



DEPARTMENT OF WATER AND SANITATION

DUE AT 11:00 ON

CLOSING DATE: 02 OCTOBER 2026

***Bids to be submitted to the Tender Box before 11:00, bids not submitted in the tender box will not be accepted.**

WTE-2624ES

**DESIGN, SUPPLY, INSTALLATION, COMMISSION OF THE CONTROL PANEL
FOR THE STANDBY GENERATOR AND SERVICE THE STANDBY GENERATOR
AT KLIPFONTEIN DAM IN THE OPERATIONS EASTERN**

SUBMIT BID DOCUMENTS TO:

POSTAL ADDRESS:

DEPT OF WATER AND SANITATION
SUPPLY CHAIN MANAGEMENT OFFICE
PRIVATE BAG X 24
HOWICK, 3290

OR

TO BE DEPOSITED IN:

DEPT OF WATER AND SANITATION
THE BID BOX AT THE ENTRANCE
GATE OF MIDMAR DAM
R103 PROSPECT ROAD
MIDMAR DAM
HOWICK, 3290

***Please do not address your parcel to an official if you are making use of a delivery company.
Clearly state: Tender Box**

Compulsory Briefing Session

Date: 23 September 2026

Time: 11:00am

Venue: Klipfontein Dam

BIDDER: (Company Address OR Stamp)

COMPILED BY: DEPARTMENT OF WATER AND SANITATION



DEPARTMENT OF WATER AND SANITATION

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T1 TENDERING PROCEDURES

T1.1 INSTRUCTIONS TO BIDDERS

1. ISSUING OF DOCUMENTS

- (a) A complete sets of bid documents are issued to a prospective Bidder.
- (b) Bidders must satisfy themselves that the document is complete and conform to the index of this document. Should any figures or writing be indistinct or should any pages be missing from this document or should this document or the drawing(s) contain any obvious errors, the Bidders must immediately notify the Department in order to have any discrepancy rectified or clarified before submitting his bid. Such clarification will be valid only if made by the Department by means of formal amendment as described hereunder prior to the date of submission of bids. The Department may issue amendments to clarify or modify the Bid Documents. A copy of each amendment will be issued to each bidder and shall be acknowledged on the form issued with the amendments. No claim whatsoever will be entertained for faults in the bid price resulting from the above-mentioned discrepancies.
- (c) No alterations, omissions or additions shall be made to this document, but should it be deemed necessary to do so, the Bidder is at liberty to qualify his bid.
- (d) All Bidders shall be deemed to have waived, renounced and abandoned any conditions printed or written upon any stationery used by them for the purpose of or in connection with the submission of bids which are in conflict with the conditions laid down in this document.
- (e) Each page of the completed document that will be submitted should be initialled by the Bidder at the bottom of the page.

2. QUERIES WITH RESPECT TO THIS BID

Queries of a specific technical nature may be discussed personally or telephonically with **Mr Mvelo Mthanda at 033 239 1212 / mthandam@dws.gov.za** or may be directed in writing to: The Director: Eastern Operations, Department of Water and Sanitation, Private bag X24, Howick.

3. COMPLETION OF BIDS

- (a) The bid must be signed on the Invitation to Bid form (SBD 1) annexed hereto with all blanks in the bid and the appendix filled in.
- (b) All spaces in the bid forms and other annexures shall be completed in full.
- (c) **SBD 3.1 in the bid document and the Pricing Schedule must be fully completed and priced out by the bidder. Failure to do so will deem your bid invalid.**
- (d) The bid documents shall not be separated in any way nor must any pages be detached from the original documents.

4. SUBMISSION OF BIDS

The Bid Document shall be completed, signed and submitted as follows:

- (a) The original Bid, together with a covering letter and supporting documents, shall be sealed in an envelope endorsed:

ORIGINAL BID FOR WTE-2624ES: DESIGN, SUPPLY, INSTALLATION, COMMISSION OF THE CONTROL PANEL FOR THE STANDBY GENERATOR AND SERVICE THE STANDBY GENERATOR AT KLIPFONTEIN DAM IN THE OPERATIONS EASTERN

- (b) Bids sealed and endorsed as above, will be received by: The Supply Chain Management Office or may be deposit in the bid box at the entrance of **Department of Water and Sanitation, R103 Prospect Road, Howick** and not later than **11:00** on the date stipulated on the front cover of this document.

5. SIGNATURE ON BIDS

The Bid, if by an individual, must be signed by that individual or by someone on his behalf duly authorised thereto and **proof of such authority must be produced**. If the bid is by a Company, it must be signed by a person duly authorised thereto by a Resolution of a Board of Directors a copy of which Resolution, duly certified by the Chairman of the Company is to be submitted with the bid.

The successful bidder will be required to submit a "Letter from the manufacturer" confirming the supply arrangement within 14 days after the approval of the bid.

If the bid is submitted by joint venture of more than one person and/or Companies and/or firms it shall be accompanied by the following:

- (a) The original or a notarially certified copy of the original document under which such joint venture was constituted which must define precisely inter alia the conditions under which the joint venture will function, its period of duration and the participation of the several constituent persons and/or companies and/or firms.
- (b) A certificate signed by or on behalf of each participating person and/or company and/or firm authorising the person who signed the bid to do so.

6. GENERAL CONDITIONS OF CONTRACT

The General Conditions of Contract, as attached shall be regarded as an integral part of the contract documents.

7. PERIOD OF VALIDITY OF QUOTATIONS AND WITHDRAWAL AFTER CLOSING DATE

All quotations shall remain valid for a period of **one hundred and twenty days (120)** after the closing time and date set.

8. TELEGRAPHIC BIDS

No bid forwarded by telegram, telex, facsimile, e-mail or similar apparatus will be considered.

9. THE DEPARTMENTS RIGHT TO DECLINE ANY BID

The Department does not bind itself to accept the lowest or any bid. Bids not complying with the above-mentioned requirements and specifications may be regarded as incomplete and may not be considered.

10. ACCEPTANCE OR REJECTION

Quotations may be rejected if they show any departure from the conditions or specifications contained in the quotation documents or are incomplete in any way. The employer **does not bind him** to accept the lowest or any quotation and reserves the right to accept any quotation he may deem expedient, nor will he assign any reason for the acceptance or rejection of any quotation.

11. DEPARTMENT NOT LIABLE FOR BIDDER'S EXPENSES

The Department will not be held liable for any expenses incurred in preparing and submitting bids.

T1.2 EVALUATION CRITERIA

DWS will evaluate all proposals according to the Preferential Procurement Regulations, 2022, using 80/20 preference points system as prescribed in the Preferential Procurement Policy Framework Act (PPPFA, Act 5 of 2000). The lowest acceptable bid will score 80 points for price and a maximum of 20 points will be awarded for the specific goals. Maximum of 100 points will be scored for functionality (quality).

