NEC3 Engineering & Construction Contract

Between **ESKOM HOLDINGS SOC Ltd**
(Reg No. 2002/015527/30)

and **[Insert at award stage]**
(Reg No. _____)

for **ACACIA POWER STATION UNITS 1,2 & 3 ENCLOSURES AND FUEL STORAGE TANKS A AND B REFURBISHMENT**

Contents:		No of pages
Part C1	Agreements & Contract Data	[•]
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Part C4	Site Information	[•]

CONTRACT No. **[Insert at award stage]**

Part C1: Agreements & Contract Data

Contents:

		No of pages
C1.1	**Form of Offer and Acceptance**	**[●]**
	[to be inserted from Returnable Documents at award stage]	
C1.2a	**Contract Data provided by the *Employer***	**[●]**
C1.2b	**Contract Data provided by the *Contractor***	**[●]**
	[to be inserted from Returnable Documents at award stage]	
C1.3	**Proforma Guarantees**	**[●]**

C1.1 Form of Offer & Acceptance

Offer

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract for the procurement of:

Acacia Power Station Units 1,2 & 3 Enclosures and Fuel Storage Tanks A and B Refurbishment

The tenderer, identified in the Offer signature block, has examined the documents listed in the Tender Data and addenda thereto and by submitting this Offer has accepted the Conditions of Tender.

By the representative of the tenderer, deemed to be duly authorised, signing this part of this Form of Offer and Acceptance the tenderer offers to perform all of the obligations and liabilities of the *Contractor* under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the *conditions of contract* identified in the Contract Data.

Option B	The offered total of the Prices exclusive of VAT is	**R [●]**
	Sub total	**R [●]**
	Value Added Tax @ 15% is	**R [●]**
	The offered total of the amount due inclusive of VAT is[1]	**R [●]**
	(in words) **[●]**	

This Offer may be accepted by the Employer by signing the Acceptance part of this Form of Offer and Acceptance and returning one copy of this document including the Schedule of Deviations (if any) to the tenderer before the end of the period of validity stated in the Tender Data, or other period as agreed, whereupon the tenderer becomes the party named as the *Contractor* in the *conditions of contract* identified in the Contract Data.

Signature(s) .....

Name(s) .....

Capacity .....

For the tenderer:

.....

(Insert name and address of organisation)

Name & signature of witness ..... Date .....

Tenderer's CIDB registration number (if applicable) .....

[1] This total is required by the *Employer* for budgeting purposes only. Actual amounts due will be assessed in terms of the *conditions of contract*.

Acceptance

By signing this part of this Form of Offer and Acceptance, the Employer identified below accepts the tenderer's Offer. In consideration thereof, the Employer shall pay the Contractor the amount due in accordance with the *conditions of contract* identified in the Contract Data. Acceptance of the tenderer's Offer shall form an agreement between the Employer and the tenderer upon the terms and conditions contained in this agreement and in the contract that is the subject of this agreement.

The terms of the contract, are contained in:

Part C1	Agreements and Contract Data, (which includes this Form of Offer and Acceptance)
Part C2	Pricing Data
Part C3	Scope of Work: Works Information
Part C4	Site Information

and drawings and documents (or parts thereof), which may be incorporated by reference into the above listed Parts.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Returnable Schedules as well as any changes to the terms of the Offer agreed by the tenderer and the Employer during this process of offer and acceptance, are contained in the Schedule of Deviations attached to and forming part of this Form of Offer and Acceptance. No amendments to or deviations from said documents are valid unless contained in this Schedule.

The tenderer shall within two weeks of receiving a completed copy of this agreement, including the Schedule of Deviations (if any), contact the Employer's agent (whose details are given in the Contract Data) to arrange the delivery of any securities, bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the *conditions of contract* identified in the Contract Data at, or just after, the date this agreement comes into effect. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

Notwithstanding anything contained herein, this agreement comes into effect on the date when the tenderer receives one fully completed original copy signed between them of this document, including the Schedule of Deviations (if any).

