Purchaser" means the organization purchasing the goods.
- 1.22 "Republic" means the Republic of South Africa.
- 1.23 "SCC" means the Special Conditions of Contract.
- 1.24 "Services" means those functional services ancillary to the supply of the goods, such as transportation and any other incidental services, such as installation, commissioning, provision of technical assistance, training, catering, gardening, security, maintenance and other such obligations of the supplier covered under the contract.

- 1.25 "Written" or "in writing" means handwritten in ink or any form of electronic or mechanical writing.
- 2. Application**
- 2.1 These general conditions are applicable to all bids, contracts and orders including bids for functional and professional services, sales, hiring, letting and the granting or acquiring of rights, but excluding immovable property, unless otherwise indicated in the bid documents.
- 2.2 Where applicable, special conditions of contract are also laid down to cover specific supplies, services or works.
- 2.3 Where such special conditions of contract are in conflict with these general conditions, the special conditions shall apply.
- 3. General**
- 3.1 Unless otherwise indicated in the bid documents, the purchaser shall not be liable for any expense incurred in the preparation and submission of a bid. Where applicable a non-refundable fee for documents may be charged.
- 3.2 With certain exceptions, invitations to bid are only published in the Government Tender Bulletin. The Government Tender Bulletin may be obtained directly from the Government Printer, Private Bag X85, Pretoria 0001, or accessed electronically from www.treasury.gov.za
- 4. Standards**
- 4.1 The goods supplied shall conform to the standards mentioned in the bid documents and specifications.
- 5. Use of contract documents and information; inspection.**
- 5.1 The supplier shall not, without the purchaser's prior written consent, disclose the contract, or any provision thereof, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the purchaser in connection therewith, to any person other than a person employed by the supplier in the performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.
- 5.2 The supplier shall not, without the purchaser's prior written consent, make use of any document or information mentioned in GCC clause 5.1 except for purposes of performing the contract.
- 5.3 Any document, other than the contract itself mentioned in GCC clause 5.1 shall remain the property of the purchaser and shall be returned (all copies) to the purchaser on completion of the supplier's performance under the contract if so required by the purchaser.
- 5.4 The supplier shall permit the purchaser to inspect the supplier's records relating to the performance of the supplier and to have them audited by auditors appointed by the purchaser, if so required by the purchaser.
- 6. Patent rights**
- 6.1 The supplier shall indemnify the purchaser against all third-party claims of infringement of patent, trademark, or industrial design

Amendment 1 of 2010

rights arising from use of the goods or any part thereof by the purchaser.

7. Performance security

- 7.1 Within thirty (30) days of receipt of the notification of contract award, the successful bidder shall furnish to the purchaser the performance security of the amount specified in SCC.
- 7.2 The proceeds of the performance security shall be payable to the purchaser as compensation for any loss resulting from the supplier's failure to complete his obligations under the contract.
- 7.3 The performance security shall be denominated in the currency of the contract, or in a freely convertible currency acceptable to the purchaser and shall be in one of the following forms:
- (a) a bank guarantee or an irrevocable letter of credit issued by a reputable bank located in the purchaser's country or abroad, acceptable to the purchaser, in the form provided in the bid documents or another form acceptable to the purchaser; or
 - (b) a cashier's or certified cheque
- 7.4 The performance security will be discharged by the purchaser and returned to the supplier not later than thirty (30) days following the date of completion of the supplier's performance obligations under the contract, including any warranty obligations, unless otherwise specified in SCC.

8. Inspections, tests and analyses

- 8.1 All pre-bid testing will be for the account of the bidder.
- 8.2 If it is a bid condition that supplies to be produced or services to be rendered should at any stage during production or execution or on completion be subject to inspection, the premises of the bidder or contractor shall be open, at all reasonable hours, for inspection by a representative of the Department or an organization acting on behalf of the Department.
- 8.3 If there are no inspection requirements indicated in the bid documents and no mention is made in the contract, but during the contract period it is decided that inspections shall be carried out, the purchaser shall itself make the necessary arrangements, including payment arrangements with the testing authority concerned.
- 8.4 If the inspections, tests and analyses referred to in clauses 8.2 and 8.3 show the supplies to be in accordance with the contract requirements, the cost of the inspections, tests and analyses shall be defrayed by the purchaser.
- 8.5 Where the supplies or services referred to in clauses 8.2 and 8.3 do not comply with the contract requirements, irrespective of whether such supplies or services are accepted or not, the cost in connection with these inspections, tests or analyses shall be defrayed by the supplier.

8.6 Supplies and services which are referred to in clauses 8.2 and 8.3 and which do not comply with the contract requirements may be rejected.

8.7 Any contract supplies may on or after delivery be inspected, tested or analyzed and may be rejected if found not to comply with the requirements of the contract. Such rejected supplies shall be held at the cost and risk of the supplier who shall, when called upon, remove them immediately at his own cost and forthwith substitute them with supplies which do comply with the requirements of the contract.
Failing such removal the rejected supplies shall be returned at the suppliers cost and risk. Should the supplier fail to provide the substitute supplies forthwith, the purchaser may, without giving the supplier further opportunity to substitute the rejected supplies, purchase such supplies as may be necessary at the expense of the supplier.

8.8 The provisions of clauses 8.4 to 8.7 shall not prejudice the right of the purchaser to cancel the contract on account of a breach of the conditions thereof, or to act in terms of Clause 23 of GCC.

9. Packing

9.1 The supplier shall provide such packing of the goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packing, case size and weights shall take into consideration, where appropriate, the remoteness of the goods' final destination and the absence of heavy handling facilities at all points in transit.

9.2 The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the contract, including additional requirements, if any, specified in SCC, and in any subsequent instructions ordered by the purchaser.

10. Delivery and documents

10.1 Delivery of the goods shall be made by the supplier in accordance with the terms specified in the contract. The details of shipping and/or other documents to be furnished by the supplier are specified in SCC.

10.2 Documents to be submitted by the supplier are specified in SCC.

11. Insurance

11.1 The goods supplied under the contract shall be fully insured in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified in the SCC.

12. Transportation

12.1 Should a price other than an all-inclusive delivered price be required, this shall be specified in the SCC.

13. Incidental

13.1 The supplier may be required to provide any or all of the

Amendment 1 of 2010

services

following services, including additional services, if any, specified in SCC:

- (a) performance or supervision of on-site assembly and/or commissioning of the supplied goods;
- (b) furnishing of tools required for assembly and/or maintenance of the supplied goods;
- (c) furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied goods;
- (d) performance or supervision or maintenance and/or repair of the supplied goods, for a period of time agreed by the parties, provided that this service shall not relieve the supplier of any warranty obligations under this contract; and
- (e) training of the purchaser's personnel, at the supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied goods.

13.2 Prices charged by the supplier for incidental services, if not included in the contract price for the goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the supplier for similar services.

14. Spare parts

14.1 As specified in SCC, the supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the supplier:

- (a) such spare parts as the purchaser may elect to purchase from the supplier, provided that this election shall not relieve the supplier of any warranty obligations under the contract; and
- (b) in the event of termination of production of the spare parts:
 - (i) Advance notification to the purchaser of the pending termination, in sufficient time to permit the purchaser to procure needed requirements; and
 - (ii) following such termination, furnishing at no cost to the purchaser, the blueprints, drawings, and specifications of the spare parts, if requested.

15. Warranty

15.1 The supplier warrants that the goods supplied under the contract are new, unused, of the most recent or current models, and that they incorporate all recent improvements in design and materials unless provided otherwise in the contract. The supplier further warrants that all goods supplied under this contract shall have no defect, arising from design, materials, or workmanship (except when the design and/or material is required by the purchaser's specifications) or from any act or omission of the supplier, that may develop under normal use of the supplied goods in the conditions prevailing in the country of final destination.

15.2 This warranty shall remain valid for twelve (12) months after the goods, or any portion thereof as the case may be, have been

Amendment 1 of 2010

delivered to and accepted at the final destination indicated in the contract, or for eighteen (18) months after the date of shipment from the port or place of loading in the source country, whichever period concludes earlier, unless specified otherwise in SCC.

- 15.3 The purchaser shall promptly notify the supplier in writing of any claims arising under this warranty.
- 15.4 Upon receipt of such notice, the supplier shall, within the period specified in SCC and with all reasonable speed, repair or replace the defective goods or parts thereof, without costs to the purchaser.
- 15.5 If the supplier, having been notified, fails to remedy the defect(s) within the period specified in SCC, the purchaser may proceed to take such remedial action as may be necessary, at the supplier's risk and expense and without prejudice to any other rights which the purchaser may have against the supplier under the contract.

16. Payment

- 16.1 The method and conditions of payment to be made to the supplier under this contract shall be specified in SCC.
- 16.2 The supplier shall furnish the purchaser with an invoice accompanied by a copy of the delivery note and upon fulfillment of other obligations stipulated in the contract.
- 16.3 Payments shall be made promptly by the purchaser, but in no case later than thirty (30) days after submission of an invoice or claim by the supplier.
- 16.4 Payment will be made in Rand unless otherwise stipulated in SCC.

17. Prices

- 17.1 Prices charged by the supplier for goods delivered and services performed under the contract shall not vary from the prices quoted by the supplier in his bid, with the exception of any price adjustments authorized in SCC or in the purchaser's request for bid validity extension, as the case may be.

18. Contract amendments

- 18.1 No variation in or modification of the terms of the contract shall be made except by written amendment signed by the parties concerned.

19. Assignment

- 19.1 The supplier shall not assign, in whole or in part, its obligations to perform under the contract, except with the purchaser's prior written consent.

20. Subcontracts

- 20.1 The supplier shall notify the purchaser in writing of all subcontracts awarded under this contracts if not already specified in the bid. Such notification, in the original bid or later, shall not relieve the supplier from any liability or obligation under the contract.

21. Delays in the supplier's performance

- 21.1 Delivery of the goods and performance of services shall be made by the supplier in accordance with the time schedule prescribed by the purchaser in the contract.
- 21.2 If at any time during performance of the contract, the supplier or its subcontractor(s) should encounter conditions impeding timely delivery of the goods and performance of services, the supplier shall promptly notify the purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the supplier's notice, the purchaser shall evaluate the situation and may at his discretion extend the supplier's time for performance, with or without the imposition of penalties, in which case the extension shall be ratified by the parties by amendment of contract.
- 21.3 No provision in a contract shall be deemed to prohibit the obtaining of supplies or services from a national department, provincial department, or a local authority.
- 21.4 The right is reserved to procure outside of the contract small quantities or to have minor essential services executed if an emergency arises, the supplier's point of supply is not situated at or near the place where the supplies are required, or the supplier's services are not readily available.
- 21.5 Except as provided under GCC Clause 25, a delay by the supplier in the performance of its delivery obligations shall render the supplier liable to the imposition of penalties, pursuant to GCC Clause 22, unless an extension of time is agreed upon pursuant to GCC Clause 21.2 without the application of penalties.
- 21.6 Upon any delay beyond the delivery period in the case of a supplies contract, the purchaser shall, without cancelling the contract, be entitled to purchase supplies of a similar quality and up to the same quantity in substitution of the goods not supplied in conformity with the contract and to return any goods delivered later at the supplier's expense and risk, or to cancel the contract and buy such goods as may be required to complete the contract and without prejudice to his other rights, be entitled to claim damages from the supplier.

22. Penalties

- 22.1 Subject to GCC Clause 25, if the supplier fails to deliver any or all of the goods or to perform the services within the period(s) specified in the contract, the purchaser shall, without prejudice to its other remedies under the contract, deduct from the contract price, as a penalty, a sum calculated on the delivered price of the delayed goods or unperformed services using the current prime interest rate calculated for each day of the delay until actual delivery or performance. The purchaser may also consider termination of the contract pursuant to GCC Clause 23.

23. Termination for default

- 23.1 The purchaser, without prejudice to any other remedy for breach of contract, by written notice of default sent to the supplier, may terminate this contract in whole or in part:

Amendment 1 of 2010

- (a) if the supplier fails to deliver any or all of the goods within the period(s) specified in the contract, or within any extension thereof granted by the purchaser pursuant to GCC Clause 21.2;
- (b) if the Supplier fails to perform any other obligation(s) under the contract; or
- (c) if the supplier, in the judgment of the purchaser, has engaged in corrupt or fraudulent practices in competing for or in executing the contract.

23.2 In the event the purchaser terminates the contract in whole or in part, the purchaser may procure, upon such terms and in such manner as it deems appropriate, goods, works or services similar to those undelivered, and the supplier shall be liable to the purchaser for any excess costs for such similar goods, works or services. However, the supplier shall continue performance of the contract to the extent not terminated.

23.3 Where the purchaser terminates the contract in whole or in part, the purchaser may decide to impose a restriction penalty on the supplier by prohibiting such supplier from doing business with the public sector for a period not exceeding ten (10) years.

23.4 If a purchaser intends imposing a restriction on a supplier or any person associated with the supplier, the supplier will be allowed a time period of not more than fourteen (14) days to provide reasons why the envisaged restriction should not be imposed. Should the supplier fail to respond within the stipulated fourteen (14) days the purchaser may regard the intended penalty as not objected against and may impose it on the supplier.

23.5 Any restriction imposed on any person by the Accounting Officer/ Authority will, at the discretion of the Accounting Officer/ Authority, also be applicable to any other enterprise or any partner, manager, director or other person who wholly or partly exercises or exercised or may exercise control over the enterprise of the first-mentioned person, and with which enterprise or person the first-mentioned person, is or was in the opinion of the Accounting Officer/Authority actively associated.

23.6 If a restriction is imposed, the purchaser must, within five (5) working days of such imposition, furnish the National Treasury, with the following information :

- (a) the name and address of the supplier and/or person restricted by the purchaser;
- (b) the date of commencement of the restriction'
- (c) the period of restriction; and
- (d) the reasons for the restriction.

These details will be loaded in the National Treasury's central data base of suppliers or persons prohibited from doing business with the public sector.

23.7 If a court of law convicts a person of an offence as contemplated in sections 12 or 13 of the Prevention and Combating of Corrupt Activities, Act No. 12 of 2004, the court may also rule that such person's name be endorsed on the Register for Tender Defaulters. When a person's name has been endorsed on the Register, the person will be prohibited from doing business with the public sector for a period not less than five years and not more than 10 years. The National Treasury is empowered to determine the period of restriction and each case will be dealt with on its own merits. According to section 32 of the Act the Register must be open to the public. The Register can be perused on the National Treasury Website.

24. Anti-dumping and countervailing duties and rights

24.1 When, after the date of bid, provisional payments are required, or anti-dumping or countervailing duties are imposed, or the amount of a provisional payment or anti-dumping or countervailing right is increased in respect of any dumped or subsidized import, the State is not liable for any amount so required or imposed, or for the amount of any such increase. When, after the said date, such a provisional payment is no longer required or any such anti-dumping or countervailing right is abolished, or where the amount of such provisional payment or any such right is reduced, any such favourable difference shall on demand be paid forthwith by the contractor to the State or the State may deduct such amounts from moneys (if any) which may otherwise be due to the contractor in regard to supplies or services which he delivered or rendered, or is to deliver or render in terms of the contract or any other contract or any other amount which may be due to him

25. Force Majeure

25.1 Notwithstanding the provisions of GCC Clauses 22 and 23, the supplier shall not be liable for forfeiture of its performance security, damages, or termination for default if and to the extent that his delay in performance or other failure to perform his obligations under the contract is the result of an event of force majeure.