Bids received will be evaluated on the five (4) phases namely:

- (1) Mandatory Requirements (if applicable),
- (2) Functionality Requirements
- (3) Administrative Compliance
- (4) Price & Specific Goal

PHASE 1: MANDATORY REQUIREMENTS:

Failure to submit any of the documents listed below will render your bid non-responsive and the bid will be disqualified.

No	Criteria	Yes	No
1	Attach valid CIDB certificate minimum Grading 2 ME or higher		
2	Completed bill of quantities		
3	Fully Completed pricing schedule (SBD 3.1)		
4	Signed Briefing Certificate/Bidder's name must appear on the attendance register		

PHASE 2: FUNCTIONALITY COMPLIANCE

- Full compliance to technical requirements by indicating compliant or non-compliant.
- Bidders who Fail to comply with the below requirements in full will be considered non-responsive and may be disqualified from further evaluation.

Criteria	Sub-Criteria	COMPLY YES/NO	
		Yes	No
Team capability	Team capability- Demonstrated skills and experience of key personnel for this project, limited to the Project Manager or Site agent. • An Organogram with personnel relevant to the project. • Attach 1 page resume of Project Manager or Site Agent indicating, amongst others, relevant qualifications, experience, accreditation/affiliation (where relevant), etc. Artisan/Site Agent with 2 or more years' experience.		
Proposed construction programme	Proposed construction programme- Provides a detailed list of tasks necessary to complete the works, tasks a specific to the project and encompass milestones Appropriate timeline and time estimates		
Past relevant work experience	Past relevant work Experience – Three (3) award letters, completion certificates and verifiable completion certificates of which the scope of work is relevant to the project scope as prescribed in the project specification.		
Methodology	Methodology- Items (a-g) must be clearly outlined in the detailed method statement. a) Project execution Plan b) Broad methodologies in line with the task descriptions outlined under project scope/ task description and technical c) specifications and schedules d) Clear milestones, installation methods and timeframes for each task to be completed. e) Associated Health, Safety and Environmental Assessments		

PHASE 3: ADMINISTRATIVE COMPLIANCE

Bidders are required to comply with the following listed below:

No	Criteria	Yes	No
1	Companies must be registered with National Treasury's Central Supplier Database must submit CSD report. Provide MAAA number on SBD1		
2	Tax compliant with SARS (to be verified through CSD and SARS). Attach Tax Compliance status PIN page		
3	Active registration with Company Intellectual Property Commission (to be verified through CSD and CIPC). Attach copy of Bidder's CIPC / CIPRO certificate.		

No	Criteria	Yes	No
4	A valid copy of B-BBEE Status Level Verification Certificate or a valid original sworn affidavit (failure to submit, the Bidder will forfeit the relevant points allocated for B-BBEE under specific goals)		
5	Initial and sign Tender data section (T1 & T2) and all required documents to be submitted with tender. Initial each page of section C1, C2 and C3 and sign where required.		
6	Letter of appointment of duly authorized person to sign bid. Proof of such authority must be submitted with the bid. If by an individual, must be signed by that individual or by someone on his behalf duly authorised thereto and proof of such authority must be produced. If the bid is by a Company, it must be signed by a person duly authorised thereto by a Resolution of a Board of Directors a copy of which Resolution, duly certified by the Chairman of the Company is to be submitted with the bid.		
7	Complete, sign, submit SBD1, SBD4, SBD6.1 and Annexures C (Local Production and Content declaration – summary schedule.)		

PHASE 4: PRICE AND SPECIFIC GOALS

The 80/20-point system will be used in evaluating all proposals.

Evaluation element	Weighting (Points)
SPECIFIC GOALS	20
PRICE	80
Total	100

Price

A maximum of 80 points are allocated for price on the following basis

$$P_s = 80 \left(1 - \frac{P_t - P_{\min}}{P_{\min}} \right)$$

Where:

P_s = Points scored for comparative price of bid under consideration
 P_t = Comparative price of bid under consideration
 P_{min} = Comparative price of lowest acceptable bid

Preference Point System (Specific Goals)

SPECIFIC GOALS	NUMBER OF POINTS TO BE ALLOCATED
Women	5
People with disability	5
Youth (35 and below)	5
Location of enterprise (Province)	2
B-BBEE status level contributors from level 1 to 2 which are QSE or EME	3
Total points for SPECIFIC GOALS	20

Documents requirement for verification of points allocation:

Procurement Requirement	Required Proof Documents
Women	Full CSD Report
Disability	Full CSD Report
Youth	Full CSD Report
Location	Full CSD Report
B-BBEE status level contributors from level 1 to 2 which are QSE or EME	Valid BBBEE certificate/sworn affidavit Consolidated BEE certificate in cases of Joint Venture Full CSD Report

The definition and measurement of the goals above is as follows:

Women, disability, and youth:

This will be measured by calculating the pro-rata percentage of ownership of the bidding company which meets this criterion. E.g., Company A has five shareholders each of whom own 20% of the company. Three of the five shareholders meet the criterion, i.e. they are women/disability/youth. Therefore, this bidder will obtain 60% of the points allowable for this goal.

Location of enterprise

Local equals province. Where a project cuts across more than one province, the bidder may be located in any of the relevant provinces to obtain the points.

B-BBEE status level contributors from level 1 to 2 which are QSE or EME

Measured in terms of normal BBBEE requirements.

Note: Formula for calculating points for specific goals

Preference points for entities are calculated on their percentage shareholding in a business, provided that they are actively involved in and exercise control over the enterprise. The following formula is prescribed:

$$PC = \frac{Mpa \times P\text{-own}}{100}$$

Where

PC= Points awarded for specific goal

Mpa= The maximum number of points awarded for ownership in that specific category

P-own = The percentage of equity ownership by the enterprise or business

Should you require any further information in this regard, please do not hesitate to contact:

Name:	Mvelo Mthanda
Tel:	033 239 1212
Mobile:	082 323 8257
Email:	mthandam@dws.gov.za

T1.3 LIST OF RETURNABLE DOCUMENTS AND SCHEDULES

The Bidder must complete and attach the following Returnable Documents:

a) SBD Forms to be completed and signed

- | | | |
|--------|--|--------------------------|
| SBD1 | Invitation to Bid | ☐ |
| SBD3.1 | Pricing Schedule – Firm Prices | ☐ |
| SBD4 | Declaration of Interest | ☐ |
| SBD6.1 | Preference Points Claim Form in terms of the Preferential Procurement Regulations 2022 | ☐ |

b) Returnable Schedules required for Bid Evaluation purposes

- | | | |
|----|---|--------------------------|
| A: | Certificate of attendance of briefing session | ☐ |
| B: | Bill of Quantities (BOQ) | ☐ |

c) Other Documents required for Bid Evaluation purposes

- | | | |
|----|--|--------------------------|
| 1: | Company/business registration certificate (CK) issued by the Commissioner of Companies & Intellectual Property Commission (Joint Ventures/Close Corporation/Partnership/Company/Sole Proprietor) | ☐ |
| 2: | An original valid Tax Clearance Certificate issued by the South African Revenue Services. | ☐ |
| 3: | Certified copies of Identity Documents of shareholders | ☐ |
| 4: | B-BBEE Status Level Verification Certificate or Sworn Affidavit | ☐ |
| 5: | Letter of Authority indicating the person who will be authorized to sign bidding documents and contract on behalf of bidder | ☐ |
| 6: | General condition of a contract, signed | ☐ |
| 7: | CSD Reports (comprehensive) | ☐ |
| 8: | Check list of returnable documents | ☐ |