Unless the tenderer (now *Contractor*) within five working days of the date of such receipt notifies the Employer in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the Parties.

Signature(s) .....

Name(s) .....

Capacity .....

for the Employer

.....
(Insert name and address of organisation)

Name & signature of witness .....

Date .....

Note: If a tenderer wishes to submit alternative tenders, use another copy of this Form of Offer and Acceptance.

Schedule of Deviations to be completed by the *Employer* prior to contract award

Note:

1. This part of the Offer & Acceptance would not be required if the contract has been developed by negotiation between the Parties and is not the result of a process of competitive tendering.
2. The extent of deviations from the tender documents issued by the Employer prior to the tender closing date is limited to those permitted in terms of the Conditions of Tender.
3. A tenderer's covering letter must not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid be the subject of agreement reached during the process of Offer and Acceptance, the outcome of such agreement shall be recorded here and the final draft of the contract documents shall be revised to incorporate the effect of it.

No.	Subject	Details
1	**[●]**	**[●]**
2	**[●]**	**[●]**
3	**[●]**	**[●]**
4	**[●]**	**[●]**
5	**[●]**	**[●]**
6	**[●]**	**[●]**
7	**[●]**	**[●]**

By the duly authorised representatives signing this Schedule of Deviations below, the Employer and the tenderer agree to and accept this Schedule of Deviations as the only deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Tender Schedules, as well as any confirmation, clarification or changes to the terms of the Offer agreed by the tenderer and the Employer during this process of Offer and Acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the tenderer of a completed signed copy of this Form shall have any meaning or effect in the contract between the parties arising from this Agreement.

	For the tenderer:	**For the Employer**
Signature		
Name		
Capacity		
On behalf of	*(Insert name and address of organisation)*	*(Insert name and address of organisation)*
Name & signature of witness		
Date		

C1.2 ECC3 Contract Data

Part one - Data provided by the *Employer*

Clause	Statement	Data	
1	**General**		
	The *conditions of contract* are the core clauses and the clauses for main Option	**B:**	**Priced contract with bill of quantities**
	dispute resolution Option	**W1:**	**Dispute resolution procedure**
	and secondary Options	**X2**	**Changes in the law**
		X5:	**Sectional Completion**
		X7:	**Delay damages**
		X16:	**Retention**
		X18:	**Limitation of liability**
		Z:	***Additional conditions of contract***
	of the NEC3 Engineering and Construction Contract, April 2013 (ECC3)		
10.1	The *Employer* is (Name):	**Eskom Holdings SOC Ltd (reg no: 2002/015527/30), a state owned company incorporated in terms of the company laws of the Republic of South Africa**	
	Address	**Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg**	
10.1	The *Project Manager* is: (Name)	**Rowan Francis**	
	Address	**15 Pasita Street, Rosenpark, Durbanville, Cape Town 7550, South Africa**	
	Tel	**TBC**	
	e-mail	**Franciro@eskom.co.za**	
10.1	The *Supervisor* is: (Name)	**TBC**	
	Address		
	Tel No.		

	e-mail	
11.2(13)	The Works are	**As describaed in Part 3 - Section C3.1: Employer's Works Information.**
11.2(14)	The following matters will be included in the Risk Register	**1) Inclement Weather delays** **2) Interface clashes with other outage related work in same area.** **3) Scope growth when uncovering Waterproof section of the Unit Enclosures.**
11.2(15)	The *boundaries of the site* are	**Acacia Power Station Boundary**
11.2(16)	The Site Information is in	**Part 4: Site Information**
11.2(19)	The Works Information is in	**Part 3: Scope of Work and all documents and drawings to which it makes reference.**
12.2	The *law of the contract* is the law of	**the Republic of South Africa**
13.1	The *language of this contract* is	**English**
13.3	The *period for reply* is	• **SHEQ and items discovered outside the scope of this Contract – 1 working day** • **Contractual Communication – 2 working days**
2	**The *Contractor's* main responsibilities**	**Data required by this section of the core clauses is provided by the *Contractor* in Part 2 and terms in italics used in this section are identified elsewhere in this Contract Data.**
3	**Time**	
11.2(3)	The *completion date* for the whole of the Works is	**31 October 2027**