25.2 If a force majeure situation arises, the supplier shall promptly notify the purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the purchaser in writing, the supplier shall continue to perform its obligations under the contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the force majeure event.

26. Termination for insolvency

26.1 The purchaser may at any time terminate the contract by giving written notice to the supplier if the supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the supplier, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the purchaser.

- 27. Settlement of Disputes**
- 27.1 If any dispute or difference of any kind whatsoever arises between the purchaser and the supplier in connection with or arising out of the contract, the parties shall make every effort to resolve amicably such dispute or difference by mutual consultation.
- 27.2 If, after thirty (30) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the purchaser or the supplier may give notice to the other party of his intention to commence with mediation. No mediation in respect of this matter may be commenced unless such notice is given to the other party.
- 27.3 Should it not be possible to settle a dispute by means of mediation, it may be settled in a South African court of law.
- 27.4 Mediation proceedings shall be conducted in accordance with the rules of procedure specified in the SCC.
- 27.5 Notwithstanding any reference to mediation and/or court proceedings herein,
- (a) the parties shall continue to perform their respective obligations under the contract unless they otherwise agree; and
 - (b) the purchaser shall pay the supplier any monies due the supplier.
- 28. Limitation of liability**
- 28.1 Except in cases of criminal negligence or willful misconduct, and in the case of infringement pursuant to Clause 6;
- (a) the supplier shall not be liable to the purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the supplier to pay penalties and/or damages to the purchaser; and
 - (b) the aggregate liability of the supplier to the purchaser, whether under the contract, in tort or otherwise, shall not exceed the total contract price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment.
- 29. Governing language**
- 29.1 The contract shall be written in English. All correspondence and other documents pertaining to the contract that is exchanged by the parties shall also be written in English.
- 30. Applicable law**
- 30.1 The contract shall be interpreted in accordance with South African laws, unless otherwise specified in SCC.
- 31. Notices**
- 31.1 Every written acceptance of a bid shall be posted to the supplier concerned by registered or certified mail and any other notice to him shall be posted by ordinary mail to the address furnished in his bid or to the address notified later by him in writing and such posting shall be deemed to be proper service of such notice

Amendment 1 of 2010

31.2 The time mentioned in the contract documents for performing any act after such aforesaid notice has been given, shall be reckoned from the date of posting of such notice.

32. Taxes and duties

32.1 A foreign supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the purchaser's country.

32.2 A local supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted goods to the purchaser.

32.3 No contract shall be concluded with any bidder whose tax matters are not in order. Prior to the award of a bid the Department must be in possession of a tax clearance certificate, submitted by the bidder. This certificate must be an original issued by the South African Revenue Services.

33. National Industrial Participation (NIP) Programme

33.1 The NIP Programme administered by the Department of Trade and Industry shall be applicable to all contracts that are subject to the NIP obligation.

34. Prohibition of Restrictive Practices

34.1 In terms of Section 4(1)b)(iii) of the Competition Act No. 89 of 1998, as amended, an agreement between, or concerted practice by, firms, or a decision by association of firms, is prohibited if it is between parties in a horizontal relationship and if a bidder(s) was/were in collusive bid (or bid rigging).

34.2 If a bidder(s) or contractor(s), based on reasonable grounds or evidence obtained by the purchaser, has/have engaged in the restrictive practice referred to above, the purchaser may refer the matter to the Competition Commission for investigation and possible imposition of administrative penalties as contemplated in the Competition Act No. 89 of 1998.

34.3 If a bidder(s) or contractor(s), has/have been found guilty by the Competition Commission of the restrictive practice referred to above, the purchaser may, in addition and without prejudice to any other remedy provided for, invalidate the bid(s) for such item(s) offered, and/or terminate the contract in whole or part, and/or restrict the bidder(s) or contractor(s) from conducting business with the public sector for a period not exceeding ten (10) years and/or claim damages from the bidder(s) or contractor(s) concerned.

The content of these General Conditions of Contract have been noted and accepted.

Signature of Bidder: _____.

Name: _____.

Date: _____.

(please ensure that all the pages of the General Conditions of Contract are initialled)

General Conditions of Contract (revised July 2010)



correctional services

Department:
Correctional Services
REPUBLIC OF SOUTH AFRICA

Department of Correctional Services

FACILITIES – PROFESSIONAL SERVICES

**SPECIFICATION FOR THE SUPPLY, INSTALLATION AND
COMMISSIONING OF 650kVA, 400V, 3PH, OUTDOOR GENERATOR
SET INCLUDING MAINTANANCE AT THE DEPARTMENT OF
CORRECTIONAL SERVICES ZONDERWATER COLLEGE**

Date: 27 SEPTEMBER 2023

Facilities Chief Directorate
Professional Services Directorate
Electrical Engineering Standards & Specifications
CO Nkomo and Sophie De Bruyn Street
Pretoria
0001

J.B. C.I. Sm
J.S.T. ell

Table of Contents

1.	SECTION 1 – GENERAL	2
1.1.	Intent of Specification.....	2
1.2.	Standards and Codes	2
1.3.	Compliance with Regulations.....	2
1.4.	Scope of Work.....	2
1.5.	Co-ordinating.....	3
1.6.	Tests Certificates and Inspections	3
1.7.	Operating and Maintenance Manuals	3
1.8.	Guarantee	3
1.9.	Materials and Workmanship	5
1.10.	Brochures.....	5
2.	SECTION 2 – EQUIPMENT REQUIREMENTS	7
2.1.	Engine	7
2.1.1.	General	7
2.1.2.	Rating	7
2.1.3.	De-Rating	7
2.1.4.	Starting and Stopping	7
2.1.5.	Starter Battery	7
2.1.6.	Cooling.....	8
2.1.7.	Lubrication.....	8
2.1.8.	Fuel Pump.....	8
2.1.9.	Fuel Tank	8
2.1.10.	Governor	9
2.1.11.	Flywheel	9
2.1.12.	Exhaust Silencer	9
2.1.13.	Accessories	9
2.1.14.	Exhaust emissions	9
2.2.	Alternator.....	10
2.2.1.	General	10
2.2.2.	Regulation	10
2.2.3.	Performance.....	10
2.2.4.	Coupling.....	10
2.3.	Switchboard	10
2.3.1.	General	10
2.3.2.	Construction	10
2.3.3.	Protection and Alarm Devices.....	11
2.3.4.	Modular Generator Set controller.....	12
2.3.5.	Manual Starting	15
2.3.6.	Battery Charging Equipment.....	15
2.3.7.	Switchboard Instruments	16
2.3.8.	Marking	16
2.3.9.	Earthing.....	16
2.3.10.	Operation Selector Switch	16
2.3.11.	Automatic Change-over System	16
2.3.12.	By-pass Switch and Main Isolator	17
2.3.13.	Start Delay	17
2.3.14.	Stop Delay.....	17
2.4.	Installation	17
2.5.	Warning Notices.....	17
2.6.	Construction	18
2.7.	Operation	18
3.	SECTION 3 – TECHNICAL SPECIFICATION	20
3.1.	General	20
3.2.	Site Information and Conditions.....	20
3.2.1.	Location.....	20
3.2.2.	Site Conditions	20
3.3.	Output and Voltage	20

3.4.	Switchboard/Control Panel Unit.....	21
3.5.	Cables	21
3.6.	Engine	21
3.7.	Alternator.....	21
3.8.	Load Acceptance	21
3.9.	Enclosure	22
3.10.	Alarms	23
3.11.	Remote Control Generator Switch	23
3.12.	Fuel Drip Tray	23
3.13.	Completion Time.....	23
3.14.	Inform	23
3.15.	Fuel Supply Tank	23
4.	SECTION 4 – SCHEDULES OF TECHNICAL INFORMATION	26
4.1.	Engine	26
4.2.	Alternator.....	28
4.3.	Switchboard	29
4.4.	Battery.....	30
4.5.	Dimensions	30
4.6.	Deviation from the Specification as an Alternative (State Briefly)	30
4.7.	Spare Parts and Maintenance Facilities	30
5.	SECTION 5 – PRICE SCHEDULES	32
5.1.	General	32
5.2.	Schedule	32
5.3.	Summary of Schedules of Quantities.....	35

CI SM HST all JB

SECTION 1 – GENERAL

TABLE OF CONTENTS

1.1.	Intent of Specification.....	2
1.2.	Standards and Codes	2
1.3.	Compliance with Regulations.....	2
1.4.	Scope of Work.....	2
1.5.	Co-ordinating.....	3
1.6.	Tests Certificates and Inspections	3
1.7.	Operating and Maintenance Manuals	3
1.8.	Guarantee	3
1.9.	Materials and Workmanship	5
1.10.	Brochures	5

01 8M JGT lll 2B

1. SECTION 1 – GENERAL

1.1. Intent of Specification

The specification is intended to cover the complete installation and commissioning of the outdoor, silenced, containerised, generator plant and associated distribution boards, cabling and auxiliaries. The minimum equipment requirements are outlined, but do not cover all the details of design and construction. Such details are recognised as being the exclusive responsibility of the contractor.

For the purposes of this document the following applies:

- Generator Contractor shall be referred to as the Generator Contractor or simply Contractor;
- The masculine includes the feminine;
- The singular includes the plural.

1.2. Standards and Codes

All standards referenced shall be the latest editions.

Correctional Services Act

OHSACT

SANS 10142-1

SANS 8528

SANS 60034

SANS IEC 60947

Department of Public Works Quality Specification Parts A, B and C.

Local municipality by-laws for generator installations. (To be obtained from local municipality)

Occupational Health and Safety Act.

The wiring of premises: Low Voltage Installations

Reciprocating internal combustion engine driven alternating current generating sets.

Rotating electrical Machines

Low Voltage Switchgear

1.3. Compliance with Regulations

The installation shall be erected and tested in accordance with the following Acts and regulations:

- a) The Occupational Health and Safety Act, 1993 (Act 85 of 1993) as amended,
- b) The Local Government Ordinance 1939 (Ordinance 17 of 1939) as amended and the municipal by-laws and any special requirements of the local supply authority,
- c) The Fire Brigade services Act 1987 (Act 99 of 1987) as amended,
- d) The National Building Regulations and Building Standards Act 1977 (Act 103 of 1977) as amended,
- e) The Electricity Act 1984 (Act 41 of 1984) as amended.
- f) The Environmental Act and Regulations

1.4. Scope of Work

Included in this Outdoor Generator Specification

Supply, delivery, installation and commissioning of the complete outdoor **prime rated** generator inside an IP65 and silenced canopy/container set on a concrete plinth as specified in this document.

The successful tenderer shall supply, deliver and install a complete single enclosed diesel driven standby generator set in a position that will be determined on site. The machine shall be totally enclosed in a 3CR12 stainless steel housing powder coated or within 50km from the coast with grade 316 steel housing powder coated. The exhaust shall be manufactured from stainless steel.

The housing is to be provided on galvanized 3CR12 stainless steel skids so that the generator set can be transported to site and placed in position on a concrete plinth, casted by the successful tenderer. The skids must be of sufficient height to allow for the passage of storm water under the set.

1.5. Co-ordinating

The Contractor shall familiarise himself with the requirements of the other professional disciplines and shall examine the plans and specifications covering each of these sections.

The generator space, noise and vibration requirements shall be carefully checked with other professional disciplines to ensure that the equipment can be installed in the proper sequence in the space allotted.

1.6. Tests Certificates and Inspections

The following tests are to be carried out:

- a) At the supplier's premises, before the generating set will be delivered to site Representatives of the Department must be present during the test to satisfy themselves that the generating set complies with the specification and delivers the specified output. The test must be carried out in accordance with SANS 8528. The Representative/Agent must be timeously advised of the date for the test.
- b) After completion of the works and before practical completion is taken, a full test will be carried out on the installation for a period of sufficient duration to determine the satisfactory working thereof. During this period the installation will be inspected and the contractor shall make good, to the satisfaction of the Representative/Agent, any defects which may arise.
- c) The Contractor shall provide all instruments and equipment required for testing and any water, power and fuel required for the commissioning and testing of the installation at completion.
- d) Test reports of both tests as specified under (a) and (b) are to be submitted to the Representative/Agent.

The total costs for these tests shall be included in the tendered amount.

In the event of the plant, equipment or installation not passing the test, the Representative/Agent shall be at liberty to deduct from the Contract amount all reasonable expenses incurred by the Employer and/or the Representative/Agent attending the test.

1.7. Operating and Maintenance Manuals

The Contractor shall be responsible for the compilation of a complete set of Operating and Maintenance manuals.

All information shall be recorded and reproduced in electronic format as well as supplying the Representative/Agent with three sets of hard copies.

Approval of the final Operating and Maintenance Manuals shall be a prerequisite for issuing of a Certificate of Practical Completion of the installation.

1.8. Guarantee and Maintenance

After works completion have been achieved, there will follow a 12-month warranty (inclusive of maintenance) and 24 months maintenance period and up to 4 000 hours of the generator running time.

During this period the generator contractor shall maintain the generator installation as per the requirements of the Occupational Health and Safety Act. This maintenance shall include systematic examinations, adjustments and lubrication of all generator equipment. Electrical and mechanical parts shall be repaired or replaced whenever it is required to maintain optimum performance without additional cost to the Department, unless the condition was caused by misuse or vandalism of the generator equipment or natural hazards/force majeure.

The work under this section shall be performed by competent, qualified accredited personnel under the supervision and in the direct employment of the Generator Contractor and shall not be transferred to any non-affiliated agent. Contract maintenance and repair work shall be done during normal working hours and shall further provide emergency call-back service twenty-four (24) hours a day, seven (7) days a week and as detailed in **Table 1**.

Incidents	Service Hours	Response Times	Operational Impact
Emergency	24 hours, 7 days	From receipt of Service Call 2 hours plus travel time from specified location based on 80km/hr	<ul style="list-style-type: none"> Failures that seriously affect the operational effectiveness. Failures that constitute a danger to personnel or equipment or a health hazard.
Urgent	07h00 to 17:00, Monday to Friday	From receipt of Service Call 2 hours plus travel time from specified location based on 80km/hr	<ul style="list-style-type: none"> Failures that are not causing immediate danger or a health hazard but affect operational effectiveness.
Important	07h00 to 17:00, Monday to Friday	From receipt of Service Call 2 hours plus travel time from specified location based on 80km/hr	<ul style="list-style-type: none"> Failures that affect operations, but do not seriously affect occupation of facilities or operational effectiveness.

Table 1. Types of Service Calls and response required

The Generator Contractor guarantees a compliance rate of 97.50% (ninety seven point five zero percent) with the Response Times Targets set out in Table 1 measured over a thirty (30) day calendar month period in respect of Fault and/or Problem Management ("Service Level").

For any given calendar month, the following financial penalties will apply to any Service Level Failure

Number of incidents	Percentage of Penalty
First incident of Service Level Failure	20 % of projected monthly invoice
Second incident of Service Level Failure	40 % of projected monthly invoice
Third incident of Service Level Failure	60 % of projected monthly invoice
Fourth incident of Service Level Failure	80 % of projected monthly invoice
Fifth incident of Service Level Failure	100 % of projected monthly invoice

Table 2. Monthly Financial Penalties per Service Level Failure

The Contractor will also be required to enter into a formal Service Level Agreement (SLA) which will be agreed upon before the maintenance period commences. The SLA will be implemented together with the proposed maintenance plan for a period of 36 months and up to 4000 hours of generator running time.