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

SBD 1

PART A: INVITATION TO BID

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE (NAME OF DEPARTMENT/ PUBLIC ENTITY)					
BID NUMBER:	WTE-2624ES		CLOSING DATE: 02 OCTOBER 2026	CLOSING TIME:	11:00am
DESCRIPTION	DESIGN, SUPPLY, INSTALLATION, COMMISSION OF THE CONTROL PANEL FOR THE STANDBY GENERATOR AT KLIPFONTEIN DAM IN THE OPERATIONS EASTERN				
BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)					
THE BID BOX AT THE ENTRANCE OF WATER AND SANITATION – MIDMAR DAM					
R103 PROSPECT STREET					
HOWICK, 0001					
BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO			TECHNICAL ENQUIRIES MAY BE DIRECTED TO:		
CONTACT PERSON	Gerda Lamprecht		CONTACT PERSON	Mr. M Mthanda	
TELEPHONE NUMBER				033 239 1212	
FACSIMILE NUMBER					
E-MAIL ADDRESS	lambrechtg@dws.gov.za		E-MAIL ADDRESS	Mthandam@dws.gov.za	
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] ☐ Yes ☐ No		B-BBEE STATUS LEVEL SWORN AFFIDAVIT		[TICK APPLICABLE BOX] ☐ Yes ☐ 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?	☐ Yes ☐ No [IF YES ENCLOSE PROOF]		ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?		☐ Yes ☐ 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, 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:

.....



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

SBD 3.1

**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: **WTE-2624ES**

Closing date: **02 OCTOBER 2026**

Closing Time **11:00**

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

ITEM NO.	QTY	DESCRIPTION OF GOODS	UNIT PRICE (To be filled by the bidder)	BID PRICE (To be filled by the bidder)
1	1	Design, supply, installation of the control panel for the standby generator		
2	1	Service and repair the onsite standby generator; 1.1 Testing 1.2 Maintenance 1.3 Repairs or replacement of faulty equipment		
3	1	Battery		
4	20 L	Supply of Diesel 50 ppm		
			SUB-TOTAL (VAT EXCLUSIVE)	
			15% VAT	
			TOTAL BID PRICE (VAT INCLUSIVE)	

- **Required by:** OPERATIONS EASTERN
- **Att:** SUPPLY CHAIN MANAGEMENT
- **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**

BIDDER'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

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.

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

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.

- 3.5 There have been no consultations, communications, agreements or arrangements made by the Bidder with any official of the procuring 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

SBD 6.1

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

1.2 To be completed by the organ of state

- 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 PREFERENCE POINT SYSTEMS

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

80/20 or

$$Ps = 80 \left(1 - \frac{Pt - Pmin}{Pmin} \right)$$

Where

Ps = Points scored for price of tender under consideration
Pt = Price of tender under consideration
Pmin = Price of lowest 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 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 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 (80/20 system) (To be completed by the organ of state)	Number of points Claimed (80/20 system) To be completed by the Tenderer
Women Ownership	5	
Disability Ownership	5	
Youth Ownership	5	
Location of enterprise (local equals province) KZN	2	
B-BBEE status level contribution from level 1 to 2 which are QSE or EME	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:	
	
	
	

LOCAL CONTENT ANNEXURE C

SATS 1286.2011

Annex C

Local Content Declaration - Summary Schedule

(C1) Tender No.
(C2) Tender description:
(C3) Designated product(s)
(C4) Tender Authority:
(C5) Tendering Entity name:
(C6) Tender Exchange Rate:
(C7) Specified local content %

Note: VAT to be excluded from all calculations

Pula EU GBP

Calculation of local content							
Tender item no's	List of items	Tender price - each (excl VAT)	Exempted imported value	Tender value net of exempted imported content	Imported value	Local value	Local content % (per item)
(C8)	(C9)	(C10)	(C11)	(C12)	(C13)	(C14)	(C15)

Tender summary			
Tender Qty	Total tender value	Total exempted imported content	Total Imported content
(C16)	(C17)	(C18)	(C19)

Signature of tenderer from Annex B

Date: _____

(C20) Total tender value R 0
(C21) Total Exempt imported content R 0
(C22) Total Tender value net of exempt imported content R 0
(C23) Total Imported content R 0
(C24) Total local content R 0
(C25) Average local content % of tender



C1: CONTRACT DATA

C1.1 GENERAL CONDITIONS OF CONTRACT

C2. PRICING DATA

C2.1 BILL OF QUANTITIES



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

CONTRACT NO: WTE-2624ES

PRICING DATA: BILL OF QUANTITIES

Crane Examination, Service, Repairs and Load Testing in the Eastern Operations

Item. No.	Pay Ref.	Description	Unit	QTY	Rate	Amount
1		Service and repair the onsite standby generator: 1. Testing 2. Maintenance 3. Repairs or Replacement of faulty parts	Sum	1		
2		Supply a new Generator Battery	Sum	1		
3		Supply of Diesel 50 ppm	Sum	20L		
4		Design, supply, installation of the control panel for the standby generator	Sum	3		
5		Supply of new Battery	Sum	1		
TOTAL						
Total to be brought to SBD 3.1						

C3: SCOPE OF WORKS

C3.1 Technical Specification

1. Introduction

This document provides technical specification for Design, supply, installation, commission of the control panel for the standby generator and Service the standby generator at Klipfontein Dam.

Background and Discussion

Klipfontein Dam is located on the White Mfolozi River, 12km from Vryheid town. The co-ordinates of the dam are 29° 29' 45.999'' S 25° 13' 18.9984'' E.

The scope of this project is intended to cover the following:

- Decommissioning, removal of the existing generator control panel.
- Design, construction, manufacture, supply, installation, testing, complete commissioning and handover operational generator control panel.
- Complete refurbishment of motor switchgear, control and protection panel at New Ventures pump station.
- The service provider will be responsible for all maintenance and repairs of the standby generators.