30.1 The *access dates* are:

Part of the Site		Date
1	**Access to Unit 2 Enclosure**	**27 February 2027**
2	**Access to Unit 1 Enclosure**	**12 April 2027**
3	**Access to Unit 3 Enclosure**	**28 August 2027**
4	**Access to Fuel Tank A**	**01 March 2027**
5	**Access to Fuel Tank B**	**01 March 2027**

Note: Dates given are preliminary and may change before Contract Award, to align to confirmed Outage Windows. A total of 36 Working Days (Mon to Sat) will be allocated to complete the Civil Scope on Unit Enclosures. Fuel Tank are not outage related works

31.1	The *Contractor* is to submit a first programme for acceptance within	**2 Weeks from Contract Date.**
31.2	The *starting date* is	**01 February 2027**
32.2	The *Contractor* submits revised programmes at intervals no longer than	**1 Week.**
35.1	The *Employer* is not willing to take over the Works before the Completion Date.	

4	**Testing and Defects**	
42.2	The *defects date* is	**52 weeks after Completion of the whole of the Works.**
43.2	The *defect correction period* is	**5 working days**
	except that the *defect correction period* for	**a defect that effects the operations of a unit is 2 working days**
5	**Payment**	
50.1	The *assessment interval* is	**between the 25th day of each successive month.**
51.1	The *currency of this contract* is the	**South African Rand.**
51.2	The period within which payments are made is	**30 days after receipt of an acceptable Tax invoice and all relevant supporting documentation**
51.4	The *interest rate* is	**the publicly quoted prime rate of interest (calculated on a 365 day year) charged from time to time by the Standard Bank of South Africa Limited (as certified, in the event of any dispute, by any manager of such bank, whose appointment it shall not be necessary to prove) for amounts due in Rands and** **(ii) the LIBOR rate applicable at the time for amounts due in other currencies. LIBOR is the 6 month London Interbank Offered Rate quoted under the caption "Money Rates" in The Wall Street Journal for the applicable currency or if no rate is quoted for the currency in question then the rate for United States Dollars, and if no such rate appears in The Wall Street Journal then the rate as quoted by the Reuters Monitor Money Rates Service (or such service as may replace the Reuters Monitor Money Rates Service) on the due date for the payment in question, adjusted *mutatis mutandis* every 6 months thereafter and as certified, in the event of any dispute, by any manager employed in the foreign exchange department of The Standard Bank of South Africa Limited, whose appointment it shall not be necessary to prove.**
6	**Compensation events**	
60.1(13)	The place where weather is to be recorded is:	**The *Contractor* contacts the South African Weather Service. Below are some of the weather stations in the Cape Town area that can be used:** • **iThemba Labs automatic weather station (AWS): Located within the Greater Cape Town area** • **Constantiaberg automatic weather station (AWS): Located within the Cape Peninsula**

	The *weather measurements* to be recorded for each calendar month are,	**the cumulative rainfall (mm)** **the number of days with rainfall more than 10 mm** **the number of days with minimum air temperature less than 0 degrees Celsius** **the number of days with snow lying at 09:00 hours South African Time** **and these measurements:**
	The *weather measurements* are supplied by	**The *Contractor* obtains the one in ten year return weather data from South African Weather**
7	**Title**	**Applicable as per core clause 70 NEC3 April 2013.**
8	**Risks and insurance**	
80.1	These are additional *Employer*'s risks	**None**
9	**Termination**	**Applicable as per core clause 90 NEC3 April 2013.**
10	**Data for main Option clause**	
B	**Priced contract with bill of quantities**	**Refer to Part 2: Pricing Data**
60.6	The *method of measurement* is	**As stated in Part C2.1, Pricing Assumptions.**
11	**Data for Option W1**	
W1.1	The *Adjudicator* is	**the person selected from the ICE-SA Division (or its successor body) of the South African Institution of Civil Engineering Panel of Adjudicators by the Party intending to refer a dispute to him. (see www.ice-sa.org.za). If the Parties do not agree on an Adjudicator the Adjudicator will be appointed by the Arbitration Foundation of Southern Africa (AFSA).**
	Address	**[●]**
	Tel No.	**[●]**
	Fax No.	**[●]**
	e-mail	**[●]**
W1.2(3)	The *Adjudicator nominating body* is:	**the Chairman of ICE-SA a joint Division of the South African Institution of Civil Engineering and the London Institution of Civil Engineers. (See www.ice-sa.org.za) or its successor body.**
W1.4(2)	The *tribunal* is:	**arbitration.**