During the guarantee and maintenance period the Department will invite tenders for the comprehensive maintenance of the generator, which will commence after the final completion has taken place, i.e. after the twelfth month guarantee period is over and all defects are corrected.

CI SM HST 02/13

1.9. Materials and Workmanship

- a) The work throughout shall be executed to the highest standards and to the entire satisfaction of the Representative/Agent who shall interpret the meaning of the Contract Document and shall have the authority to reject any work and materials, which, in his judgement, are not in full accordance therewith. All condemned material and workmanship shall be replaced or rectified as directed and approved by the Representative/Agent.
- b) All work shall be executed in a first-class manner by qualified accredited tradesman.
- c) The Contractor shall be fully responsible for his work and shall replace any of the work which may be damaged, lost or stolen. The Contractor shall protect the building and its contents against damage by him, his employees or sub-contractors and shall make good any damage thereto.
- d) The Contractor shall indemnify the Employer of all liability for damages arising from injuries or disabilities to persons or damage to property occasioned by any act or omission of the Contractor or any of his sub-contractors, including any and all expenses, legal or otherwise, which may be incurred by the Employer or Representative/Agent in the defence of any claim, action or suit.
- e) The Contractor shall warrant that the materials and workmanship shall be of the highest grade, that the equipment shall be installed in a practical and first-class manner in accordance with the best practices and ready and complete for full operation. It is specifically intended that all material or labour which is usually provided as part of such equipment as is called for and which is necessary for its proper completion and operation shall be provided without additional cost whether or not shown or described in the Contract Document.
- f) The Contractor shall thoroughly acquaint himself with the work involved and shall verify on site all measurements necessary for proper installation and commissioning work. The Contractor shall also be prepared to promptly furnish any information relating to his own work as may be necessary for the proper installation work and shall co-operate with and co-ordinate the work of others as may be applicable.
- g) The Contractor shall inspect and verify that the existing power feeder system is compatible with the equipment offered and any changes or upgrading of the electrical supply shall be brought to the attention of the Representative/Agent.
- h) Material and equipment damaged in transit shall be replaced with undamaged material without additional cost to the Department.
- i) All components and their respective adjustment, which do not form part of the equipment installation work, but influence the optimum and safe operation of the equipment shall be considered to form part of, and shall be included in the Contractor's scope of works.
- j) All control equipment and serviceable items shall be installed and positioned such that they will be accessible and maintainable.
- k) The Contractor shall make sure that all safety regulations and measures and environmental regulations are applied and enforced during the installation and guarantee period to ensure the safety of the public and the User Client.

1.10. Brochures

Detailed brochures of all equipment offered shall be presented together with the tender documents.

SECTION 2 – EQUIPMENT REQUIREMENTS

TABLE OF CONTENTS

2.1.	Engine	7
2.1.1.	General	7
2.1.2.	Rating	7
2.1.3.	De-Rating	7
2.1.4.	Starting and Stopping	7
2.1.5.	Starter Battery	7
2.1.6.	Cooling	8
2.1.7.	Lubrication.....	8
2.1.8.	Fuel Pump.....	8
2.1.9.	Fuel Tank	8
2.1.10.	Governor	9
2.1.11.	Flywheel	9
2.1.12.	Exhaust Silencer	9
2.1.13.	Accessories.....	9
2.1.14.	Exhaust emissions	9
2.2.	Alternator.....	10
2.2.1.	General	10
2.2.2.	Regulation	10
2.2.3.	Performance.....	10
2.2.4.	Coupling	10
2.3.	Switchboard	10
2.3.1.	General	10
2.3.2.	Construction	10
2.3.3.	Protection and Alarm Devices.....	11
2.3.4.	Modular Generator Set controller.....	12
2.3.5.	Manual Starting	15
2.3.6.	Battery Charging Equipment.....	15
2.3.7.	Switchboard Instruments	16
2.3.8.	Marking	16
2.3.9.	Earthing.....	16
2.3.10.	Operation Selector Switch	16
2.3.11.	Automatic Change-over System	16
2.3.12.	By-pass Switch and Main Isolator.....	17
2.3.13.	Start Delay	17
2.3.14.	Stop Delay.....	17
2.4.	Installation.....	17
2.5.	Warning Notices.....	18
2.6.	Construction	18
2.7.	Operation	18

2. SECTION 2 – EQUIPMENT REQUIREMENTS

2.1. Engine

2.1.1. General

The engine must comply with the requirements laid down in SANS 8528 and must be of the atomized injection, compression ignition type, running at a speed not exceeding 1500 r.p.m. The engine must be amply rated for the required electrical output of the set, when running under the site conditions. The starting period for either manual or automatic switching-on until the taking over by the generating set, in one step, of a load equal to the specified site electrical output, shall not exceed 15 seconds. This must be guaranteed by the Tenderer.

Turbo-charged engines will only be accepted if the Tenderer submits a written guarantee that the engine can deliver full load within the specified starting period.

Curves furnished by the engine makers, showing the output of the engine offered against the speed, for both intermittent and continuous operation as well a fuel consumption curves when the engine is used for electric generation, must be submitted with the Tender.

2.1.2. Rating

The set shall be capable of delivering the specified output continuously under the site Conditions, without overheating. The engine shall be capable of delivering an output of 110% of the specified output for one hour in any period of 12 hours consecutive running in accordance with SANS 8528.

2.1.3. De-Rating

The engine must be de-rated for the site conditions as set out in the Technical Specification, Section 3 of this document.

The de-rating of the engine for site conditions shall be strictly in accordance with SANS 8528 as amended to date. Any other methods of de-rating must have the approval of the Department and must be motivated in detail. Such de-rating must be guaranteed in writing and proved by the successful Tenderer at the site test.

2.1.4. Starting and Stopping

The engine shall be fitted with an electric starter motor and be easily started from cold, without the use of any special ignition devices under summer as well as winter conditions.

Tenderers must state what arrangements are provided to ensure easy starting in cold weather. Full details of this equipment must be submitted. In the case of water cooled engines, any electrical heaters shall be thermostatically controlled. The electrical circuit for such heaters shall be taken from the control panel, and must be protected by a suitable circuit breaker.

2.1.5. Starter Battery

The set must be supplied a fully charged lead-acid type or maintenance free type battery, complete with necessary electrolyte. The battery must have sufficient capacity to provide the starting torque stipulated by the engine manufacturer. The battery capacity shall not be less than 120 Ah and shall be capable of providing three consecutive start attempts from cold and thereafter a fourth attempt under manual control of not less than 20 seconds duration each. The battery must be of the heavy duty "low maintenance" type, house in a suitable battery box.

SM JAT
OI all JB

2.1.6. Cooling

The engine may be either of the air or water cooled type. In the case of water-cooling, a built-on heavy duty, tropical type pressurised radiator must be fitted. Only stand-by sets that are water cooled shall have electric heaters.

For either method of cooling, protection must be provided against running at excessive temperatures. The operation of this protective device must give a visual and audible indication on the switchboard. Water-cooled engines shall in addition be fitted with a low water cut-out switch, installed in the radiator, to switch the set off in the event of a loss of coolant. The protection shall operate in the same way as the other cut-outs (e.g. low oil pressure). All air ducts for the cooling of the engine are to be allowed for. The air shall be supplied from the cooling fan cowling/radiator face to air outlet louvers in the enclosure.

2.1.7. Lubrication

Lubrication of the main bearings and other important moving parts shall be by forced feed system. An automatic low oil pressure cut-out must be fitted, operating the stop solenoid on the engine and giving a visible and audible indication on the switchboard.

2.1.8. Fuel Pump

The fuel injection equipment is suitable for operation with the commercial brands of diesel fuel normally available in South Africa.

2.1.9. Fuel Tank

The fuel tank shall be an integral part of the base frame of the generator set. The tank shall have sufficient capacity for standby sets to run the engine on full load for a minimum period of 24 hours.

The diesel fuel storage system / tank which will be provided with the standby generator installation must be fitted with a fuel filtration and water separation system (filter & separator) which is entirely separate from the fuel supply line and line filter to the engine. This filtration and water separation system must be dedicated to purifying the content of the storage system / tank by way of the cleaning processes which are applied while circulating the fuel through the filter & separator unit.

The filtration system must be able to handle diesel fuel of "high" and of "low" sulphur content for an indefinite period. The suction line of the system must be connected to the lowest part of the storage system / tank. The return line must be connected in the top section of the storage system / tank in such a position and in such a way that the flow of fuel within the storage system / tank between the fuel return point and the fuel suction point will induce scouring of the bottom of the system / tank to effectively capture sediment and water in the to be filtered fuel.

The filtration unit must filter the diesel fuel, removing suspended particles of effective diameters down to 5 micron. In addition, it must separate all water from the fuel and the fuel storage system and automatically dispose of / dump such water into an open, removable receptacle for disposal at the installation or in a suitable position outside the building. Separation of the fuel and water must be sufficiently effective that the discharged water will meet the standard required for it to be disposed of into a municipal drain and sewer system.

The filter and water separator unit must draw its power from the DC batteries used to power the relevant generator set. The circulating pump shall be provided with a controller programmed to switch the pump through not more than three complete on and off cycles of equal time (i.e. 50% on; 50% off) , per hour, with a deviation of not more than 10 % ±. The pump must be capable of a duty cycle of not less than 60% running time. The flow rate through the circulating pump must be between 1 L/min and 1.25 L /min.

The filter cartridge of the filter and water separator unit must be replaceable, and, in normal operational conditions, not require replacement within periods shorter than three months. The replacement units must be readily available.

SM ~~AI~~ all JB

The filtration & separator system may be mounted against the wall of the plant room or on the inside of a container, which may house the installation as may be specified elsewhere in this document.

The tank shall be fitted with a suitable filter, a full height gauge glass, "low fuel level" alarm, giving an audible and visible signal on the switchboard as well as a low-low fuel level cut-out.

An electrically operated pump with sufficient length of oil resistant hose to reach 2m beyond the door of the canopy/container, shall be supplied, for each set for filling the fuel tank/s from 200 litre drums.

The interconnection fuel piping shall consist of copper tubes and the connection to vibrating components shall be in flexible tubing with armoured covering.

The contractor shall allow for the supply and installation of a fuel shut off fusible link in the container. The fusible link shall shut off the fuel at a temperature of 130 degrees in an event of a fire in the self-contain enclosure. The fusible link shall be mounted above the engine and coupled to the shut off valve by means of a 2mm stainless steel cable. The cable shall be installed to the shut off valve without any possibility of kinking the cable which may cause malfunctioning of the protection device.

2.1.10. Governor

The speed of the engine shall be controlled by a governor in accordance with ECM of SANS 8528 if not otherwise specified in the Detailed Specification.

The permanent speed variation between no load and full load shall not exceed 4.5% of the nominal engine speed and the temporary speed variation shall not exceed 10%. External facilities must be provided on the engine, to adjust the nominal speed setting by $\pm 5\%$ at all loads between zero and rated load.

2.1.11. Flywheel

A suitable flywheel must be fitted, so that lights fed from the set will be free from any visible flicker.

The cyclic irregularity of the set must be within the limit laid down in SANS 8528.

2.1.12. Exhaust Silencer

It is essential to keep the noise level as low as possible. An effective exhaust silencing system of the residential type must be provided and shall be capable of providing 20 to 30 decibels of suppression.

The exhaust system shall consist of 3CR12 steel for inland areas (greater than 50km from the coast) or Grade 304 stainless steel in coastal areas.

The exhaust pipe shall be installed in such a way that the expelled exhaust fumes will not cause discomfort to the public. The exhaust pipe must be flexibly connected to the engine to take up vibrations transmitted from the engine, which may cause breakage. The exhaust piping and silencer shall be lagged and then cladded in stainless steel sheet to reduce the heat and noise transmission in the generator enclosure and shall be protected against the ingress of driving rain at 45° to the horizontal. The exhaust pipe must extend 0,5m above the canopy.

2.1.13. Accessories

The engine must be supplied complete with all accessories, air and oil filters, 3 instruction manuals, spare parts lists, the first fill of all lubricating oils, fuel, etc.

2.1.14. Exhaust emissions

The exhaust emissions shall comply with US Tier III/EU stage III standards.

2.2. Alternator

2.2.1. General

The alternator shall be of the self-excited brushless type, with enclosed ventilated drip-proof housing and must be capable of supplying the specified output continuously with a temperature rise not exceeding the limits laid down in SANS 60034-1 for rotor and stator windings.

The alternator shall be capable of delivering an output of 110% of the specified output, for one hour in any period of 12 hours consecutive running.

Both windings must be fully impregnated for tropical climate and must have an oil resisting finishing varnish.

2.2.2. Regulation

The alternator must preferably be self-regulated without the utilisation of solid state elements. The inherent voltage regulation must not exceed plus or minus 5% of the nominal voltage specified, at all loads with the power factor between unity and 0,9 lagging and within the driving speed variations of 4,5% between no-load and full load.

2.2.3. Performance

The excitation system shall be designed to promote rapid voltage recovery following the sudden application of the load. The voltage shall recover to within 5% of the steady state within 300 milliseconds following the application of full load and the transient voltage dip shall not exceed 18%.

2.2.4. Coupling

The engine and alternator must be directly coupled by means of a high quality flexible coupling, ISO 9001:2000 approved and must be designed and manufactured to this quality system.

2.3. Switchboard

2.3.1. General

A switchboard must be supplied and installed to incorporate the equipment for the control and protection of the generating set and battery charging.

The switchboard must conform the specification as set out in the following paragraphs.

2.3.2. Construction

The switchboard shall be enclosed in the steel enclosure.

All equipment, connections and terminals shall be easily accessible from the front. The front panels may be either hinged or removable and fixed with studs and chromium-plated cap nuts. Self-tapping screws shall not be used in the construction of the board.

All pushbuttons, pilot lights, control switches, instrument and control fuses, shall be mounted on hinged panels with the control wires in flexible looms.

The steelwork of the boards must be thoroughly de-rusted, primed with zinc chromate and finished with two coats of signal red quality enamel, or a baked powder epoxy coating.

Suitably rated terminals must be provided for all main circuits and the control and protection circuits. Where cable lugs are used, these shall be crimped onto the cable strands. Screw terminals shall be of the type to prevent spreading of cable strands. All terminals shall be clearly marked.

For the control wiring, each wire shall be fitted with a cable or wire marker of approved type, and numbering of these markers must be shown on the wiring diagram on the switchboard. Control wiring shall be run in PVC trunking. The trunking shall be properly fixed to the switchboard steelwork. Adhesives shall not be acceptable for the fixing of trunking or looms.

The modular generator set controller and protection equipment shall be mounted on a separate easily replaceable panel.

All equipment on the switchboard, such as contactors, isolators, busbars, etc., shall have ample current carrying capacity to handle at least 110% of the alternator full load current.

Access to the cubicle will be such that all components can be conveniently reached for testing and maintenance purposes.

The necessary bushes and a screen over the terminals will be provided where the power feeds enter and leave the cubicle.

The cubicle will be so constructed that the ac and dc components are screened from one another.

2.3.3. Protection and Alarm Devices

All switchboards shall be equipped with protection and alarm devices as described below.