Design, supply, installation, commission of the control panel for the standby generator

The panel shall consist of the following:

QUANTITY	DESCRIPTION
4	Surge arresters
1	A suitable rated four pole circuit breaker and contactor for dummy load switching
8	Relays
1	12V Battery Charger
1	160A Three (3) Phase Circuit Breaker - Generator
1	200A Three (3) Phase Circuit Breaker - Mains
1	250A Change over switch
1	3 Phase Contactor
1	Fuel Gauge

2	400 V voltmeters with seven position selector switch for generator supply
3	Ammeters with maximum demand indication for the generator supply
1	Frequency meter for the generator supply
1	Running hour meter
1	Plant selector switch marked "OFF-AUTO-MANUAL-TEST"
1	Engine stop and start control
1	Emergency stop
1	Engine failure equipment for high temperature, low oil pressure, over speed, low water level and low fuel level
1	Various signal lights and push buttons
1	Fuses for secondary circuits

- The surge arresters to be used shall be rated for a nominal discharge current of 15 kA, maximum discharge current of 40 kA and a response time of 25 ns.
- These surge arrestors shall be housed in a separate compartment in order to avoid damage to another component when they burn. This compartment shall be situated as close as possible to the earth bar to keep the connection as short as possible.
- The equipment in the panel shall be rated to withstand a fault current of 10 kA (for 3 seconds).

Selector switch

A key operated, four-position selector switch shall be provided. The four positions shall be as follows:

(a) Auto

In this position, the generator and control circuit shall operate automatically under control of one or more of the logic modules detailed hereunder.

(b) Test

The generator shall start automatically but the alternator circuit breaker shall not close. The mains control shall not be affected. It shall be possible to prove the operation of the automatic synchronising unit without closing the alternator ACB. The operation of the engine/alternator protective devices shall be proved by simulating a fault by means of tests buttons. Refer to Clause 22 for the operation of the dummy load in test position.

(c) Manual

In this position all automatic control circuits shall be inoperative. The sets shall be started from a pushbutton or switch on the control board. The alternator AC, voltage and engine speed shall also be controlled by pushbuttons or potentiometers.

(d) Off

In this position the set shall be completely disconnected from the automatic control for cleaning and maintenance purposes. The mains control section shall, however, still operate normally.

Automatic mains failure module

- This module shall monitor all three phase voltages and voltages to neutral both individually and jointly. It shall initiate the starting sequence upon failure of any one or all three phases and the neutral or if the voltage should drop by more than 15%.
- Provide a time delay unit which upon mains failure, initiates start delay of 0-60 seconds (set at 15 seconds). If the mains should return during the start delay, the start-up cycle shall not proceed. The remote mains supply circuit breaker shall trip only once the set has started.

An alternator voltage/frequency-sensing module

This module shall sense the alternator voltage between two phases. The drop out voltage shall be adjustable between 80% and 95% of nominal in the under-voltage band and between 105% and 120% nominal in the over voltage band.

The unit shall incorporate a frequency monitor, adjustable to limits to $\pm 10\%$ of 50 HZ.

Three separate outputs from the module shall be provided - one for voltage and two for frequency. These outputs shall initiate operation of the overspeed, under-speed, as well as abnormal voltage trip and alarms but shall be sufficiently delayed to over-come short time voltage or frequency variations.

A stop delay module

Upon restoration of the mains, supply, this module shall provide an adjustable period of 0-15 minutes after the return of mains supply to run the engine on no-load for cooling down purposes before the engine is automatically shut down.

A start delay module

This module shall initiate the starting of the engine after the required start delay and which shall permit three starting attempts of the engine by giving three on-and-off periods of approximately 5 seconds each. An overall timer shall block the start process after 6 attempts

and initiate the "Start Failure" alarm. The alarm-cancelling button shall then reset the start command. A cancelling signal derived from the battery-charging alternator on the engine shall block the start command of firing of the engine. After voltage and frequency build-up, sensed by clause 2.25.3 above, a changeover from mains to alternator supply shall be initiated.

Alarm & Protection System

An alarm and protection module incorporating parallel engine protection and alarm circuits, shall be provided. The following features shall be included:

ALARMS: NON URGENT WARNINGS	B.	ALARMS: URGENT CAUSING SHUTDOWNS
kW Overload	1.	Low oil pressure (engine) (Under 50/100 kPa)
Switches not in auto	2.	High temperature (engine) (Over 95 deg. C)
Starter battery charger failed	3.	Under speed (engine)
Low fuel alarm	4.	Over voltage
Battery voltage fairly low	5.	Overload
Output circuit breaker on	6.	Start failure
Dummy load on	7.	Low water level
	8.	Low fuel level
	9.	Battery voltage very low
		Open flame detection
• The operation of each of the B alarms shall interrupt the fuel cut-off solenoid supply and give a separate visual indication on the module. • The protection circuits shall be reset by a pushbutton. • A pushbutton shall be provided for lamp testing of the visual indicators. • The visual indications shall be by LED's. • The protection and visual indication circuits shall be supplied from the starter battery.		

- **Battery Charger Module** The battery charger shall be supplied from the 230 volt AC mains and shall operate satisfactorily with a maximum voltage variation of $\pm 10\%$ and a maximum frequency deviation of ± 3 cycles.
- The charger shall operate automatically as demanded by the state of the battery.
- The charger shall be of the constant voltage type with current limiting facilities. The output voltage shall be kept within 1% of the float charge voltage as required for maximum water conservation and maximum life of the battery.
- The ripple content in the output of the charger shall be less than 2%.

The battery charger shall be equipped with the following additional equipment:

- a) Overload protection.
- b) One 56 x 46 mm dial shielded voltmeter and associated pushbutton for the indication of battery volts.
- c) One 56 x 46 mm dial shielded type ammeter for the indication of battery charging current.

Additional Monitor and Display Devices

The following additional displays shall be mounted on the monitor & control panel:

- One water temperature gauge (40 to 120 deg. C)
- One oil pressure gauge (0 to 500 kPa)
- One running frequency meter (45 to 55 Hz)
- Three alternator ammeters (I1, I2 & I3 amps)
- One alternator voltmeter (volts) with selector switch (0 – 500V)
- One running hour meter (recording to 99 999 h)
- A suitable rated triple pole circuit breaker
- Engine stop and start control
- Engine failure equipment for high temperatures, low oil pressure, over speed and low water level
- Switch for panel light
- Fuses for secondary circuits
- A single-phase switch socket outlet

Legislative Requirements

- The service provider is expected to comply in full with all legislative requirements relating to the maintenance and repairs of generators.
- The service provider's procedures for the procurement, storage, handling, transporting, application and general use of chemicals must comply with all applicable legislation, Codes of good practice and Authorities, including but not restricted to
- SABS National Standards in accordance with the maintenance and repairs of Generators.
- The service provider is expected to comply in full with all legislative, health and safety requirements relating to the service provision.

Performance

- The service provider will be responsible for all maintenance and repairs of the standby generators.
- The service provider will be responsible for the maintenance and repairs of generators in accordance with the original manufacturer's specifications, applicable regulations and industry standards.
- The service provider must report to the Project Manager and fill in the logbook, the date, Time (Fault reporting and repairs).