Commented [ND1]: Delo to review and provide, this should be based on C2.1

W1.4(5)	The *arbitration procedure* is	**the latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.**
	The place where arbitration is to be held is	**Cape Town, South Africa**
	The person or organisation who will choose an arbitrator - if the Parties cannot agree a choice or - if the arbitration procedure does not state who selects an arbitrator, is	**the Chairman for the time being or his nominee of the Association of Arbitrators (Southern Africa) or its successor body.**

12 Data for secondary Option clauses

X2	**Changes in the law**	**Applicable as per secondary clause X2 NEC3 April 2013**

X5 Sectional Completion

X5.1 The *completion date* for each *section* of the Works is:

Section	**Description**	***Completion date***
1	**Completion of Unit 2 enclosures**	**04 April 2027**
2	**Completion of Unit 1 enclosure**	**18 May 2027**
3	**Completion of Unit 3 enclosure**	**03 October 2027**
4	**Completion of Fuel Tank A**	**31 October 2027**
5	**Completion of Fuel Tank B**	**31 October 2027**

Note: Dates given are preliminary and may change before Contract Award, to align to confirmed Outage Windows. A total of 36 Working Days (Mon to Sat) will be allocated to complete the Civil Scope on Unit Enclosures. Fuel Tank are not outage related works

X5 & X7 Sectional Completion and delay damages used together

X7.1 X5.1 Delay damages for late Completion of the *section*s of the Works are:

Section	**Description (Amount per week or part thereof)**	**Maximum % damages**
1	**0.7% of the Accepted Contract Amount**	**15% of the final Accepted Contract Amount. in the aggregate**
2	**0.7% of the Accepted Contract Amount**	**15% of the final Accepted Contract Amount. in the aggregate**

		3	**0.7% of the Accepted Contract Amount**	**15% of the final Accepted Contract Amount. in the aggregate**
		4	**0.25% of the Accepted Contract Amount**	**15% of the final Accepted Contract Amount in the aggregate**
		5	**0.25% of the Accepted Contract Amount**	**15% of the final Accepted Contract Amount. in the aggregate.**

X16	**Retention**	
X16.1	The *retention free amount* is	**R0.0 (zero Rand)**
	The *retention percentage* is	**10% of the Prices, 5% will be released at Completion of the whole of the Works and the remaining 5% will be released after the Defects Certificate has been issued.**
X18	**Limitation of liability**	
X18.1	The *Contractor*'s liability to the *Employer* for indirect or consequential loss is limited to:	**R0.0 (zero Rand)**
X18.2	For any one event, the *Contractor*'s liability to the *Employer* for loss of or damage to the *Employer*'s property is limited to:	**the amount of the deductibles relevant to the event**
X18.3	The *Contractor*'s liability for Defects due to his design which are not listed on the Defects Certificate is limited to	**The greater of** • **the total of the Prices at the Contract Date and** • **the amounts excluded and unrecoverable from the *Employer*'s assets policy for correcting the Defect (other than the resulting physical damage which is not excluded) plus the applicable deductible as at contract date.**
X18.4	The *Contractor*'s total liability to the *Employer* for all matters arising under or in connection with this contract, other than excluded matters, is limited to:	**the total of the Prices other than for the additional excluded matters.** **The *Contractor's* total liability for the additional excluded matters is not limited.** **The additional excluded matters are amounts for which the *Contractor* is liable under this contract for** • **Defects due to his design which arise before the Defects Certificate is issued,**