A circuit breaker and an adjustable current limiting protection relay must be installed for protection of the alternator. The protection relay shall be of the type with inverse time characteristics. The relay shall cause contactor to isolate the alternator and stop the engine.

Protection must be provided for overload, high engine temperature, low lubricating oil pressure, over speed, start-failure, and low water level.

Reset push buttons are required on the modular generator set controller and a visible signal are required and the engine must stop when any of the protective devices operate. In the case of manual operation of standby sets, it shall not be possible to restart the engine.

The indication on the modular generator set controller must be in ENGLISH.

"OVERLOAD"
"TEMPERATURE HIGH"
"OIL PRESSURE LOW"
"OVERSPEED"
"START FAILURE"
"LOW WATER LEVEL"

In addition an audible and visible flashing signal shall be provided, when:

- a) The fuel level in the service tank is low. The indication on the modular generator set controller shall be "FUEL LOW".
- b) The battery charger failed. The indication on the modular generator set controller shall be "CHARGER FAIL"

A low-low level sensor must be provided. At this level the engine must stop to prevent air entering the fuel system.

This is also applicable to the engine driven generator/alternator.

All alarm conditions must operate an alarm hooter. A pushbutton must be installed in the hooter circuit to stop the audible signal, but the fault indicating light on the control panel must remain lit until the fault has been rectified.

An on/off switch is not acceptable. After the hooter has been stopped, it must be re-set automatically, ready for a further alarm.

The hooter must be of the continuous duty and low consumption type. Both hooter and protection circuits must operate from the battery.

Potential free contacts from the alarm relay must be brought down to terminals for remote indication of alarm conditions.

A test pushbutton must be provided to test all indicators lamps.

2.3.4. Modular Generator Set controller

The modular generator set controller shall be an electronic unit to match those of the other modular generator set controllers and of a high quality i.e. Levato, Deep Sea Electronics, Circom. It must be provided with IO and communication facilities.

The modular generator set controller will be supplied with all its functions and shall be mounted on a separate easily replaceable panel with plug in termination blocks for easy installation and replacement.

The modular generator set controller interface will be implemented with relays, contactors etc.

The modular generator set controller will have a mimic display of the alternator/mains/ change over contactors configuration with LED's showing the status of the mains, alternator and change over contactors.

Configuration software shall be supplied with the system. The software will be capable of the following:

- Fault management (event log)
- Configuration management (software upgrades and function changes)
- Account management (energy management)
- Performance management (generator set point changes)
- Security management (passwords)

The modular generator set controller will have a standard RS 232/485 or Ethernet interface suitable for TCP I/P transport medium. All communication including configuration management will be done through this port. Equipment connected at each end of the RS 232 or Ethernet cable shall be adequately protected against transient over-voltages, lightning effects (particularly if the set and remote alarms are in separate buildings), switching surges, power system surges or mains and alternator borne noise/interference.

The controller will incorporate the following functions:

- Mains sensing
- Alternator output-voltage sensing
- Alternator over- frequency sensing
- Control of processor unit (self-diagnostics)
- Alarm/ Status indications
- Control selector and operation
- Phase rotation monitor

A 4- position control selector on the controller will be provided to facilitate the following modes of operation:

- OFF: Diesel/ alternator generator set switched off
- MANUAL: Mains bypassed: Diesel/ alternator will not take load

- AUTO: Diesel /alternator takes load on mains failure
- TEST: Diesel /alternator takes load on mains failure
- A standby failure alarm (SF) will be given on the controller and to the output alarms when "Not in Auto" is selected.

The modular generator set controller must monitor the following

When the voltage of the incoming mains varies by more than a pre-program value (default +/- 10%) from the normal voltage on any phase, the controller will signal that the incoming mains will be disconnected and the engine-starting sequence initiated.

When the frequency of the incoming mains varies by more than pre-program value (default +/-5%) from the normal frequency, the controller will signal that the incoming mains will be disconnected and the engine-starting sequence initiated.

Upon restoration of the incoming mains to the pre-program value (default +/-10%) of the normal voltage on all phases, the monitor will signal that the load will be disconnected from the alternator and reconnected to the incoming mains.

If the alternator has been disconnected from the load and the incoming mains within the voltage limits of +/- 10% on all phases, the controller will signal that the load will be reconnected to the incoming mains.

Should the incoming mains fail or not in the specified limits while the engine is running under control of the cooling-off timer, the control for the cooling-off timer in the controller will be cancelled and the load connected to the alternator.

When the output voltage of the alternator varies by more than the pre-program value (default value +/- 10 %) on ANY phase, the controller will signal that the load will be disconnected from the alternator and the engine stopped.

A software over and under-frequency monitor will be provided in the controller if the frequency exceeds or drop below pre-programmed values. It will meet the requirements of class G2 governing. The monitor will not be influenced by harmonics.

Note: Software monitors will include adjustable overshoot and undershoot timers to be fully compatible with Class G2 governing.

All timers will be implemented in software.

Incoming supply failure timer

It is essential that incoming supply failures, occurring at short intervals, do not cause a series of starts and stops.

A timer adjustable from 1 s to 10 s required

The timer default value will be generator set to 3 s

The signal generated by the mains voltage monitor will start the timer. If the duration of the signal is less than the generator setting on the timer, the signal is suppressed so that the switching and starting sequence is initiated. However, if the duration of the signal is more than the generator setting on the timer, the signal will be transmitted to initiate the switching and starting sequence.

Incoming supply restoration timer

It is essential that incoming supply failures, occurring at short intervals, do not cause a series of starts and stops.

A timer adjustable from 1 s to 10 s required.

The timer default value will be generator set to 3 s.

The signal generated by the mains voltage monitor will start the timer. If the duration of the signal is less than 150 sec, the signal is suppressed and the timer is regenerator set. However, if the duration of the signal is more than 150 sec, the signal will be transmitted to initiate the switching sequence.

Alternator supply/ incoming supply change-over timer

It is essential that the supply be disconnected from the load before the incoming supply is reconnected to the load. This will be software generator settable in the controller with a minimum of 5 seconds and maximum of 20 seconds.

On receipt of the switching signal, the alternator supply will be disconnected from the load and timer started. After 5 sec, the incoming supply will be reconnected to the load.

Engine cooling-off timer

After the load has been transferred to the incoming supply the engine will run without load for a period to cool off and then stop.

A timer, software adjustable in the controller from 5 to 10 min is required.

Repeat- start control

A repeat- start control is required in the controller software adjustable so that in the event of the engine falling to start on the first start attempt, the starter motor will be released and repeat the start attempt.

The repeat-start attempt will be repeated 3 times.

The duration of each start attempt will be 6 sec with a period of 15 sec between successive start attempts.

Should the engine fail to start after the third start attempt, the controller will transmit a signal for alarm purposes.

In addition to the requirement for the switchboard instruments listed elsewhere in this document metering will also form part of the modular generator set controller and must be accessible on the software.

The modular generator set controller shall display the following alarm/status indications:

- High engine temperature.
- Low Oil pressure
- High/low alternator output voltage
- Over and under speed (frequency)
- Low water level
- Emergency stop activated
- Mains fail
- Battery charger fail
- Dummy load in operation (When provided)
- Unit not in Auto
- Engine running
- Low fuel alarm
- Engine start failure

Conditions one to six above will stop the engine.

The Contractor shall provide a remote alarm mimic panel and the associated control wiring for the set. The panel shall be installed in the duty/security room at the entrance to the building approximately 70m from the generator set position.

The mimic panels must fit into furniture and blend with the design. Before manufacture, the Contractor shall submit and obtain the approval, from the Engineer, for the mimic panel.

The remote alarm must have potential free relay contacts which shall indicate the following on each set:

- 1) Mains on/off
- 2) Alternator running
- 3) Common fault alarm
- 4) Buzzer which can only be reset at the generator panel
- 5) Fuel low

The cable between the remote alarms is to be a signal cable with a screen and this option must be able to operate from a 12 / 24 V dc supply so that it can be powered from the generator set batteries.

A facility to originate a fault message should a warning or shutdown fault occur.

A facility to allow the mode of the control system to be changed to any of the four modes to allow the set to be run from a remote location.

A facility to originate a call to the control cellular and to transfer a fault message should a warning or shutdown fault occur. The alarm conditions above from the controller will be extended to four relays with a make and break contact and terminal strip to allow for remote monitoring of the following alarms:

- Mains fail
- Standby run
- Standby fail
- Low Fuel

A remote start facility must be supplied, software controllable in the controller.

All events relating to the status of the generator set shall be logged with date and time in a non-volatile memory (which can retain information for a period of 6 months in the absence of power to the controller) and the user shall be able to contain a hard copy on site.

The modular generator set controller system must be able to operate with a minimum DC supply voltage of 4 volts (without making use of either an internal or an external auxiliary battery) to allow cranking and starting under conditions of low battery capacity. Control cables between the set and the control panel shall be fitted with sockets for ease of undoing in the event the modular generator set controller has to be removed.

2.3.5. Manual Starting

Each switchboard shall be equipped with two pushbuttons marked "START" and "STOP" for manual starting and stopping of the set.

2.3.6. Battery Charging Equipment

Each switchboard shall be equipped with battery charging equipment.

The charger shall operate automatically in accordance with the state of the battery and shall generally consist of an air-cooled transformer, a full wave solid state rectifier, and the necessary automatic control equipment of the constant voltage system.

The charger must be fed from the mains. An engine driven alternator must be provided for charging the battery while the set is operational. Failure of this alternator must also activate the battery charger failure circuit.

The starter battery voltage will be software monitored by the modular generator set controller. The voltage will be digitally displayed.

SM CI HST all JB

2.3.7. Switchboard Instruments

Each generating set shall have a switchboard equipped as follows:

- a) One flush square dial voltmeter, reading the alternator voltage, scaled as follows:
 - (i) 0-300V for single phase generators.
 - (ii) 0-500V for three phase generator. In this case a six position and off selector switch must be installed for reading all phase and phase to neutral voltages.
- b) A flush square dial combination maximum demand and instantaneous ampere meter for each phase, with resettable pointer suitably scaled 20% higher than the alternator rating. A red arc stripe above scale markings from 0-20A and a red radial line through the scale at full-load current, shall be provided. This instruments shall be supplied complete with the necessary current transformer.
- c) One flush square dial vibrating type frequency meter, indicating the alternator frequency.
- d) A six digit running hour meter with digital counter, reading the number of hours the plant has been operating. The smallest figure on this meter must read 1/10 hour.
- e) Fuses or m.c.b.'s for the potential voltage circuits of the meters.
- f) One flush square dial ampere meter suitably scaled for the battery charging current.
- g) One flush square dial voltmeter with a spring loaded pushbutton or switch for the battery voltage.

2.3.8. Marking

All labels, markings or instructions on the switchgear shall be in English.

2.3.9. Earthing

An earth bar must be fitted in the switchboard, to which all non-current carrying metal parts shall be bonded.

The neutral point of the alternator must be solidly connected this bar by means of a removable link labelled "EARTH". Suitable terminals must be provided on the earth bar for connection of up to three earth conductors, which will be supplied and installed by others.

2.3.10. Operation Selector Switch

A four position selector switch must be provided on the switchboard marked "AUTO", "MANUAL", "and TEST" and "OFF".

With the selector on "AUTO", the set shall automatically start and stop, according to the mains supply being available or not.

With the selector on "TEST", it shall only be possible to start and stop the set with the pushbuttons, but the running set shall not be switched to the load.

With the selector on "MANUAL", the set must take the load when started with the pushbutton, but it must not be possible to switch the set on to the mains, or the mains onto the running set.

With the selector on "OFF", the set shall be completely disconnected from the automatic controls, for cleaning and maintenance of the engine.

2.3.11. Automatic Change-over System

A fully automatic change-over system must be provided to isolate the mains supply and connect the standby set to the outgoing feeder in case of a mains failure and reverse this procedure on return of the mains.

The contactors for this system must be electrically and mechanically interlocked.

2.3.12. By-pass Switch and Main Isolator

The switchboard shall be equipped with an on-load isolator to isolate the mains and a manually operated on-load 4 pole 4 position by-pass switch, which shall switch the connected loads as follows:

NORMAL: will allow for the normal connection i.e. connects the incoming mains to the Automatic control gear or directly to the outgoing feeder.

In the GEN BY-PASS position the switch will disconnect the automatic changeover control gear, and will connect the municipal mains directly the essential supply busbar which will allow for the maintenance of either or both the generator and the automatic changeover equipment.

MAINS BY-PASS switching position would allow the generator to be connected directly to the essential supply busbar. This is when there is a problem with the automatic changeover equipment and there is no municipal power available.

The final position is an OFF position which will remove all power downstream of this switch.

It is required that this by-pass switch and mains isolator be mounted away from the automatic control gear, in a separate compartment, either on the side or in the lower portion of the switchboard cubicle, and that the switches are operated from the front of the compartment.

Contractor to note: The by-pass and mains isolator switch shall also break the main neutral.

2.3.13. Start Delay

Starting shall be automatic in event of a mains failure. A 0-15 second adjustable start delay timer shall be provided to prevent start-up on power trips or very short interruptions.

2.3.14. Stop Delay

A stop delay with timer is required for the set, to keep the set on load for an adjustable period of one to sixty seconds after the return of the mains supply, before changing back to the supply. An additional timer shall keep the set running for a further adjustable cooling period of 5 to 10 minutes at no-load before stopping.

2.4. Installation

Except for the supply of the incoming mains cable and outgoing feeder cables, the tenderer must include for the complete installation and wiring of the plant in running order, including the connection of the incoming cable and outgoing feeder cables.

The connecting of the cable and control cabling to the generator and the control terminals in the LV board remains the responsibility of the tenderer.

2.5. Warning Notices

Notices, in English, must be installed on the outside of the steel enclosure.

The successful tenderer must consult the Occupational Health and Safety Act 83 of 1993 and get approval of the wording from the Department's representative, prior to ordering the notices.

The notice shall be made of a non-corrodible and non-deteriorating material, preferable plastic, and must read as follows:

DANGER: This engine will start without notice. Turn selector switch on control board to "OFF" before working on the plant.

An engraved label shall be installed next to the fuel cap that indicates the following:

- Base Tank Capacity
- Bulk Tank Capacity (if provided)
- Full load litres per hour consumption

2.6. Construction

The engine and alternator of the set shall be built together on a common frame, which must be mounted on a skid base on anti-vibration mountings. The set must be placed inside an IP65 canopy/container. A drip tray must be fitted under the engine. The tray must be large enough to catch a drip from any part of the engine.

The frame must be of the 'DUPLEX' type.

2.7. Operation

The set is required to supply the lighting and power requirements in the case of a mains power failure.

The set shall be fully automatic i.e. it shall start when any one phase of the main supply fails or get switched and shall shut down when the normal supply is re-established. In addition it shall be possible to manually start and stop the set by means of pushbuttons on the switchboard.

The automatic control shall make provision for three consecutive starting attempts. Thereafter the set must be switched off, and the start failure relay on the switchboard must give a visible and audible indication of the fault.

To prevent the alternator being electrically connected to the mains supply when the mains supply is on and vice versa, a safe and fail proof system of suitably interlocked contactors shall be supplied and fitted to the changeover switchboard.