Replacement for Parts

- Non-consumable replacement parts utilized must be that of the standard products from the original/similar generator manufacturer.
- Any substitution for original replacement parts must be with an equivalent or a better product. The replacement part may be accepted by DWS provided that it meets or exceeds all the requirements of the original part and that such substitute will not materially alter the original basic design.
- All replacement parts, materials, and workmanship provided must be guaranteed by the bidder to perform the required services, to the full satisfaction of DWS, in accordance with standards from the original generator manufacturer.
- The service provider must provide all the necessary tools and equipment to perform maintenance procedures.
- The service provider must further have all the measuring equipment to measure (current, volts, air and water temperatures, air- and water pressures etc.) as prescribed by the original generator manufacturer.
- Warranty Period: Original OEM warranty certificate must be provided for each part or component replacement on equipment. If the same part or component of the same equipment has to be replaced within the warranty period, the cost of replacement will be for the bidder's account.

Switches, Fuse Switches, Fuses & Contactors

TECHNICAL SPECIFICATION: LV EQUIPMENT

Voltmeters, Ammeters & Instrument Transformers

Drawings

1. Detailed dimensioned drawings of all plant and equipment.
2. Complete wiring diagrams and block schematic diagrams.

On the completion of the Contract, all drawings required for the manuals shall be prepared in A3 size using a CAD system and computer-generated standard Department drawing layouts. They shall be included in manuals as specified.

These final drawings shall include:

- (i) A proper and accurate as-built wiring diagram of the complete installation showing circuit numbers, terminal strip numbers and conductor colours.
- (ii) A schematic diagram clearly showing functions and components equipment and switchgear is to be included.
- (iii) Fully dimensioned as-installed physical layout drawing of the generating set, substation, cooling and exhaust system.
- (iv) Fully dimensioned as-installed physical layout of the switchboard.
- (v) A detailed schedule of all wiring.

Mounting of Circuit Breakers

All molded case circuit breakers must be mounted flush in the board so that only the operating handles project through the front panel. Circuit breakers and isolators must be installed so that the operating handle points upwards for the "ON" position and downwards for the "OFF" position, throughout.

Mounting of Contactors

Contactors must be directly mounted on the board frame and behind the front panel. No plastic or other type of dust shields are required.

Mounting of Instruments

All ammeters, volt meters and frequency meters and other instruments must be flush mounted in a hinged front panel. The rear of these instruments must be covered with a removable lid of suitable non-conductive material screwed to the panel so that the terminals of the meters cannot be inadvertently touched while the door is open. Fuses for the protection of the instruments must be mounted in a suitable place behind the front panels and must be clearly labelled to denote their function.

Mounting of Fuses

Fuse holders containing fuses that form part of the power distribution must be mounted semi-flush in the front panel with the fuse holder handle protruding sufficiently to facilitate easy

removal thereof without opening or removing the panel. Control fuses may be located inside control panels.

COLOUR

The colour of the board must be Electrical Orange. The inside of the board may however be white.

EQUIPMENT IN CONTROL AND DISTRIBUTION BOARD :

Supply and install the following equipment in the respective sections of the board. The equipment lists given below are not necessarily complete and serve only as a guide regarding the required grouping of equipment. Any other equipment necessary for compliance with the required functions of the set, must be supplied and installed. The required sectionalization of the board must be strictly adhered to. Grouping together of eg. light and heavy current equipment will not be acceptable.

LIGHT CURRENT CONTROL SECTION

The following equipment must be installed in the light current control section of the board :

- (1) Control circuit, switches, control relays and semi-conductor components.
- (2) Four position selector switch to select the control function.
- (3) Sensor units for mains voltage, alternator voltage and alternator frequency.
- (4) Two push buttons, red and green respectively, for the manual start and stop functions.
- (5) Battery charger with related equipment and instruments.
- (6) Alarm indication and alarm reset push button.
- (7) Lamp test push button.
- (8) Labeled screw terminals for all outgoing control wiring.

ALTERNATOR SWITCHGEAR SECTION

The following equipment must supplied and installed in the alternator switchgear section of the board :

- (1) Alternator supply main circuit breaker.
- (2) Six pole change-over switch.
- (3) Current transformers for alternator supply instruments.
- (4) Busbars.
- (5) Cable gland plate for the termination of alternator supply cable(s).
- (6) Labeled screw terminals for outgoing control wiring

DISTRIBUTION SECTION

The following equipment must be supplied and installed in the distribution switchgear section of the board:

- (1) Main circuit breaker for mains supply.
- (2) Six pole by-pass switch.
- (3) Current breakers for all circuits as prescribed.
- (4) Current transformers for mains supply instruments.
- (5) Busbars.
- (6) Cable gland plate for the termination of the mains supply and outgoing circuit cables.

LIGHT CURRENT EQUIPMENT

(1) Tenderers may offer their standard equipment on condition that it complies in all respects with the operational requirements detailed in this document. Should such equipment deviate from the requirements, such deviations must be clearly pointed out in the tender offer. Should no such variations be documented, full compliance to the required operational functions shall be accepted and such compliance shall be contractually binding.

(2) The semi-conductor control unit must at least comply with the following requirements:

- (a) The unit must consist of a sturdy base frame suitable for containing withdrawable plug in type printed circuit cards.
- (b) The light current control relays must be mounted on the printed circuit modules.
- (c) All control switches must be mounted on the base frame unit and not on the printed circuit cards.
- (d) Printed circuit card contact strips and plugs must be of high quality with gold plated spring loaded contacts.
- (e) The mounting of components on the printed circuit cards must be of professional quality.
- (f) The modules must be interlocked to avoid faulty installation.
- (g) All circuits must be designed fail-safe.
- (h) All components must be rated conservatively and the unit as a whole must be adequately protected against lightning and switching surges.

CIRCUIT BREAKERS

The following circuit breakers must be provided, installed and suitably labelled in the heavy current section of the distribution board:

- (1) A three pole circuit breaker as main switch for the mains supply to the distribution board.
- (2) A three pole circuit breaker as main switch for the alternator supply to the distribution board.

(3) All circuit breakers for the protection of the circuits related to the generator set, eg. re-heaters, battery charger. These circuit breakers must be grouped together and labelled to denote their function.

(4) Single and triple pole circuit breakers required in the detail specification as supply switches to the various outgoing supplies.

In single phase systems the main circuit breakers must be double pole units.

CHANGE-OVER SWITCH

(1) An automatic change-over switch must be provided in the alternator switchgear section of the control board. The unit may consist of two contactors or two motorized air circuit breakers, mechanically and electrically interlocked so that both units can simultaneously be opened but not closed.

(2) Time relays must be provided in the interlock circuitry so that a time delay of at least 3 seconds is insured in the switch over function. After the first contactor opens, three seconds must elapse before the other is engaged. This time delay must be provided in both switching directions.

(3) The change-over switch must interrupt all three phase conductors in three phase systems and the phase conductor and neutral conductor in single phase systems.

BYPASS SWITCH

(1) Supply and install a manually operated bypass switch to connect the incoming mains supply to either the change over switch or, alternatively, directly to the outgoing supply circuit as shown on the enclosed sketch.