		• **Defects due to manufacture and fabrication outside the Site,** • **loss of or damage to property (other than the Works, Plant and Materials),** • **death of or injury to a person and** • **infringement of an intellectual property right.**
X18.5	The *end of liability date* is	**(i) 3 (three) years after the *defects date* for latent Defects and** **(ii) the date on which the liability in question prescribes in accordance with the Prescription Act No. 68 of 1969 (as amended or in terms of any replacement legislation) for any other matter.** **A latent Defect is a Defect which would not have been discovered on reasonable inspection by the *Employer* or the *Supervisor* before the *defects date*, without requiring any inspection not ordinarily carried out by the *Employer* or the *Supervisor* during that period. If the *Employer* or the *Supervisor* do undertake any inspection over and above the reasonable inspection, this does not place a greater responsibility on the *Employer* or the *Supervisor* to have discovered the Defect.**
Z	**The *Additional conditions of contract* are**	**Z1 to Z15 always apply.**

Z1 Cession delegation and assignment

Z1.1 The *Contractor* does not cede, delegate or assign any of its rights or obligations to any person without the written consent of the *Employer.*

Z1.2 Notwithstanding the above, the *Employer* may on written notice to the *Contractor* cede and delegate its rights and obligations under this contract to any of its subsidiaries or any of its present divisions or operations which may be converted into separate legal entities as a result of the restructuring of the Electricity Supply Industry.

Z2 Joint ventures

Z2.1 If the *Contractor* constitutes a joint venture, consortium or other unincorporated grouping of two or more persons or organisations then these persons or organisations are deemed to be jointly and severally liable to the *Employer* for the performance of this contract.

Z2.2 Unless already notified to the *Employer*, the persons or organisations notify the *Project Manager* within two weeks of the Contract Date of the key person who has the authority to bind the *Contractor* on their behalf.

Z2.3 The *Contractor* does not alter the composition of the joint venture, consortium or other unincorporated grouping of two or more persons without the consent of the *Employer* having been given to the *Contractor* in writing.

Z3 Change of Broad Based Black Economic Empowerment (B-BBEE) status

Z3.1 Where a change in the *Contractor's* legal status, ownership or any other change to his business composition or business dealings results in a change to the *Contractor*'s B-BBEE status, the *Contractor* notifies the *Employer* within seven days of the change.

Z3.2 The *Contractor* is required to submit an updated verification certificate and necessary supporting documentation confirming the change in his B-BBEE status to the *Project Manager* within thirty days of the notification or as otherwise instructed by the *Project Manager*.

Z3.3 Where, as a result, the *Contractor's* B-BBEE status has decreased since the Contract Date the *Employer* may either re-negotiate this contract or alternatively, terminate the *Contractor*'s obligation to Provide the Works.

Z3.4 Failure by the *Contractor* to notify the *Employer* of a change in its B-BBEE status may constitute a reason for termination. If the *Employer* terminates in terms of this clause, the procedures on termination are P1, P2 and P3 as stated in clause 92, and the amount due is A1 and A3 as stated in clause 93.

Z4 Confidentiality

Z4.1 The *Contractor* does not disclose or make any information arising from or in connection with this contract available to Others. This undertaking does not, however, apply to information which at the time of disclosure or thereafter, without default on the part of the *Contractor*, enters the public domain or to information which was already in the possession of the *Contractor* at the time of disclosure (evidenced by written records in existence at that time). Should the *Contractor* disclose information to Others in terms of clause 25.1, the *Contractor* ensures that the provisions of this clause are complied with by the recipient.

Z4.2 If the *Contractor* is uncertain about whether any such information is confidential, it is to be regarded as such until notified otherwise by the *Project Manager*.