SECTION 3 – TECHNICAL SPECIFICATION

TABLE OF CONTENTS

3.1.	General	20
3.2.	Site Information and Conditions	20
3.2.1.	Location.....	20
3.2.2.	Site Conditions	20
3.3.	Output and Voltage	21
3.4.	Switchboard/Control Panel Unit	21
3.5.	Cables	21
3.6.	Engine	21
3.7.	Alternator.....	21
3.8.	Load Acceptance	21
3.9.	Enclosure	22
3.10.	Alarms	23
3.11.	Remote Control Generator Switch	23
3.12.	Fuel Drip Tray	23
3.13.	Completion Time.....	23
3.14.	Inform	23
3.15.	Fuel Supply Tank	23

3. SECTION 3 – TECHNICAL SPECIFICATION

3.1. General

Supply, deliver, install, commission, test and maintain a containerised, silenced, 650kVA, 400V, 3ph, generating sets at Zonderwater Training College, located around R515 Cullinan, 1000.

This installation must comply fully with all the sections and drawings of this document. This technical specification is supplementary to the Equipment Requirements, Section 2, and must be read together where they are at variance the Technical Specification shall apply.

Concrete plinths to be provided by the Contractor taking into consideration the dimensions, sleeves, weight and bunding wall requirements. The contractor shall submit the designs for approval before any work commences.

The surface of the concrete plinth shall be at least 100mm higher than the existing ground level. The thickness and strength of the plinth shall be designed by the consulting engineer and are detailed on the drawings.

A tap to be provided to drain all the water that accumulates inside the bund wall. Final position of the tap will be determined on site. It is the engineer's responsibility to ensure plinth design complies with generator dimensions and weights. The bund wall shall contain 110% of the fuel, oil and water capacity of the generator. The bund wall shall not constrain the canopy doors from opening completely.

The contractor shall install an earthing system in the concrete plinth. The contractor shall install a minimum of two (2) earth spikes 1.8 meters long on opposite corners of the concrete plinth into the ground. The earth spikes shall be connected by means of a 70mm² bare copper earth wire to the main earth bar in the control panel. The earth conductor shall be connected to the earth bar, canopy, bass, skid and earth bar by means of suitably crimping lugs and brass bolts.

3.2. Site Information and Conditions

3.2.1. Location

The site is at DCS Zonderwater Training College near Cullinan in the Gauteng Province

3.2.2. Site Conditions

The following site conditions will be applicable and equipment shall be suitably rated to develop their assigned rating and duty at these conditions.

- | | |
|---|---------------|
| a) Height above sea level | : 1450 Meter |
| b) Maximum ambient temperature | : 33 °C |
| c) Maximum ambient humidity at lowest temperature | : 64 % @ 28°C |

3.3. Output and Voltage

After the de-rating factors for the engine and generator due to site conditions have been taken into account, the set must have a site output and voltage as follows: -

No load voltage	:	400/230 Volt
Rating	:	650 kVA
Power at 0.8 power factor	:	520 kW
Frequency	:	50Hz
Fault Level	:	

3.4. Switchboard/Control Panel Unit

All remote switch- and control gear shall be adequately rated for prospective fault current level.

The control panel in the substation shall be rated 25kA.

The remote control panel unit shall be enclosed in the IP65 canopy/container.

3.5. Cables

The contractor will be responsible for all electrical cable connections associated with the complete generating set installation.

Generator	PVC/SWA/PVC Cable	3 x 240mm ² + 70mm ² BCEW
Mains	PVC/SWA/PVC Cable	3 x 240mm ² + 70mm ² BCEW
Load	PVC/SWA/PVC Cable	3 x 240mm ² + 70mm ² BCEW
Control	Cable	

3.6. Engine

A sump drainpipe must be fitted with a shut-off valve placed in a convenient position outside the base frame to facilitate drainage.

Recommended oil types must be indicated on the engine, or base frames, by means of suitable labels.

All engine instruments shall have clear markings on the faceplates, indicating the normal operating zone(s), maximum and minimum allowable values/limits and danger zone(s).

The flywheel shall be covered by approved hoods.

3.7. Alternator

The Alternator shall be of the low harmonic type.

3.8. Load Acceptance

The generator set shall be capable of accepting 75% of the specified site electrical output 10 seconds after the starter motor is energised and the remaining 25%, 5 seconds thereafter, i.e. 100% load acceptance shall not exceed 15 seconds.

3.9. Enclosure

The standby set is a free standing unit and shall be mounted in an enclosure as detailed below:-

3.9.1 General

The enclosure, shall be completely vermin-proof, powder coated and shall be constructed of 3CR12 stainless steel or within 50km from the coast with grade 316 steel housing of a minimum thickness of ± 1.5 mm.

The enclosure shall allow easy access to the engine, alternator, radiator filler cap and control cubicle for maintenance purposes.

The door shall be flush with the rest of the canopy and of the side opening type. A minimum of four doors are required i.e. two on either side.

The door hinges and locking bars shall be of a heavy duty type and be manufactured of 3CR12 stainless steel or within 50km from the coast with grade 316 steel and shall be fitted with a grease nipple.

The doors and panels shall be suitably braced and stiffened to ensure rigidity and to prevent bending and warping.

Suitable door restraints shall be fitted to all the doors, enclosure including the control panel to prevent wind damage. The restraint shall consist of a steel rod in a steel groove or slide with a spring loaded catch, which is to be manually reset to close the door.

No flexible restraints will be accepted.

The diesel fuel level indicator and alternator rating plate shall be clearly visible with the doors open.

Unless specified the silencers shall be mounted within the enclosure.

Perforated sheeting shall be fitted over all the insulating material inside the canopy of all soundproof sets.

Rubber seals on doors shall be equal to or similar to rubber pinch weld, wind lace.

9.2 Design

The enclosure shall be designed to be weather-proof and sound-proofing as specified. Rivets or self-tapping screws will under no circumstances be allowed for fixing the various sections of the enclosure. Only cadmium coated nuts and bolts are acceptable.

9.3 Roof

The roof of the enclosure shall be constructed for proper drainage of water as per the drawing.

9.4 Lamp fitting

A lamp fitting and it's associated on/off door switch shall be provided inside the enclosure for illumination of the control panel. The power for the lamp shall be obtained from the starter battery.

9.5 Sound-proofing

The sound-proofing on canopy engine sets shall be such that the maximum noise level generated by the set under any load condition shall not exceed 65 dB measured in any direction at a distance of 5m from the centre of the set with the doors closed.

The supply and discharge air paths will require separate attenuators on soundproof sets.

9.6 Padlock and keys

The contractor shall supply padlocks and keys for all the doors of the enclosure. The padlock shall be off the "Viro A82 keyed alike with stainless steel shackles" type.

Suitable brass metal plates shall be installed behind each lock for the protection of the enclosure against scratching or damaging, where the locks are hanging.

3.10. Alarms

The successful tenderer must pay particular attention to the requirements of the alarms as described in the Equipment Requirements, Section 2.

One alarm hooter and red light shall be supplied and installed on the outside of the generator container in a position as indicated by the Department's Representative.

The hooter shall consist of an electronic unit similar and equal to a "Klaxon" - type SY2/725 hooter with a continuously rated output and 110 dB at a distance of 2 metres, and shall be IP55 weatherproof rated.

The warning light shall consist of a 40W flashing red light, which shall be mounted on a galvanised steel frame together with the hooter.

The hooter and light shall be switched on or off simultaneously after initiation or cancellation of an alarm condition. The supply and installation of the wiring between the control board and the alarm unit forms part of this contract.

The successful tenderer must ensure that the hooter control circuit resets automatically after cancellation due to a low fuel condition or battery charger failure, but the visible fault indication must remain, i.e. should the operator continue to run the set, the hooter must sound, should any other condition develop.

A remote alarm panel shall be supplied and installed by the contractor in the control room. This shall be of surface mounting, enamelled sheet metal (colour to approval), minimum depth construction, and shall incorporate a flashing red pilot alarm light, adjustable electronic sounder, and a silence push button. The silence button shall not switch off the pilot light - this shall only be switched off when the alarm is reset at the Generator Panel.

A 2,5mm² x 4-core PVC SWA PVC cable will be supplied, installed and terminated by others between the Generator Panel and the Charge Office. The Contractor shall connect this cable at both ends and shall supply and install all switch gear relays, etc. to ensure satisfactory operation of the Remote Alarm Panel.

3.11. Remote Control Generator Switch

A Remote Control Generator "ON/OFF/AUTO" switch will be supplied and installed by others in the control room, and a 2,5mm² x 4-core PVC SWA PVC cable will be supplied and installed by others between the control room and the Generator Panel.

The contractor shall connect this cable at both ends, and shall supply and install all switch gear, relays, etc. to ensure satisfactory operation of the remote control switch.

3.12. Fuel Drip Tray

A drip tray approximately 100mm deep shall be mounted below the generator and must be large enough to collect any fuel that drips from the generator fuel accessories. The drip tray shall be manufactured from black mild steel. The thickness of the drip tray sheet steel shall not be less than 2mm.

3.13. Completion Time

The Generator Set is required to be commissioned within an agreed construction plan in conjunction with the Department of Correctional Services representative.

3.14. Inform

The successful tenderer shall inform the Engineer when the set is ready for installation.

3.15. Fuel Supply Tank

The fuel tank shall be an integral part of the base frame of the generator set. The tank shall have sufficient capacity to run the engine on full load for a minimum period of 24 hours. The base tank shall be an open channel self-bund walled type that shall be of sufficient capacity to contain a spillage equivalent to 110% in volume of the base tank. The containment tank shall be manufactured from black mild steel with a thickness of not less than 2mm.

A float level alarm connected to the generator controller shall be incorporated into the bund area located such that the alarm will be activated when 50% of the volume of the bund area has been reached in the event of any diesel fuel leakage.

CSM. HET ell JB

SECTION 4 – SCHEDULES OF TECHNICAL INFORMATION
(TO BE FULLY COMPLETED BY TENDERER)

TABLE OF CONTENTS

4.1.	Engine	26
4.2.	Alternator.....	28
4.3.	Switchboard	29
4.4.	Battery.....	30
4.5.	Dimensions	30
4.6.	Deviation from the Specification as an Alternative (State Briefly)	30
4.7.	Spare Parts and Maintenance Facilities	30

SM
CS *4/15* *all* *1/3*

4. SECTION 4 – SCHEDULES OF TECHNICAL INFORMATION

4.1. Engine

NO	ITEM	REMARKS
1.	Manufacturer's Name	
2.	Country of Origin	
3.	Manufacturer's model No. and year of manufacture	
4.	Continuous sea level rating after allowing for ancillary equipment : a) In b.h.p. b) In kW	
5.	Percentage de-rating for site conditions, in accordance with SANS 8528 a) For altitude b) For temperature c) For humidity d) Total de-rating	
6.	Net output on site in kW	
7.	Nominal speed in r.p.m.	
8.	Number of cylinders	
9.	Strokes per working cycle	
10.	Stroke in mm	
11.	Cylinder bore in mm	
12.	Swept volume in cm ³	
13.	Mean piston speed in m/min	
14.	Compression ratio	
15.	Cyclic irregularity	
16.	Fuel consumption of the complete generating set on site in l/h of alternator output at : a) Full load b) ¾ load c) ½ load NOTE : A tolerance of 5% shall be allowed above the stated value of fuel consumption.	
17.	Make of fuel injection system.	
18.	Capacity of fuel tank in litres	
19.	Is gauge glass fitted to tank?	
20.	Is electric pump for filling the fuel tank included?	

NO	ITEM	REMARKS
21.	Method of starting	
22.	Voltage of starting system	
23.	Method of cooling	
24.	Type of radiator if water-cooled	
25.	Type of heater for warming cylinder heads	
26.	Capacity of heater in kW	
27.	Method of protection against high temperature	
28.	Method of protection against low oil pressure	
29.	Type of governor	
30.	Speed variation in % a. Temporary b. Permanent	
31.	Minimum time required for as assumption of full load in seconds	
32.	Recommended interval in running hours for : a. Lubricating oil change b. Oil filter element change c. Decarbonising	
33.	Type of base	
34.	Can plant be placed on solid concrete floor?	
35.	Are all accessories and ducts included?	
36.	Is engine naturally aspirated?	
37.	Are performance curves attached?	
38.	Diameter of exhaust pipe	
39.	Noise level in plant room in dBA	N/A
40.	Noise level at tail of exhaust pipe in dBA	
41.	BMEP (4 stroke) at continuous rating (kPa)	
42.	% Load acceptance to SANS 8528, with 10% transient speed drop	

4.2. Alternator

NO	ITEM	REMARKS
1.	Maker's name and model no.	
2.	Country of Origin and year of manufacture	
3.	Type of enclosure	
4.	Nominal speed in r.p.m.	
5.	Number of bearings	
6.	Terminal voltage	
7.	Sea level rating kVA at 0,9 power factor	
8.	De-rating for site conditions	
9.	Input required in kW	
10.	Method of excitation	
11.	Efficiency at 0,9 power factor and : a) Full load b) $\frac{3}{4}$ load c) $\frac{1}{2}$ load	
12.	Maximum permanent voltage variation in %	
13.	Transient voltage dip on full load	
14.	Voltage recovery on full load application in milli-seconds	
15.	Is alternator brushless?	
16.	Class of insulation of windings	
17.	Is alternator tropicalised?	
18.	Symmetrical short circuit current at terminals n Ampere	
19.	Type of Coupling	

4.3. Switchboard

NO	ITEM	REMARKS
1.	Maker's Name	
2.	Country of Origin	
3.	Is board floor mounted?	
4.	Finish of board	
5.	Make of volt, amp, and frequency meters	
6.	Dial size of meters in mm	
7.	Scale range of voltmeter	
8.	Scale range of ammeters	
9.	Ration of current transformers	
10.	Make of hour meter	
11.	Range of cyclometer counter	
12.	Smallest unit shown on counter (Item 11)	
13.	Make of circuit breaker	
14.	Type of circuit breaker	
15.	Rating of circuit breaker in Amp and fault level in kA	
16.	Setting range of overload trips	
17.	Setting range of instantaneous trips	
18.	Make of change-over equipment	
19.	Make of voltage relay	
20.	Is control and protection equipment mounted on a small removable panel?	
21.	Type of control equipment	
22.	Make of mains isolator	
23.	Type of indicators for protective devices	
24.	Make of rectifier	
25.	Type of rectifier	
26.	Is battery charging	
27.	Are volt- and ammeters provided for charging circuit?	
28.	Is the alarm hooter of the continuous duty type?	
29.	Rating in Amps of : a. Change-over equipment b. Mains on load isolator c. By-pass switch d. Circuit breaker to outgoing feed	
30.	Is manufacture of switchboard/control panel to be sub-let?	