(2) The bypass switch must have only two positions, labelled as follows: **BYPASS**
STANDBY Should the bypass switch be required with an off-position, this must be the centre position and must be labeled: **OFF**

(3) The bypass switch must be mounted within the distribution section or in a separate section separated from the control section with sheet metal bulkheads so that no exposed live terminals are accessible within the control section without removing the panel to the bypass or distribution sections. The operating handle must protrude through the front panel of the board.

(4) The bypass switch must switch only the phase conductors and not the neutral conductor.

VOLTAGE SENSORS

Two identical, but separate, voltage sensor units must be supplied to monitor the mains and alternator supplies respectively. Each unit must comply with the following requirements :

(1) It must be a semi-conductor type with two trip units respectively adjustable from 90% to 100% and 100% to 110% of nominal mains voltage.

(2) The unit must trip after the voltage of any of the three phases exceeds the set high and/or low limits for longer than 5 seconds.

INSTRUMENTS

The list of instruments below represents the minimum requirements for control board instrumentation. Any additional instrumentation necessary for the operation of the installation, must also be supplied. The types and quality of instruments is specified elsewhere. The instruments must be sensibly arranged, labelled and grouped in the respective sections for generator set and mains supply instrumentation. Wherever applicable, instruments must be fuse protected.

(1) Panel Lights Six panel lights, coloured according to the phase colours, three each for the alternator and mains supplies respectively. The lights must be directly connected to the supply side of each main switch. Labels : MAINS ALTERNATOR

(2) Frequency meter to monitor the alternator output frequency. Label : ALT.Hz BBB

(3) Ammeters Six ammeters, to indicate the maximum demand and momentary phase current values of both the alternator and main supplies respectively. Labels : R W B R W B MAINS ALTERNATOR

(4) Volt meter

Two 0 - 600 Volt meters, each with a seven position selector switch. Switch labels : ALTERNATOR MAINS Position labels : R/G, G/B, R/B, R/N, G/N, B/N, AF

(5) Hour meter An electrical cyclometer type running hour meter. Labels : HOURS CCC

(6) Fuel content meter A fuel content meter need only be supplied if a bulk fuel tank is required and such a meter is specifically required in the detail specification. The supply and installation of the sensor unit in the tank, as well as the connection thereof to the meter forms part of the instruction to supply and install such a meter. The meter must indicate the fuel content of the tank to $\pm 5\%$ accuracy. The indication may be analogue or in steps but within the accuracy limit set above.

SET MOUNTED CONTROL EQUIPMENT :

The following equipment must be mounted on a suitable panel on the generator set. The panel must be mounted on the non-vibrating frame of the set and/or on suitable neoprene vibration mountings. The equipment must be labeled as indicated.

KEY SWITCH

(1) Supply and install an industrial type two position key switch. The key must only be removable in the OFF position. The two switch positions must be clearly labeled OFF and ON and the switch itself, MASTER CONTROL.

(2) With the key switch in the OFF position, it must be impossible for the set to be started from the control board regardless of the position of the control selector switch. Switching off the key switch while the set is in operation must stop the set immediately.

(3) With the key switch in the ON position, all the required control functions must be in operation. Label : ON/OFF MASTER CONTROL

The Scope of Work for Generator maintenance and repairs is as follows:

Major Maintenance of Generators:

- Replace engine lubricating oil, remove and dispose used oil from the DWS site in a regulatory Compliant manner.
- Replace oil, fuel and coolant filters and add corrosion inhibitor, as needed.
- Radiator/ heating exchanger checks and repair
- Replace lube oil in hydraulic governors (where applicable)
- Hose and connections checks and servicing
- Fan belts checks, repair/replace and servicing
- Jacket water heater checks and servicing
- Water pump checks and servicing
- Thermostat checks and servicing
- Cooling Systems
- Check all spark plugs, ignition condenser, cap, rotor, wires and points, clean and adjust.
- Coolant – Add corrosion inhibitor checks and servicing
- Check the air filters and, when necessary, clean the filters and replace the filter oil, or alternatively change the filter elements.

Fuel Systems

- Inspect Fuel Tank
- Fuel lines connections
- Inspect Governor and Controls
- Supply and install new fuel filters – Primary/ Secondary
- Check fuel pressure pump

Air Intake and Exhaust System

- Check and service turbocharger
- Check and service exhaust manifold
- Check and service exhaust system valves & valve rotators
- Check starting system
- Check, air filters, and replace when required
- Check and service air filter service indicator
- Check and service air inlet system

Lube Oil System

- Oil must be topped up to the prescribed level
- Engine oil to be changed when indicated to be necessary by result of oil analysis or when

specified by engine manufacturer, whichever period occurs first.

Supply And Install New Engine Oil Components

- Test oil pressure
- Check crank case breather
- Perform oil sample analysis
- Check starting system

Batteries, Starters, Alternators & Engine Management

- Check and service Battery charger
- Check and service Starter motor
- Check and service Alternator
- Check and service engine monitor & safety controls

Gauges

- Check and service Safety controls
- Check and service Remote annunciators/Alarms
- Check and Service Bearings, Space Heaters and Vibration Isolators
- Check and service bearings
- Check and service space heater
- Check and service vibration Isolators

Tests

- Perform oil and coolant sample analysis. Test results must be provided to DWS.
- Check engine coolant for proper levels and condition
- Check fuel tanks, pumps and lines for leaks or damage
- Check engine, heaters, radiator, hoses and heat exchanger (if applicable) for coolant
- Check for leaks and condition
- Submit a written report to DWS and advice of any further work required.
- Report to duly appointed DWS representative and enter in the logbook in the Control room the date of the visit, the tests carried out, and the adjustments made and any other details that may be appropriate.
- Clean the generator, its components and the generator room, as necessary.
- Operate the plant off - load for 15 minutes in close collaboration with the duly appointed DWS representative.

The following needs to be considered:

- Install Non-Return Valve on Fuel Suction Line
- Electric Primer Pump – 12V DC
- All Fuel Hoses and Hose Clamps
- Supply and Install New 12V Battery charger
- Water Heater Jacket Element and Thermostat
- ATS system/retrofitted sea changeover system – ensure its functional
- Test run the Standby Generator

For Klipfontein Dam

Entire control panel with new breakers, electrical wiring, relays, changeover switch and new battery. The panel to be manufactured to DWS specifications including corrosion protection 9900 standards

Site visit

The contractor shall visit the site before submitting a quotation in which the contractor shall familiarize themselves with the components of the dam for the purposes of this project and accuracy of the quotation. The contractor must identify all work necessary to achieve the purpose of this project and must explicitly indicate this at the site visit. Any oversight on the contractor's behalf must not impact on the quality of the completed project and shall be for the contractor's cost to rectify such oversight. The contractor shall ensure that only critical role players attend the site visit and are involved in the project to ensure that the Department does not incur unnecessary expenditure.