Z4.3 In the event that the *Contractor* is, at any time, required by law to disclose any such information which is required to be kept confidential, the *Contractor*, to the extent permitted by law prior to disclosure, notifies the *Employer* so that an appropriate protection order and/or any other action can be taken if possible, prior to any disclosure. In the event that such protective order is not, or cannot, be obtained, then the *Contractor* may disclose that portion of the information which it is required to be disclosed by law and uses reasonable efforts to obtain assurances that confidential treatment will be afforded to the information so disclosed.

Z4.4 The taking of images (whether photographs, video footage or otherwise) of the Works or any portion thereof, in the course of Providing the Works and after Completion, requires the prior written consent of the *Project Manager*. All rights in and to all such images vests exclusively in the *Employer*.

Z4.5 The *Contractor* ensures that all his subcontractors abide by the undertakings in this clause.

Z5 Waiver and estoppel: Add to core clause 12.3:

Z5.1 Any extension, concession, waiver or relaxation of any action stated in this contract by the Parties, the *Project Manager*, the *Supervisor*, or the *Adjudicator* does not constitute a waiver of rights, and does not give rise to an estoppel unless the Parties agree otherwise and confirm such agreement in writing.

Z6 Health, safety and the environment: Add to core clause 27.4

Z6.1 The *Contractor* undertakes to take all reasonable precautions to maintain the health and safety of persons in and about the execution of the Works. Without limitation the *Contractor*:

- accepts that the *Employer* may appoint him as the "Principal Contractor" (as defined and provided for under the Construction Regulations 2014 (promulgated under the Occupational Health & Safety Act 85 of 1993) ("the Construction Regulations") for the Site;
- warrants that the total of the Prices as at the Contract Date includes a sufficient amount for proper compliance with the Construction Regulations, all applicable health & safety laws and regulations and the health and safety rules, guidelines and procedures provided for in this contract and generally for the proper maintenance of health & safety in and about the execution of Works; and
- undertakes, in and about the execution of the Works, to comply with the Construction Regulations and with all applicable health & safety laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the *Contractor's* direction and control, likewise observe and comply with the foregoing.

Z6.2 The *Contractor*, in and about the execution of the Works, complies with all applicable environmental laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the *Contractor's* direction and control, likewise observe and comply with the foregoing.

Z7 Provision of a Tax Invoice and interest. Add to core clause 51

Z7.1 Within one week of receiving a payment certificate from the *Project Manager* in terms of core clause 51.1, the *Contractor* provides the *Employer* with a tax invoice in accordance with the *Employer*'s procedures stated in the Works Information, showing the amount due for payment equal to that stated in the payment certificate.

Z7.2 If the *Contractor* does not provide a tax invoice in the form and by the time required by this contract, the time by when the *Employer* is to make a payment is extended by a period equal in time to the delayed submission of the correct tax invoice. Interest due by the *Employer* in terms of core clause 51.2 is then calculated from the delayed date by when payment is to be made.

Z7.3 The *Contractor* (if registered in South Africa in terms of the companies Act) is required to comply with the requirements of the Value Added Tax Act, no 89 of 1991 (as amended) and to include the *Employer*'s VAT number 4740101508 on each invoice he submits for payment.

Z8 Notifying compensation events

Z8.1 Delete from the last sentence in core clause 61.3, "unless the *Project Manager* should have notified the event to the *Contractor* but did not".

Z9 *Employer's* limitation of liability

Z9.1 The *Employer's* liability to the *Contractor* for the *Contractor's* indirect or consequential loss is limited to R0.00 (zero Rand)

Z9.2 The *Contractor*'s entitlement under the indemnity in 83.1 is provided for in 60.1(14) and the *Employer*'s liability under the indemnity is limited.

Z10 Termination: Add to core clause 91.1, at the second main bullet point, fourth sub-bullet point, after the words "against it":

Z10.1 or had a business rescue order granted against it.