*SM 9/10/07
 CE all's E*

NO	ITEM	REMARKS
31.	If yes, state name and address of specialist manufacturer	

4.4. Battery

NO	ITEM	REMARKS
1.	Maker's Name	
2.	Country of Origin	
3.	Type of battery	
4.	Voltage of battery	
5.	Number of cells	
6.	Capacity in cold crank amp	

4.5. Dimensions

NO	ITEM	REMARKS
1.	Overall dimensions of set in mm	
2.	Overall mass	
3.	Is the canopy/container adequate for the installation of the set, switch board and fuel tank	

4.6. Deviation from the Specification as an Alternative (State Briefly)

NO	DESCRIPTION

4.7. Spare Parts and Maintenance Facilities

NO	ITEM	REMARKS
1	Approximate value of spares carried in stock for this particular diesel engine and alternator	
2	Where are these spares held in stock	
3	What facilities exist for the servicing of the equipment offered	
4	Where are these facilities available	

SECTION 5 – PRICE SCHEDULES

TABLE OF CONTENTS

5.1.	General	32
5.2.	Schedule	32
5.3.	Summary of Schedules of Quantities.....	35

SM 9/15/18
CI all JB

5. SECTION 5 – PRICE SCHEDULES

5.1. General

- 1) The conditions of contract and the application of the Contract Price Adjustment Provisions shall be as set out in Part A: Section 1: Preliminaries.
- 2) The descriptions in this Price Schedule shall be read in conjunction with the specification.
- 3) The unit rate for each item in the Price Schedules shall include for all materials, labour, profit, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description.
- 4) The Price Schedules shall not be used for ordering purposes. The Contractor shall check the lengths of cables and overhead conductors on site before ordering any of the cables. Any allowance for off-cuts shall be made in the unit rates.
- 5) The rates shall exclude Value Added Tax and the total carried over to the final summary in PART A.
- 6) All material covered by this Specification shall, wherever possible, be of South African manufacture.

5.2. Schedule

Schedule 1: Generator and Electrical Installation

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
					R	c
1.1	Supply, deliver, install and commissioning of silenced, containerised standby generator complete with controllers, exhaust in canopy as specified for the following sizes:					
	650 kVA Diesel/Alternating Generator Enclosed (3Ph), Prime Rated , (Including first fill of all lubrication and oils)					
	Supply	No	1			
	Installation	No	1			
1.2	Supply and deliver first fill of fuel:					
	Supply	L				
	Installation	L				

1.3	<p>Supply, deliver, install and commission of Distribution Board as specified and as follows:</p> <p>1250A, 25kA, 400V TPNE and Digital Multimeters, plus spare capacity for additional three circuits.</p> <p>Supply Installation</p>	<p>No No</p>	<p>1 1</p>			
1.4	<p>Supply, deliver, install and commission cable tray and cabling complete with termination kit as follows:</p> <p>240mm², 4c PVC/SWA/PVC Supply Installation</p> <p>70mm², BCEW Supply Installation</p> <p>Control Cabling Supply Installation</p> <p>1800mm earth spike Supply Installation</p> <p>600mm Wide Cable Ladder c/w bends, risers and fasteners. Supply Installation</p>	<p>m m m m m Item Item m m</p>	<p>100 100 120 120 10 10 4 4 30 30</p>			
1.5	<p>Supply and install a 30MPA reinforced concrete plinth complete with sleeves and according to the DPWI specifications</p>	<p>No</p>	<p>1</p>			
1.6	<p>Supply and Install warning notices on the container as specified.</p> <p>Set of Warning Notices as per SANS and OHS specifications.</p>	<p>Item</p>	<p>1</p>			
1.7	<p>Compilation of Maintenance, operational and technical Manuals to the client satisfaction. Supply manuals</p>	<p>Item</p>	<p>1</p>			

Handwritten notes:
 8/11 J/S
 C1
 ell 1/1

1.8	Test and Commission to deliver a fully operational generating set to the client and engineers satisfaction c/w COC:					
1.8.1	At the suppliers premises, prior to delivery to site	Item	1			
1.8.2	On site after completion of the installation	Item	1			
1.9	Warranty and Maintenance of the plant as per the manufacturer's requirements and up to 4 000 running hrs.	Item	1			
1.10	Supply and install A82 padlocks.	Item	1			
1.11	Supply and install galvanised palisade fencing with a lockable gate. 8m x 6m x 1.8m	Item	1			
1.11	Decommission, remove, and transport within the college an existing 80kVA open set generator complete with associated auxiliaries:	Item	1			
1.12	Supply and Install Moulded Case Circuit Breakers:					
1.12.1	1000A, 3p, 25kA, 400V Supply	No.	1			
	Installation	No.	1			
1.12.2	1250A, 3p, 25kA, 400V Supply	No.	1			
	Installation	No.	1			
1.12.3	Enclosure Box for the 1250A MCCB Supply	No.	1			
	Installation	No.	1			
1.13	Trenching and Reinstatement	Item	1			
1.14	Other (Please specify)					
Total Carried to Summary						R

Schedule 2: Preliminaries, General and Miscellaneous

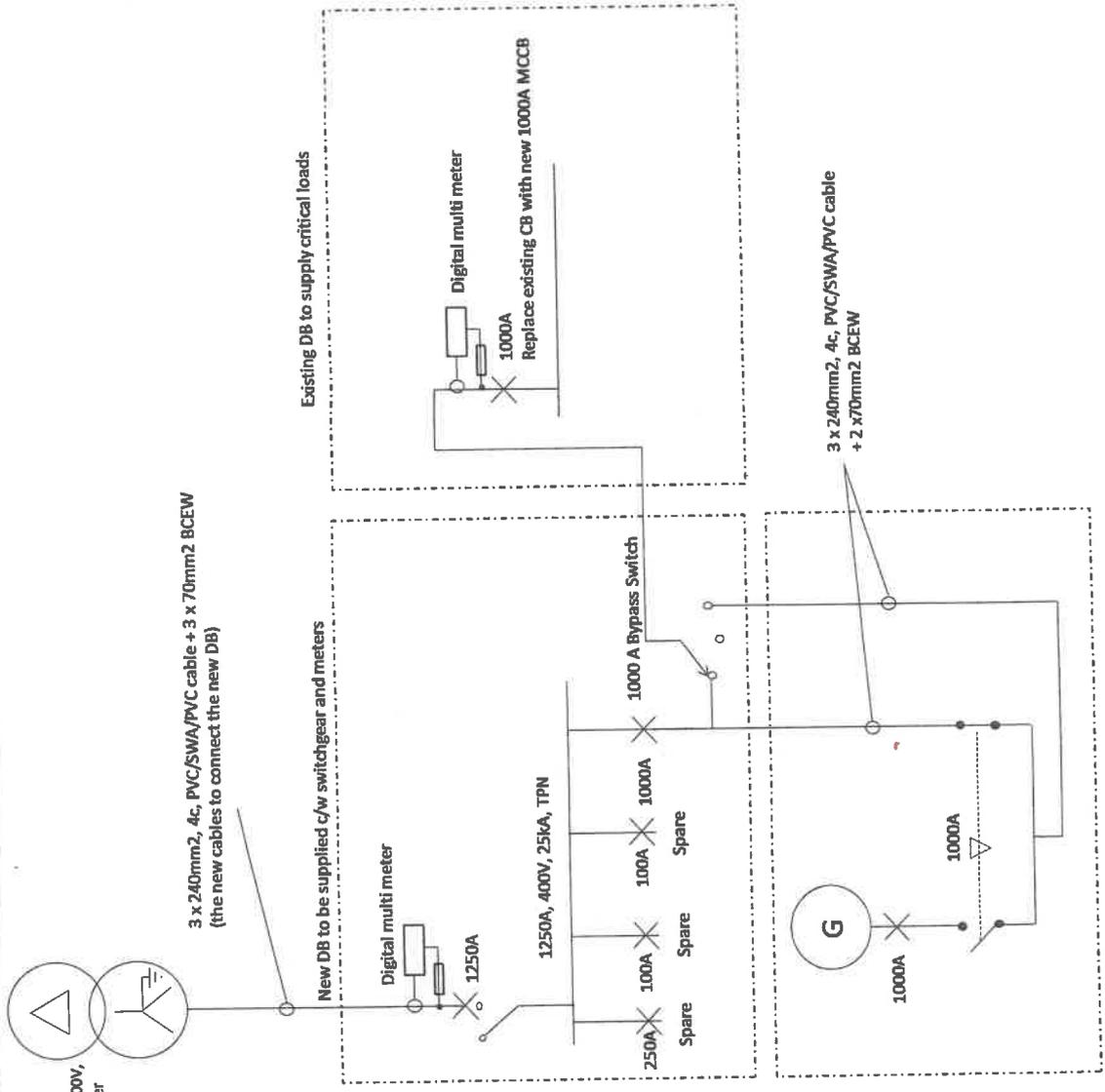
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
2.1	In addition to the Contract P&G the total amount allowed under this Schedule shall provide completely for all requirements of the General and Additional Conditions of Contract and as specified in GCC.	Item	1			
2.2	Allow for Site Establishment	Item	1			
2.3	Allow for transport/ travelling charges	Item	1			
2.4.	Allow for OHSA and Regulations	Item	1			
Total Carried to Summary					R	

5.3. Summary of Schedules of Quantities

Schedules	Page No	Amount
1. Generator and Electrical Installation		
2. Preliminaries, General and Miscellaneous		
3. Contingency (5%)		
Total Tender Price for the Supply and Installation of Prime Rated Generator Set		R

*SM HGT e1
ell 1/15*

Appendices: Electrical Single Line Drawing



New Containerised, Silenced 650kVA, 400V, 3ph Genset c/w Change Over panel and controller to be supplied

Notes:

- Existing DB to be converted to emergency DB and painted red signal. A new 1000A MCCB to be supplied and installed in the existing DB. All openings shall be blanked off and DB tested for COC compliance and a new COC issued.
- The existing cables from the transformers to the LV DB to be replaced with 3 x 240mm² 4c PVC/SWA/PVC cables which will terminate in the new DB.
- The new DB rated 1250A, 400V, 25kA, TPNE to be designed, manufactured and supplied as specified and as shown herein. The DB shall be floor standing with additional spare capacity to accommodate three MCCBs. The DB shall comply with all the requirements of applicable legislation and standards.
- The new 650kVA, 400V, 3ph generator to be supplied. The generator shall be inside a silenced container and positioned as shown on site. The generator shall comply with all the requirements of applicable legislation and standards.
- All the new and existing circuits shall be labeled using engraved trafo-lite labels.
- The new installation shall be tested, commissioned and the COC issued.

Contact:
Name: S Nkala
Cell No.: 066 485 3501



correctional services
Department:
Correctional Services
REPUBLIC OF SOUTH AFRICA

ISSUED FOR INFORMATION

Handwritten notes:
S.M. Chetty
J.B.



DEPARTMENT OF CORRECTIONAL SERVICES

SPECIAL CONDITIONS OF CONTRACT: BID GENERAL ITEMS NO:

SUPPLY AND DELIVERY, INSTALLATION AND COMMISSIONING OF A 650kVA, 400V, 50Hz STANDBY DIESEL GENERATOR SET INCLUDING MAINTANANCE IN ACCORDANCE WITH SOUTH AFRICAN NATIONAL SPECIFICATION SANS 8528 AND COMPLY WITH THE OCCUPATIONAL HEALTH AND SAFETY ACT NO. 85 OF 1993 AND CURRENT REGULATION OF ALL OTHER CODES APPLICABLE : DELIVERY IN TWO(02) PHASES : DEPARTMENT OF CORRECTIONAL SERVICES: ZONDERWATER TRAINING COLLEGE (GAUTENG PROVINCE)

JB
Ofest
CL SM
all



CONTENTS

DEPARTMENT OF CORRECTIONAL SERVICES.....1

1. INTRODUCTION.....4

2. REGISTRATION ON CENTRAL SUPPLIERS DATABASE4

3. CERTIFICATION OF DOCUMENTS BY A COMMISSIONER OF OATH4

4. CONTRACT PERIOD.....4

5. QUANTITIES.....5

6. RESPONSE FIELDS5

7. EVALUATION CRITERIA.....5

7.1 PHASE 1: MANDATORY REQUIREMENTS.....6

7.2 PHASE 2: PRICE AND SPECIFIC GOALS8

7.3 PHASE 3: AWARDING OF BIDS9

8. VALUE ADDED TAX.....9

9. BIDDER’S DISCLOSURE (SBD 4).....10

10. PARTICIPATION OF GOVERNMENT OFFICIALS IN THE BIDDING PROCESS10

11. FRONTING.....10

12. PRICE AND PRICE QUALIFICATION11

13. SUBMISSION OF BIDS11

14. LATE BIDS.....11

15. COMMUNICATION.....11

16. COUNTER CONDITIONS.....12

17. VENDOR ASSESSMENT (CAPABILITY AND FINANCIAL ABILITY)12

17.2 LEGAL REQUIREMENTS12

18. NEGOTIATIONS.....12

19. ORDERS/DELIVERIES/DELIVERY BASIS13

20. PACKAGING13

21. CONTRACT MANAGEMENT.....13

22. PENALTIES14

Handwritten signatures and initials:
 JST
 S... I... all JB



23. **PAYMENTS**.....14

24. **SETTLEMENT OF DISPUTES**15

AGT
SM CI ell JB



1. INTRODUCTION

- 1.1 This bid and all contracts emanating there from will be subject to the General Conditions of Contract issued in accordance with Treasury Regulation 16A published in terms of the Public Finance Management Act, 1999 (Act 1 of 1999).
- 1.2 The Special Conditions of Contract are supplementary to that of the General Conditions of Contract. Where, however, the Special Conditions of Contract are in conflict with the General Conditions of Contract, the Special Conditions of Contract prevail.
- 1.3 These conditions form part of the bid and bidders need to familiarize themselves with the content thereof.

2. REGISTRATION ON CENTRAL SUPPLIERS DATABASE

- 2.1 Bidders need to register on the National Treasury Central Supplier Database in order to do business with the state. Accounting Officers cannot award any bid or price quotations to any supplier who is not registered on the Central Suppliers Database. Bidders must log on www.csd.gov.za for self registration.

3. CERTIFICATION OF DOCUMENTS BY A COMMISSIONER OF OATH

- 3.1.1 Bidders must ensure that all certified copies comply with the regulation governing the administering of an oath or affirmation. The Commissioner of Oath must append a signature, date and print out name. **Copies that do not comply with this regulation will be regarded as invalid and the bidder disqualified.**
- 3.1.2 The date of certification submitted should not be older than six (6) months as at the closing date and time of the bid.

4. CONTRACT PERIOD

- 4.1 The contract period will be in two (02) phases.
- 4.2 Phase 1 supply ,installation and commision (six months),12 months warranty including maintanace period.
- 4.3 Phase 2 maintenance contract for twenty four months



5. QUANTITIES

5.1 The quantities are furnished in the BILL OF MATERIALS .

6. RESPONSE FIELDS

6.1 It is imperative that bidders submit responsive bids by completing all mandatory response fields, Section 4 Schedules of Technical Information and Section 5 Pricing Instruction . In this regard bidder's attention is also drawn to the response field and price structure explanations and examples supplied in the bid document.

6.2 Bid documents should not be retyped or redrafted.

6.3 The following bid documents must be completed in ink, signed and submitted in an original format:

Document	Description
SBD 1	Invitation to Bid
SBD 3.1	Pricing Schedule (Firm prices)
SBD 4	Bidder's disclosure
SBD 5	National Industrial participation programme (If Applicable)
SBD 6.1	Claim Form in Terms of Preferential Procurement Regulations 2022

6.4 Alternative offers may be made for any item(s) on condition that the offer complies with the specification. It must clearly be marked as an alternative offer.

6.5 Bidders shall check the numbers of the pages and satisfy themselves that none are missing or duplicated in line with the index provided. No liability shall be accepted with regard to claims arising from the fact that pages are missing or duplicated.