General

- An Assembly shall incorporate all components and equipment necessary to achieve the functionality defined in the Project Specification.
- Workmanship shall be of first-class commercial quality, in accordance with best workshop practice and South African National Standards.
- Modification, if any suggested during scrutiny/approval of drawings and execution of work, shall be carried out by successful contractor at no extra cost.
- All equipment supplied shall be new and best of their respective kinds and shall be of the class most suitable for the purpose for which they are intended.
- The workmanship shall be of the highest quality throughout. All materials and workmanship which may, in the opinion of the Engineer, be inferior to that specified for the work will be condemned. All condemned material and workmanship must be replaced or rectified at no cost to the client.
- All materials, components, and equipment used in the manufacture of the Assembly shall be new and unused, shall be of current manufacture, and shall be free from any defects or imperfections.

Tests

- On completion of manufacture, the Assembly shall be subjected to a factory acceptance test (FAT), comprising the Manufacturer's in-house tests, and the repeat tests witnessed by the Client and the Engineer.
- Once the witnessed FAT has been carried out, signed off, and any remedial works have been completed and re-tested, the Assembly is ready for delivery to site. Once erected in position, the Assembly shall be subjected to a witnessed site acceptance test (SAT).
- Once the SAT has been carried out and signed off, any remedial works shall be completed and re-tested. Plant installation and site cabling will then be carried out by others, and on its completion, witnessed commissioning shall commence.
- The manufacturer shall allow for each test (apart from in-house tests) to be witnessed by both the Client and the Engineers simultaneously. An individual testing activity shall not be considered to have been completed until any results have been recorded, and it has been signed off by the Engineer.
- The manufacturer shall provide the Client and Engineers with all reasonable facilities, including testing staff and test equipment, to carry out the inspections and tests.
- The manufacturer shall ensure that all testing is carried out in a safe manner, and shall protect those witnessing from danger, in accordance with the Occupational Health and Safety Act.
- In order to demonstrate the functionality of each circuit, external devices shall be simulated in a representative manner.
- Where the Assembly incorporates equipment requiring special testing facilities or procedures, the manufacturer shall ensure that appropriate resources are available, including where necessary, representatives from the equipment Manufacturer.

Site acceptance test (SAT)

- All equipment and every circuit that was altered or disturbed subsequent to the completion of the FAT, or for shipping and site erection, shall be specifically re-tested for integrity and functionality.
- During the SAT, all busbar joints that are re-tightened on site shall be subjected to a further Megger test, and all busbars shall be subjected to a single witnessed full voltage dielectric 'flash' test.
- The process functionality of each aspect of the control system and its operator interface shall be demonstrated.
- A COC shall be provided to the project manager before final Testing and Commissioning can start.

Commissioning

- Prior notice of and proper arrangements for the commissioning shall be made with the project manager. All electrical contractors and suppliers of equipment which will be affected by the commissioning operation.
- All sections of the works shall be carefully inspected by the contractor to ensure that all construction and installation work has been properly completed.
- Commissioning and testing on site shall be carried out by experienced personnel under the contractor's supervision.
- All re-commissioning tests and checks shall be agreed with the project manager prior to the commencement therewith.
- When all the tests required before commissioning, or tests before tests on completion, have been completed and accepted by the Engineer, the commissioning may proceed.

During this period the contractor shall instruct the operating and maintenance staff in the correct procedures of operating the plant under all circumstances of operation, including emergency conditions, the correct servicing of every part, and similar instructions. This shall be done by demonstration and confirmation, in writing, and operating manuals shall be referred to for this purpose.

- The Contractor shall complete commissioning sheet during the commissioning period and all items listed shall be entered. Final handover certificates will not be issued for equipment with incomplete commissioning reports. Information that is not available or applicable, or reasons for not performing certain tests shall be agreed with the Project manager.
- Commissioning of the plant shall include operating under conditions which shall adequately prove that all the specifications are met. All safety devices, stand-by plant, automatic controls and protection devices shall be adequately tested for reliability and correct functioning. The contractor may be called upon to repeat testing during the maintenance period if the performance of any equipment supplied under this contract is suspected to be substandard by the Engineer. Such tests shall be for the contractor's account and shall comply with the requirements specified.
- After the contractor has provided training to the employer and provided all other contractual requirements have been met, the latter will sign the commissioning report.
- Note that if any equipment should fail during the commissioning period, the equipment shall be repaired or replaced by the contractor, and testing and commissioning will commence from scratch.
- During the commissioning period, the contractor shall be responsible for providing all labour and materials (including testing equipment) and shall carry out all the servicing and any adjustment of the plant required for ensuring that it operates as specified.

Occupational Health and Safety

- The Occupational Health and Safety and Regulations (Act number 85 of 1993) is applicable. Construction Regulations, General Machinery Regulations and Driven Machinery Regulations have particular reference. The DWS shall ensure that the provisions of the OHS are complied with for the duration of the project. From date of site handover to the contractor until the completed work is handed back to the Department of Water and Sanitation, the contractor shall be responsible for maintaining safe conditions on site. As the "owner" of the site, the contractor shall bear all responsibilities in terms of the Occupational Health and Safety Act, 1993 (Act No 85 of 1993) and the regulations promulgated in terms of the Act or Factories, Machinery and Buildings Work Act, whichever is applicable.

The contractor prior to commencing on with the project shall submit:

- A comprehensive OHS file in accordance with the OHS Act.
- A detailed site-specific risk assessment for review and acceptance.
- A detailed method statement for approval by the Project Manager.
- All work shall be done in accordance with relevant legislation(s) and regulation(s). The DWS reserves the right to stop the contractor from executing work, which is not in accordance with the contractor's OHS plan for the site or which poses a threat to the health and safety of persons.

- The contractor may not appoint a subcontractor unless the contractor is reasonable satisfied that the subcontractor has necessary competencies and resources to perform work safely. Any subcontractor appointment shall be approved by the Project Manager. Where a contractor appoints a subcontractor, all OHS Act requirements shall be applicable to the subcontractor.
- The contractor shall appoint a full-time competent employee in writing as the project supervisor, with the duty of supervising the project.
- When the contractor and employees are found contravening OHS Act, the DWS shall stop the work until such time that the contractor implemented corrective measures to the satisfaction of the DWS.
- The contractor shall be responsible for supplying and installing the required safety signs as determined by the Occupational Health and Safety Act, 1993 (Act No85 of 1993) and the regulations promulgated in terms of the Act of Factories, Machinery and Building Works Act, whichever is applicable, both during the construction phase and for the completed works.
- All safety signs shall comply with the requirements of the latest edition of SANS 1186 as applicable.
- The Contractor is required to ensure that all sub-contractors or others engaged in the performance of the contract also comply with the above requirements.
- The Contractor shall appoint a Competent Person who shall be trained on any occupational health and safety aspect pertaining to them or to the work that is to be performed.
- No blasting or working with percussion tools will be allowed unless prior written approval from the Engineer and local authorities is obtained.
- Safety of the public must be of prime importance and the utmost care must be taken to ensure that the correct signs, barriers, and warning devices are in place.