Z11 Addition to secondary Option X7 Delay damages (if applicable in this contract)

Z11.1 If the amount due for the *Contractor*'s payment of delay damages reaches the limits stated in this Contract Data for Option X7 or Options X5 and X7 used together, the *Employer* may terminate the *Contractor*'s obligation to Provide the Works using the same procedures and payment on termination as those applied for reasons R1 to R15 or R18 stated in the Termination Table.

Z12 Ethics

For the purposes of this Z-clause, the following definitions apply:

Affected Party	means, as the context requires, any party, irrespective of whether it is the *Contractor* or a third party, such party's employees, agents, or Subcontractors or Subcontractor's employees, or any one or more of all of these parties' relatives or friends,
Coercive Action	means to harm or threaten to harm, directly or indirectly, an Affected Party or the property of an Affected Party, or to otherwise influence or attempt to influence an Affected Party to act unlawfully or illegally,
Collusive Action	means where two or more parties co-operate to achieve an unlawful or illegal purpose, including to influence an Affected Party to act unlawfully or illegally,
Committing Party	means, as the context requires, the *Contractor*, or any member thereof in the case of a joint venture, or its employees, agents, or Subcontractor or the Subcontractor's employees,
Corrupt Action	means the offering, giving, taking, or soliciting, directly or indirectly, of a good or service to unlawfully or illegally influence the actions of an Affected Party,
Fraudulent Action	means any unlawfully or illegally intentional act or omission that misleads, or attempts to mislead, an Affected Party, in order to obtain a financial or other benefit or to avoid an obligation or incurring an obligation,
Obstructive Action	means a Committing Party unlawfully or illegally destroying, falsifying, altering or concealing information or making false statements to materially impede an investigation into allegations of Prohibited Action, and
Prohibited Action	means any one or more of a Coercive Action, Collusive Action Corrupt Action, Fraudulent Action or Obstructive Action.

Z12.1 A Committing Party may not take any Prohibited Action during the course of the procurement of this contract or in execution thereof.

Z12.2 The *Employer* may terminate the *Contractor*'s obligation to Provide the Works if a Committing Party has taken such Prohibited Action and the *Contractor* did not take timely and appropriate action to prevent or remedy the situation, without limiting any other rights or remedies the *Employer* has. It is not required that the Committing Party had to have been found guilty, in court or in any other similar process, of such Prohibited Action before the *Employer* can terminate the *Contractor*'s obligation to Provide the Works for this reason.

Z12.3 If the *Employer* terminates the *Contractor*'s obligation to Provide the Works for this reason, the amounts due on termination are those intended in core clauses 92.1 and 92.2.

Z12.4 A Committing Party co-operates fully with any investigation pursuant to alleged Prohibited Action. Where the *Employer* does not have a contractual bond with the Committing Party, the *Contractor* ensures that the Committing Party co-operates fully with an investigation.

Z13 Insurance

Z 13.1 Replace core clause 84 with the following:

Insurance cover **84**

84.1 When requested by a Party, the other Party provides certificates from his insurer or broker stating that the insurances required by this contract are in force.

84.2 The *Contractor* provides the insurances stated in the Insurance Table A.

84.3 The insurances provide cover for events which are at the *Contractor*'s risk from the *starting date* until the earlier of Completion and the date of the termination certificate.

INSURANCE TABLE A

Insurance against	Minimum amount of cover or minim limit of indemnity
Loss of or damage to the Works, Plant and Materials	The replacement cost where not covered by the *Employer*'s insuranc The *Employer*'s policy deductible, as Contract Date, where covered by the *Employer*'s insurance
Loss of or damage to Equipment	The replacement cost
Liability for loss of or damage to property (except the Works, Plant and Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the *Contractor*) caused by activity in connection with this contract	Loss of or damage to property *Employer*'s property The replacement cost where not covered by the *Employer*'s insuranc The *Employer*'s policy deductible, as Contract Date, where covered by the *Employer*'s insurance Other property The replacement cost Bodily injury to or death of a person The amount required by applicable l
Liability for death of or bodily injury to employees of the *Contractor* arising out of and in the course of their employment in connection with this contract	The amount required by the applicat law

Z 13.2 **Replace core clause 87 with the following:**
The *Employer* provides the insurances stated in the Insurance Table B.