7. EVALUATION CRITERIA

The evaluation process will be conducted in phases as follows:

Phase 1	Phase 2
Mandatory Requirements	Price and Points for specific goals
Compliance with mandatory requirements	Bids evaluated in terms of Preferential Procurement Regulations, 2022



7.1 **Phase 1: Mandatory Requirements**

7.1.1 **REGISTRATION ON CENTRAL SUPPLIERS DATABASE**

7.1.1.1 Bidders must register on the National Treasury Central Supplier Database to do business with the Department. The Department of Correctional Services will not award any price quotations to any supplier who is not registered on the Central Suppliers Database. Bidders must log on www.csd.gov.za for self-registration.

7.1.1.2 Bidders must be registered on the Central Supplier Database (CSD).

7.1.1.3 When a Consortium/ joint Venture / Sub- contracts are involved, each party must be registered on the Central Suppliers Database and their tax compliance status will be verified through the Central Supplier Database

7.1.1.4 The Tax Compliance status requirements are also applicable to foreign bidders/ individuals who wish to submit bids.

7.1.2 The bidder/contractor must provide with their bid ,the company profile, staff component indicating the appropriate or similar experience for the delivery ,installation and commissioning of standby generators.

7.1.3 The bidder must atleast have two (02) signed reference letters of similar projects / contract undertaken and successfully completed within the last 36 months.

7.1.4 The bidder/contractor must have a CIDB contractor grading designation of 3EB, 3EP or higher. The bidder need to submit a valid certicate of CIDB grading 3EB, 3EP or higher as a proof of company's registration.

7.1.5 The bidder/contractor must submit registration with the department of labour as an electrical contractor with three (03) phase electrical installation certificate. Proof of registration need to be attached with the bid document.

7.1.6 The bidder/contractor is required to read and submit the initialized copy of the specification together with the priced bill of quantities as per SBD 3.1 pricing schedule.

The specification is divided into five (05) sections, namely: general, equipment requirements, technical specification, schedules of technical information and price schedules.



The bidder/contractor is required to read all the above-mentioned sections in collaboration and initial each page and complete in full the following schedules: schedule of technical information and price schedules.

The delivery must take place within six (06) months of the receipt and confirmation of the approved government order.

The bidder/contractor must be aware that the project must be completed in two (02) phases . Phase 1 supply ,installation and commision (six months),12 months warranty including maintainace period. Phase 2: Twenty four (24) months maintenance after the completion of the first phase.

7.1.7 **Compulsory briefing session**

7.1.7.1 Proof of attendance of compulsory site inspection.(See BD 6.1) The BD 6.1 form (attendance certificate), completed by the bidder and signed by a designated representative of the Department, must be submitted with the bid document.

7.1.8 **Certificate: Confirmation of supply arrangements between the bidder and his/her supplier (BD 27)**

7.1.8.1 Any bidder who does not normally keep stock of the item and is sourcing the goods and services from a third party (manufacturer/producer or dealer/ distributor who normally keeps stock) for the purpose of delivering the item to the Department, must ensure that the attached BD 27 is completed by his/her supplier after they have familiarised themselves with the item(s) / description(s) / specifications and conditions of the bid for all relevant goods and services required from this bid. **Failure to submit a signed (BD 27) signed by the bidder and his/her supplier will invalidate the bid.**

7.1.8.2 Third parties must especially acquaint themselves with the conditions applicable to price increases.

7.1.8.3 A letter issued on the official letterhead and signed by the third party addressing the information below is acceptable.

7.1.8.4 The bidder must ensure that the supply arrangements for the required goods and services have been mutually agreed upon with his/her supplier. No agreement between the bidder and his/her supplier will be binding on the Department.

7.1.8.5 **The Department reserves the right to verify any information supplied by the bidder and should the information be found to be false or incorrect, it will invalidate your bid.**

7.1.8.6 If a contract has been concluded on the basis of sourcing the product(s) from a manufacturer/dealer, distributor and the bidder for some or the other reason change the manufacturer/dealer, the Department should immediately be notified and a new BD 27-form (confirmation of supply arrangements between the bidder and his/her supplier) should be submitted.

7.1.8.7 The Department will only accept an original or certified copy of the completed and signed BD 27 and it must be attached with the standard bidding documents.

7.1.8.8 **Bidders must ensure that where applicable all copies are certified comply with the regulation governing the administering of an oath or affirmation as per paragraph 3.1,1. stated above.**

7.2 Phase 2: Price and Specific goals

7.2.1 In terms of Regulation of the Preferential Procurement Regulations pertaining to the Preferential Procurement Policy Framework Act, 2000 (Act 5 of 2000), responsive price quotations will be adjudicated by the Department on the **80/20 or 90/10-preference** point system in terms of which points are awarded to bidders based on:

- a) **Price quotation price (maximum 80 points)**
- b) **Specific goals (maximum 20 points)**

7.2.2 The following formula will be used to calculate the points for price:

Cases with a Rand value below R50 million (all applicable taxes included)		
$P_s = 80 \left(1 - \frac{P_t - P_{min}}{P_{min}} \right)$		
Where:		
PS	=	Points scored for comparative price of bid or offer under consideration
Pt	=	Comparative price of bid or offer under consideration
Pmin	=	Comparative price of lowest acceptable bid or offer

7.2.3 Specific goals as per Department of Correctional Services policy will be awarded as follows:

The specific goals allocated points in terms of this tender	Number of points allocated (90/10 system)	Number of points allocated (80/20 system)	Points claimed Bidder to indicate points to be claimed and proof submitted to claim for points
Women	3	7	
Youth	3	6	

*Just C1
000-8M JB*

Black	2	5	
People living with disabilities	2	2	

7.2.4 The following documentary proof must be submitted to claim for specific goals:

7.2.4.1 Women: Signed affidavit (signed off by SAPS) confirming gender, BBBEE certificate, Sworn Affidavit as per DTI prescribed template.

7.2.4.2 Disability: Medical certificate signed by the doctor.

7.2.4.3 Black: Signed affidavit (signed off by SAPS) confirming race, BBBEE certificate, Sworn Affidavit as per DTI prescribed template.

7.2.4.4 Youth: Certified Identity document, BBBEE certificate, Sworn Affidavit as per DTI prescribed template.

Note: For a bidder to qualify for preference points, ownership of 51% or more per procurement goal/historically disadvantaged individual must be obtained.

7.2.5 **The date of certification of documents should not be older than six (6) months.**

7.2.6 The points scored by a bidder in respect of specific goals will be added to the points scored for price.

7.2.7 The points scored will be rounded off to the nearest 2 decimals.

7.3 Phase 3: Awarding of bids

7.3.1 A bid must be awarded to the bidder who scored the highest total number of points in terms of the preference point systems (price and points for specific goals), unless objective criteria in terms of section 2(1)(f) of the Act justify the award of the bid to another bidder.

8. VALUE ADDED TAX

8.1 All bid prices are inclusive of 15% Value Added Tax (VAT), except in the case of a person that is not required to register for Value Added Tax.

C1
[Handwritten signatures]



9. BIDDER'S DISCLOSURE (SBD 4)

- 9.1 It is important that bidders acquaint themselves with the content of the Bidder's disclosure (SBD 4).
- 9.2 A bidder or his/her authorised representative is required to declare his/her position in relation to the evaluating/adjudicating authority and/or **take an oath declaring his/her interest, where -**
- a) The bidder is employed by the state; and/or
 - b) The legal person on whose behalf the bidding document is signed, has a relationship with persons/a person who are/is involved in the evaluation and or adjudication of the bid(s), or where it is known that such a relationship exists between the person or persons for or on whose behalf the declarant acts and persons who are involved with the evaluation and or adjudication of the bid.
- 9.3 The Declaration of Interest (SBD 4) must be completed in full.
- 9.4 Declarations of any nature will not necessarily prejudice any bidder, however should a bidder knowingly submit false declarations, this Department will act against such bidder (company) and/or its Directors in terms of paragraph 23 of the General Conditions of Contract.

10. PARTICIPATION OF GOVERNMENT OFFICIALS IN THE BIDDING PROCESS

- 10.1 In accordance with Sections 118 and 121 of the Correctional Services Act, 1998 (Act 111 of 1998), no member of the Department of Correctional Services may participate in the bidding process of the Department.
- 10.2 **The Public Administration Act, 2014 (Act no. 11 of 2014), chapter 3, section 8(2)(a) specifies that an employee of the State may not conduct business with the State.**
- 10.3 Bidders having a kinship with persons employed by the state, including a blood relationship, must declare their interest on the SBD 4 (Declaration of Interest).

11. FRONTING

- 11.1 The Department of Correctional Services supports the spirit of Broad Based Black Economic Empowerment and recognizes that real development can only be achieved through individuals and businesses conducting themselves in accordance with the Constitution and in:

HST

SM CX ELL JB



- a) An honest, fair, equitable, transparent and legally compliant manner. Against this background the Department of Correctional Services condemn any form of fronting.
- b) The Department of Correctional Services, in ensuring that bidders conduct themselves in an honest manner will as part of the bid evaluation processes, conduct or initiate the necessary enquiries, investigations to determine the accuracy of the representations made in the bid documents.

11.2 Should any of the fronting indicators as contained in the Guidelines on Complex Structures and Transactions and Fronting, issued by the Department of Trade and Industry, be established during such enquiry/ investigation, the onus will be on the bidder/ contractor to prove that fronting does not exist. Failure to do so within a period of 14 days from the date of notification may invalidate the bid/ contract and may also result in the restriction of the bidder/ contractor to conduct business with the public sector for a period not exceeding ten (10) years, in addition to any other remedies the Department may have against the bidder/ contractor concerned.

12. PRICE AND PRICE QUALIFICATION

- 12.1 Prices submitted for this bid are firm for the forty two months including all maintenance cost.
- 12.2 Prices shall be quoted in South African currency.
- 12.3 The bid prices shall be given in the units shown.
- 12.4 Prices must be inclusive of delivery cost, installation, commissioning, maintenance and all applicable taxes.

13. SUBMISSION OF BIDS

- 13.1 Each bid should be submitted in a separate sealed envelope or suitable cover on which the name and address, the bid number and the closing date must be clearly endorsed.

14. LATE BIDS

- 14.1 Bids received after the closing date and time, at the address indicated in the bid documents, will not be accepted for consideration and where possible, be returned unopened to the bidder.

15. COMMUNICATION

- 15.1 No communication with any Procurement Official will be allowed during the running period of the bid.



15.2 Communication after the closing date of the bid must be in writing and addressed to the Acting Director Procurement: email ester.moche@dcs.gov.za

15.3 The Department may request clarification regarding information provided by bidders. Bidders are to supply the required information within the specified period. Failing to do so will invalidate your bid.

16. COUNTER CONDITIONS

16.1 Bidder's attention is drawn to the fact that amendments to any of the Bid Conditions or setting of counter conditions by bidders will result in the invalidations of such bids.

17. VENDOR ASSESSMENT (CAPABILITY AND FINANCIAL ABILITY)

17.1 The Department will have the right to confirm the ability of bidders to execute this contract successfully. This includes an investigation by the Department or its appointee of the following:

- a) The bidder's financial position to execute the contracts,
- b) Previous contracts executed and current contracts (SBD 4 must completed),
- c) **Delivery periods, quality and quantity of products.**

17.2 Legal Requirements

17.2.1 A diesel generator must comply with all requirements as stipulated in the Acts , Notices , Bylaws, SANS and other applicable Regulations.

17.3 The premises/factory of the bidder or contractor should be open at all reasonable hour for inspection by a representative of the Department and/or its approved institution.

17.4 **Should the contractor not cooperate in any of these matters and/or do not have the capability to execute the contract his/her offer will be regarded as not acceptable.**

18. NEGOTIATIONS

18.1 The Department reserves the right to negotiate with bidders prior to the award of the bid.



19. ORDERS/DELIVERIES/DELIVERY BASIS

- 19.1 Before delivery of any product on this contract is conducted, the contractor must be in possession of an official order issued by an authorized official of the Department.
- 19.2 Firm delivery period must be quoted for the duration of the contract period.
- 19.3 Products must be delivered and off loaded by the contractor in the transit area of the delivery point.
- 19.4 Delivery will be accepted on weekdays between 8:00 and 14:00.
- 19.5 All deliveries and dispatches must be accompanied by a delivery note stating the official order number against which the delivery is affected.
- 19.6 Deliveries not complying with the order/specifications will be returned to the contractor at the contractor's expense.
- 19.7 The Department of Correctional Services may postpone or delay deliveries if it finds itself in any such position, as a result of circumstances beyond its control, which will make it impossible to comply with the specified delivery dates.

20. PACKAGING

- 20.1 If applicable, your attention is drawn to the packaging requirements stipulated in the specification.
- 20.2 There should be a labelling/description of the delivered items on the outside of the packaging that will correspond with the invoice.

21. CONTRACT MANAGEMENT

- 21.1 The contractor shall not abandon, transfer, assign or sublet a contract or part thereof without the prior written approval from the Department.
- 21.2 Contractor must inform the relevant Institution immediately when unforeseeable circumstances will adversely affect the execution of the contract. Full particulars of such circumstances as well as the period of delay must be furnished.
- 21.3 **Insurance**
- 21.3.1 Bidder must provide an insurance for the entire contract.



22. PENALTIES

22.1 The Department will impose a penalty as a result of unsatisfactory performance (e.g. poor quality, late delivery, non-delivery, etc.)

22.2 The following formula will be utilized for this purpose :

$$Penalty = \left(Vx \frac{10}{100} \right) x N$$

V = Value of delayed goods or services

N = Number of days of delay

A penalty will be limited to 30% of the value of delayed goods or services.

22.3 In addition to a penalty being imposed, the Department reserves the right to act in accordance with paragraph 21.6 of the General Conditions of Contract (GCC), which reads "Upon delay beyond the delivery period in the case of a supplies contract, the purchaser shall, without cancelling the contract, be entitled to purchase supplies of a similar quality and up to the same quantity in substitution of the goods not supplied in conformity with the contract and to return any goods delivered later at the supplier's expense and risk, or to cancel the contract and buy such goods as may be required to complete the contract and without prejudice to his other rights, be entitled to claim damages from the supplier."

22.4 The Department may terminate the contract at its sole discretion due to unsatisfactory performance (e.g. poor quality, late delivery, non-delivery, etc.) during the window period of two months, following the occurrence of the unsatisfactory performance.

23. PAYMENTS

23.1 Payments will only be effected by the Department in the following cases:

23.2 The successful completion of a deliverable/ service in line with the specification/ terms of reference.

23.3 Invoices should be delivered/posted or e-mailed to reach the institution that placed the order, timeously.

23.4 The invoices must be accompanied by an inspection certificate and/or proof of delivery.

23.5 Companies not registered in terms of Value Added Tax, may not claim VAT on invoices.

JST

SM CJ all JB



24. SETTLEMENT OF DISPUTES

- 24.1 Should any dispute arise from the contract paragraph 27 of the General Conditions of Contract shall apply.

**PRICING SCHEDULE – FIRM PRICES
(PURCHASES)**

NOTE: ONLY FIRM PRICES WILL BE ACCEPTED. NON-FIRM PRICES (INCLUDING PRICES SUBJECT TO RATES OF EXCHANGE VARIATIONS) WILL NOT BE CONSIDERED

IN CASES WHERE DIFFERENT DELIVERY POINTS INFLUENCE THE PRICING, A SEPARATE PRICING SCHEDULE MUST BE SUBMITTED FOR EACH DELIVERY POINT

Name of bidder.....	Bid number.....
Closing Time 11:00	Closing date.....