Section 37.2 appointment

In accordance with the provisions of Section 37(2) of the Occupational Health and Safety Act 85 of 1993 wherein the Department of Water and Sanitation as Employer has entered into a contract with the Contractor, in terms of which the Contractor is to perform certain work and services for and on behalf of the Employer, subject to the terms and conditions as contained in such contract.

Then parties have agreed that in respect of performance of the work the Contractor shall be responsible for compliance with the Occupational Health & Safety Act and its Regulations. The Employer and Mandatory accordingly enter in this agreement in terms of Section 37(2) of the OHS Act.

Risks Identified by the DWS

The following are the risks associated with this project as identified by the DWS:

- Flooding
- Dehydration
- Falling
- Injury due to falling material
- Paint or chemical inhalation
- Injury due to hand tools
- Snake bite
- Falling due to slippery surfaces
- Failure of rigging equipment
- Noise due to grinding, blast cleaning, etc
- Hand arm vibration syndrome due to prolonged use of vibratory equipment
- Airborne Fibres and Materials
- Electrocution
- Moving Machinery
- Back injuries from carrying heavy loads
- Confined spaces

Notwithstanding the abovementioned risks the contractor shall formulate a risk management plan which will include additional risks identified by the contractor.

Lock out

Prior to decommissioning and commencement of any work, the contractor in conjunction with the Project Manager shall isolate and lock out intake line, valves, actuators, electrical equipment and all sources of energy relevant to the scope of work in accordance with the Occupational Health and Safety Act (OHSA). The permit to work system must be complied with and only authorised persons shall work on the plant.

Facilities

Water

- Potable water is available on the site and the contractor shall use it at his/her own risk.
- Water for construction purposes is available on site. The supply is reasonably consistent.

Electricity or power supply

There is currently no power available on site.

Toilets

Toilets are available for use by the contractor and his staff within the pump station and should be kept in clean and orderly manner.

Site usage

- The contractor, his staff, or agents must maintain good public relations with local authorities, other contractors, and members of the public at all times.
- Access to the site will be arranged by the DWS representative with the Contractor. The Contractor shall submit a list of all his staff to the Employer for the purpose of access control.

Quality control

- The quality of the work shall be assured in accordance with the DWS Quality Control Specification, that is, DWS 2020. Prior to commencing with the project, the Quality Control Plan (QCP) shall be submitted to the DWS for review, acceptance and or approval.
- All Plant shall be subject to inspection and testing by the Engineer at the Manufacturer's premises before despatch. No material shall be delivered to the Site without inspection having being carried out or waived by the project manager in writing.
- Inspection of equipment shall be carried out by the DWS representative or a nominated and approved inspection authority.
- The DWS may employ an independent, technically qualified organisation to carry out quality surveillance of the work on his behalf. The inspection authority has the right to inspect any item covered in the Contract at any stage of execution of the Project.
- The Manufacturer's material test data certification and the Contractor's quality records shall be subject to examination by the Engineer or his representative.
- For the purpose of carrying out quality surveillance, the Engineer or his representative shall be granted access to any part of the Contractor's premises and Site relevant to the work being carried out, at any reasonable time.

Costs of Quality Control

- The cost for quality control shall be included in the quoted rates.
- When surveillance results in rejection or when notice by the Contractor results in a fruitless trip, the cost borne by the DWS shall be debited against the Contractor's account.
- If additional inspections, tests and analyses requested by the DWS prove that the repair and load testing is in accordance with the Specification, the costs of the inspections and/or tests including transport will be defrayed by the DWS. However, should the additional investigations prove that the repair and load testing does not conform to the specifications; the costs shall be defrayed by the Contractor. The Project Manager shall have the right, without prejudice to any other legal remedy, to deduct such costs from payments due to the Contractor under the Contract.
- Where Plant or services fail to meet the Contract requirements but are nevertheless accepted at an agreed revised rate, the costs with regard to inspections, test and analyses shall be for the Contractor's account unless otherwise directed by the DWS.

Non-Compliance with the Specification

- Plant, materials and services that do not conform to the requirements of this Specification shall be rejected. Such rejected plant shall be held at the cost and risk of the Contractor who shall, when called upon, and at his own cost, repair the defects according to the Contract.
- Failing satisfactory repair of rejected equipment, the Plant shall be returned to the Contractor at his cost and risk without any opportunity to substitute the rejected Plant. Alternative Plant may be purchased at the Contractor's expense, or an approved Contractor may be employed to do the repair.
- Should the Contractor fail to comply with the provisions of this specification, the Certificate of Commissioning shall not be issued.

Modifications

Any modifications or deviations from the specification shall be indicated on the form "Proposed Alterations to Specification". The Contractor shall make no changes or modifications to any part of the design, or the plant offered under this Contract without the written approval of the Project Manager. The DWS shall not accept any additional cost for any part of this Contract if this procedure has not been followed.

Compliance with Standards

- When reference is made to a code, specification or standard, the reference shall be taken to mean the latest edition of the code, specification or standard; including addenda, supplements and modifications and revisions thereto, unless otherwise specified.
- The materials and workmanship shall be in accordance with the appropriate Specification current at the time of manufacture unless otherwise specified.
- Should the Contractor desire for any reason to deviate from the Standards specified or the aforesaid equal or better Standard, he shall submit for the Project Manager's approval a statement of the exact nature of the deviation, fully supported by copies of the equivalent Standard (in English) and complete Specification of the alternative materials proposed. It shall be the responsibility of the Contractor to demonstrate that any alternative Standards proposed are equal or superior to those specified.

Bill of Quantities

Refer to Annexure 1 attached for BOQ

Quotation requirements

Before submitting a quotation, the contractor shall visit and examine the site and its surroundings and shall obtain all the information that may be necessary for preparing the quotation. The date of the site visit must be agreed upon between the project manager and contractor. Contractors are at liberty of visiting the site at other times during the quotation period subject to making prior arrangements with the project manager.

The contractor and any of his personnel or agents who visit the site or the employer's premises and lands for the purpose of such inspection will release and indemnify the employer and his personnel, contractors and agents from and against all liability in respect thereof and in respect of entering and being conveyed in any vehicle including airborne vehicles arranged by the employer and will be responsible for personal injury (whether fatal or otherwise), loss of or

damage to property and any other loss, damage, costs and expenses however caused, whether or not caused by the negligence of the employer.

Local content

It is the responsibility of the contractor to familiarise themselves and comply with any local content requirements as stipulated on the Department of Trade and Industry website.

Drawings

The contractor shall submit all drawings as part of this project which must be signed by an appropriately qualified registered person.

**FORM A: CERTIFICATE OF ATTENDANCE AT COMPULSORY
CLARIFICATION SITE MEETING**

FORM B: CONTRACTOR'S HEALTH AND SAFETY DECLARATION

FORM C: HEALTH AND SAFETY ACT AGREEMENT

ANNEXURES

C4.1 TENDER DRAWINGS

C4.1 PRO-FORMA QUALITY CONTROL PLAN

C4.1 PRO-FORMA COATING APPLICATION RECORD