OFFER TO BE VALID FOR 120 DAYS FROM THE CLOSING DATE OF BID.

Schedule 1: Generator and Electrical Installation

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
					R	c
1.1	Supply, deliver, install and commissioning of silenced, containerised standby generator complete with controllers, exhaust in canopy as specified for the following sizes: 650 kVA Diesel/Alternating Generator Enclosed (3Ph), Prime Rated , (Including first fill of all lubrication and oils)					
	Supply	No	1			
	Installation	No	1			
1.2	Supply and deliver first fill of fuel:					
	Supply	L				
	Installation	L				

1.3	Supply, deliver, install and commission of Distribution Board as specified and as follows: 1250A, 25kA, 400V TPNE and Digital Multimeters, plus spare capacity for additional three circuits. Supply Installation	No No	1 1			
1.4	Supply, deliver, install and commission cable tray and cabling complete with termination kit as follows: 240mm ² , 4c PVC/SWA/PVC Supply Installation 70mm ² , BCEW Supply Installation Control Cabling Supply Installation 1800mm earth spike Supply Installation 600mm Wide Cable Ladder c/w bends, risers and fasteners. Supply Installation	m m m m m m Item Item m m	100 100 120 120 10 10 4 4 30 30			
1.5	Supply and install a 30MPA reinforced concrete plinth complete with sleeves and according to the DPWI specifications	No	1			
1.6	Supply and Install warning notices on the container as specified. Set of Warning Notices as per SANS and OHS specifications.	Item	1			
1.7	Compilation of Maintenance, operational and technical Manuals to the client satisfaction. Supply manuals	Item	1			
1.8	Test and Commission to deliver a fully operational generating set to					

	the client and engineers satisfaction c/w COC:					
1.8.1	At the suppliers premises, prior to delivery to site	Item	1			
1.8.2	On site after completion of the installation	Item	1			
1.9	Warranty and Maintenance of the plant as per the manufacturer's requirements and up to 4 000 running hrs.	Item	1			
1.10	Supply and install A82 padlocks.	Item	1			
1.11	Supply and install galvanised palisade fencing with a lockable gate.					
	8m x 6m x 1.8m	Item	1			
1.11	Decommission, remove, and transport within the college an existing 80kVA open set generator complete with associated auxiliaries:	Item	1			
1.12	Supply and Install Moulded Case Circuit Breakers:					
1.12.1	1000A, 3p, 25kA, 400V Supply	No.	1			
	Installation	No.	1			
1.12.2	1250A, 3p, 25kA, 400V Supply	No.	1			
	Installation	No.	1			
1.12.3	Enclosure Box for the 1250A MCCB	No.	1			
	Supply	No.	1			
	Installation	No.	1			
1.13	Trenching and Reinstatement	Item	1			
1.14	Other (Please specify)					
Total Carried to Summary					R	

Schedule 2: Preliminaries, General and Miscellaneous

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
2.1	In addition to the Contract P&G the total amount allowed under this Schedule shall provide completely for all requirements of the General and Additional Conditions of Contract and as specified in GCC.	Item	1			
2.2	Allow for Site Establishment	Item	1			
2.3	Allow for transport/ travelling charges	Item	1			
2.4.	Allow for OHSA and Regulations	Item	1			
Total Carried to Summary					R	

2.5 Summary of Schedules of Quantities

Schedules	Page No	Amount
1. Generator and Electrical Installation		
2. Preliminaries, General and Miscellaneous		
3. Contingency (5%)		
Total Tender Price for the Supply and Installation of Prime Rated Generator Set		R

- Required by: DEPARTMENT OF CORRECTIONAL SERVICES
- At: ZONDERWATER TRAINING COLLEGE
- Brand and model
- Country of origin
- Does the offer comply with the specification(s)? *YES/NO
- If not to specification, indicate deviation(s)
- Period required for delivery
*Delivery: Firm/not firm
- Delivery basis

Note: All delivery costs must be included in the bid price, for delivery at the prescribed destination.

** "all applicable taxes" includes value-added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies.

*Delete if not applicable



AUTHORISATION DECLARATION: CONFIRMATION OF SUPPLY AND FINANCIAL ARRANGEMENTS BETWEEN THE BIDDER AND THIRD PARTY

BID NUMBER: HO 3/2023

DESCRIPTION: SUPPLY AND DELIVERY, INSTALLATION AND COMMISSIONING OF A 650kVA,400V,50Hz STANDBY DIESEL GENERATOR SET INCLUDING MAINTANANCE IN ACCORDANCE WITH SOUTH AFRICAN NATIONAL SPECIFICATION SANS 8528 AND COMPLY WITH THE OCCUPATIONAL HEALTH AND SAFETY ACT NO. 85 OF 1993 AND CURRENT REGULATION OF ALL OTHER CODES APPLICABLE: DELIVERY IN TWO (02) PHASES: DEPARTMENT OF CORRECTIONAL SERVICES: ZONDERWATER TRAINING COLLEGE (GAUTENG PROVINCE)

NAME OF BIDDER: _____

CLOSING DATE: 04 DECEMBER 2023 AT 11:00AM

Are you sourcing the goods or services from a third party? _____

If you have answered YES to the above question, please provide full details from whom the items will be sourced/delivered, in the space provided on the pricing schedule (SBD 3).

DECLARATION BY THE BIDDER WHERE THE BIDDER IS SOURCING THE GOODS OR SERVICES FROM A THIRD PARTY:

1. I, _____ (Bidder) hereby declare the following:
 - The goods or services listed below, is being sourced from a third party in order to comply with the terms and conditions of the bid.
 - The third party has been informed of the terms and conditions of the bid and the third party is acquainted with the said terms and the description of the goods or services listed on the SBD 3 (Pricing Schedule).
 - The unconditional written undertaking to supply the goods or services listed in the SBD 3 (Pricing Schedule) in accordance with the terms and conditions of the bid document for the duration of the contract has been received from the third party. See confirmation below.
 - It is confirmed that all financial and supply arrangements for goods or services have been mutually agreed upon between the bidder and the third party.
2. The information contained herein is true and correct.
3. Failure to submit the BD 27 may invalidate the bid.
4. It is acknowledged that the Department reserves the right to verify the information contained herein and if found to be false or incorrect, the Department may invoke any remedies available to it in the bid documents.

SIGNATURE BY THE BIDDER:

Signed at _____ on the _____ day of _____ 20__

Signature _____ Full name _____

Designation _____

(This form must be applicable to purchases exceeding R30 000-00 per case)



THIRD PARTY UNDERTAKING

Note:

- A separate Undertaking must be completed by each Third Party;
- A letter issued on the official letterhead of the third party addressing the information below is acceptable.

To be completed by the third party

Name of Third Party: _____

Physical Address: _____

Telephone number: _____

Facsimile number: _____

E-mail address: _____

It is hereby confirmed that a mutual agreement has been reached between myself and the bidder is therefore authorised to include the products listed in the SBD 3 (Pricing Schedule).

We confirm that we have firm supply and financial arrangements in place, and have familiarized ourselves with the item descriptions, specifications and bid conditions relating to the item/s listed in the table above.

SIGNATURE BY THE THIRD PARTY:

Signature: _____ **Full name:** _____

Designation: _____

Date: _____

**PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL
PROCUREMENT REGULATIONS 2022**

This preference form must form part of all tenders invited. It contains general information and serves as a claim form for preference points for specific goals.

NB: BEFORE COMPLETING THIS FORM, TENDERERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF THE TENDER AND PREFERENTIAL PROCUREMENT REGULATIONS, 2022

1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to invitations to tender:

- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
- the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

1.2 PREFERENCE POINT SYSTEM

a) The applicable preference point system for this tender is the **80/20** preference point system.

1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:

- (a) Price; and
- (b) Specific Goals.

1.4 To be completed by the organ of state:

The maximum points for this tender are allocated as follows:

	POINTS
PRICE	80
SPECIFIC GOALS	20
Total points for Price and SPECIFIC GOALS	100

1.5 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.

1.6 The organ of state reserves the right to require of a tenderer, either before a tender is

adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

2. DEFINITIONS

- (a) “**tender**” means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;
- (b) “**price**” means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;
- (c) “**rand value**” means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;
- (d) “**tender for income-generating contracts**” means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and
- (e) “**the Act**” means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1. POINTS AWARDED FOR PRICE

3.1.1 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

A maximum of 80 or 90 points is allocated for price on the following basis:

$$\begin{array}{ccc} \mathbf{80/20} & \mathbf{or} & \mathbf{90/10} \\ \\ \mathbf{Ps = 80 \left(1 - \frac{Pt - P_{min}}{P_{min}} \right)} & \mathbf{or} & \mathbf{Ps = 90 \left(1 - \frac{Pt - P_{min}}{P_{min}} \right)} \end{array}$$

Where

- Ps = Points scored for price of tender under consideration
- Pt = Price of tender under consideration
- Pmin = Price of lowest acceptable tender

3.2. FORMULAE FOR DISPOSAL OR LEASING OF STATE ASSETS AND INCOME GENERATING PROCUREMENT

3.2.1. POINTS AWARDED FOR PRICE

A maximum of 80 or 90 points is allocated for price on the following basis:

$$\begin{array}{ccc} \mathbf{80/20} & \mathbf{or} & \mathbf{90/10} \end{array}$$

$$P_s = 80 \left(1 + \frac{P_t - P_{max}}{P_{max}} \right) \text{ or } P_s = 90 \left(1 + \frac{P_t - P_{max}}{P_{max}} \right)$$

Where

- P_s = Points scored for price of tender under consideration
 P_t = Price of tender under consideration
 P_{max} = Price of highest acceptable tender

4. POINTS AWARDED FOR SPECIFIC GOALS

- 4.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:
- 4.2. In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—
- (a) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or
 - (b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system,
- then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

Table 1: Specific goals for the tender and points claimed are indicated per the table below.

(Note to organs of state: Where either the 90/10 or 80/20 preference point system is applicable, corresponding points must also be indicated as such.)

Note to tenderers: The tenderer must indicate how they claim points for each preference point system.)

The specific goals allocated points in terms of this tender	Number of points allocated (90/10 system) (To be completed by the organ of state)	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (90/10 system) (To be completed by the tenderer)	Number of points claimed (80/20 system) (To be completed by the tenderer)
Women	4	8		
Youth	2	5		
Black	2	4		
People living with disabilities	2	3		

DECLARATION WITH REGARD TO COMPANY/FIRM

4.3. Name of company/firm.....

4.4. Company registration number:

4.5. TYPE OF COMPANY/ FIRM

- Partnership/Joint Venture / Consortium
- One-person business/sole propriety
- Close corporation
- Public Company
- Personal Liability Company
- (Pty) Limited
- Non-Profit Company
- State Owned Company

[TICK APPLICABLE BOX]

4.6. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I acknowledge that:

- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;
- iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have –

- (a) disqualify the person from the tendering process;
- (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
- (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
- (d) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
- (e) forward the matter for criminal prosecution, if deemed necessary.

.....

SIGNATURE(S) OF TENDERER(S)

SURNAME AND NAME:

DATE:

ADDRESS:

.....

.....

.....

\=-78653421`z+ /

BDDER'S DISCLOSURE

*_-+

1. PURPOSE OF THE FORM

Any person (natural or juristic) may make an offer or offers in terms of this invitation to bid. In line with the principles of transparency, accountability, impartiality, and ethics as enshrined in the Constitution of the Republic of South Africa and further expressed in various pieces of legislation, it is required for the bidder to make this declaration in respect of the details required hereunder.

Where a person/s are listed in the Register for Tender Defaulters and / or the List of Restricted Suppliers, that person will automatically be disqualified from the bid process.

2. Bidder's declaration

2.1 Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest¹ in the enterprise, employed by the state? **YES/NO**

2.1.1 If so, furnish particulars of the names, individual identity numbers, and, if applicable, state employee numbers of sole proprietor/ directors / trustees / shareholders / members/ partners or any person having a controlling interest in the enterprise, in table below.

Full Name	Identity Number	Name of State institution

2.2 Do you, or any person connected with the bidder, have a relationship

¹ the power, by one person or a group of persons holding the majority of the equity of an enterprise, alternatively, the person/s having the deciding vote or power to influence or to direct the course and decisions of the enterprise.

with any person who is employed by the procuring institution? YES/NO

2.2.1 If so, furnish particulars:

.....
.....

2.3 Does the bidder or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise have any interest in any other related enterprise whether or not they are bidding for this contract? YES/NO

2.3.1 If so, furnish particulars:

.....
.....

3 DECLARATION

I, _____ the _____ undersigned, (name)..... in submitting the accompanying bid, do hereby make the following statements that I certify to be true and complete in every respect:

- 3.1 I have read and I understand the contents of this disclosure;
- 3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;
- 3.3 The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium² will not be construed as collusive bidding.
- 3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.
- 3.4 The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
- 3.5 There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring

² Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.

- 3.6 I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

I CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 1, 2 and 3 ABOVE IS CORRECT.

I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME IN TERMS OF PARAGRAPH 6 OF PFMA SCM INSTRUCTION 03 OF 2021/22 ON PREVENTING AND COMBATING ABUSE IN THE SUPPLY CHAIN MANAGEMENT SYSTEM SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....
Signature

.....
Date

.....
Position

.....
Name of bidder

HO 3/2023

SUPPLY AND DELIVERY, INSTALLATION AND COMMISSIONING OF A 650kVA, 400V, 50Hz STANDBY DIESEL GENERATOR SET INCLUDING MAINTANANCE IN ACCORDANCE WITH SOUTH AFRICAN NATIONAL SPECIFICATION SANS 8528 AND COMPLY WITH THE OCCUPATIONAL HEALTH AND SAFETY ACT NO. 85 OF 1993 AND CURRENT REGULATION OF ALL OTHER CODES APPLICABLE : DELIVERY IN TWO(02) PHASES : DEPARTMENT OF CORRECTIONAL SERVICES: ZONDERWATER TRAINING COLLEGE (GAUTENG PROVINCE)

Prospective bidders must attend the compulsory information meeting to acquaint themselves with the extent of the services required. A completed attendance certificate must be submitted together with the bid document.

Date: 20 NOVEMBER 2023
Time: 10:00 AM
Venue: ZONDERWATER TRAINING COLLEGE (GAUTENG PROVINCE) R515 RAYTON RD CULLINAN, MASS VIP ROOM

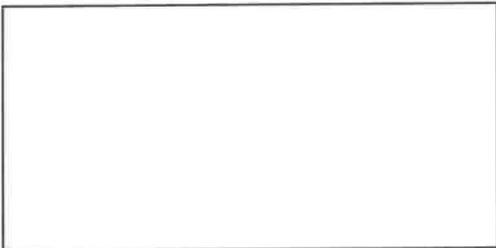
This is to certify that (name and surname).....
of (the company name)..... attended the
compulsory information meeting on the day of 2023.

.....
Signature of the bidder

.....
Signature of the dcs official

.....
Name and Surname (bidder)

.....
Name and Surname (dcs official)



.....

RANK

DEPARTMENTAL STAMP