INSURANCE TABLE B

Insurance against or name of policy	Minimum amount of cover or minimum l of indemnity

Assets All Risk	Per the insurance policy document
Contract Works insurance	Per the insurance policy document
Environmental Liability	Per the insurance policy document
General and Public Liability	Per the insurance policy document
Transportation (Marine)	Per the insurance policy document
Motor Fleet and Mobile Plant	Per the insurance policy document
Terrorism	Per the insurance policy document
Cyber Liability	Per the insurance policy document
Nuclear Material Damage and Business Interruption	Per the insurance policy document
Nuclear Material Damage Terrorism	Per the insurance policy document

Z14 Intellectual Property – Eskom owning Intellectual Property

"**Intellectual Property"** means (a) patents, trade marks, service marks, rights in designs, trade names, trade secrets, know how, copyrights and topography rights, in each case whether registered or not; (b) applications for registration of any of them; (c) rights under licences and consents in relation to any of them; (d) all forms of protection of a similar nature or having equivalent or similar effect to any of them which may subsist anywhere in the world.

"Background Intellectual Property" means any and all Intellectual Property rights that are not Foreground Intellectual Property, and are owned or controlled by the relevant party or licensed to the relevant party prior to or outside of the Works but required for the purposes of the Works.

"Foreground Intellectual Property" means all Intellectual Property rights and other matter capable of being the subject of intellectual property rights that is conceived, first reduced to practice or writing or developed in whole or in substantial part in the course of the execution of the Works and rights which are developed substantially as a result of the Works. Any Works that will be developed, changed, modified and/or improved specifically for the Purposes will be Foreground Intellectual Property. Any data or any other information relating to *Employer's* proprietary information generated from the use of the *Contractor's* Background Intellectual Property.

Z14.1 The *Contractor* retains ownership of all Background Intellectual Property rights made by or on behalf of the *Contractor* as part of the Works in information or material it uses in carrying out the Works.

Z14.2 All Foreground Intellectual Property rights, contained in any developed materials which are created by the *Contractor* or on behalf of the *Contractor*, for the purposes of and in support of the execution of the Works (*Employer*'s IP) vest with the *Employer*.

Z14.3 Any data or any other information relating to *Employer*'s proprietary information generated from the use of the *Contractor's* Background Intellectual Property, the copyright therein shall be owned by the *Employer.*

Z14.4 The *Contractor* acknowledges that all rights, title, and interest in and to the Foreground Intellectual Property that may result or originate from or be developed in execution of the Works vests in the *Employer* and that the *Contractor* has no claim of any nature in and to the Foreground Intellectual Property.

Z14.5 The *Contractor* ensures that a copyright notice is incorporated or embossed or labelled on the Foreground Intellectual Property, where the *Employer* is reflected as the owner of the Foreground Intellectual Property.

Z14.6 The *Contractor* is obliged to provide Foreground Intellectual Property manufacturing documents, designs, processes and/or specifications to the *Employer* before/on the *defect state*.

Z14.7 The *Contractor* procures that each Sub- *Contractor* executes all and any Works, and takes all and any other actions as may be required, in order to give effect to this Agreement.

Z14.8 The *Employer* retains all Background Intellectual Property rights in all documents made by or on behalf of the *Employer* including all documents and requirements provided prior to or during the execution of the Works. The *Contractor* does not, without the written consent, of the *Employer*, copy, use or issue to a third party any of the *Employer 's* Background Intellectual Property documents and requirements except for the purposes of executing the Works.

Z14.9 Either party procures that any third party executes confidentiality undertakings not to disclose to any other third parties, any of the *Employer*'s Background Intellectual Property and IP documents and requirements at all, in respect of the *Employer*, or the Background Intellectual Property, in respect of the *Contractor*.

Z14.10 Third Party Claims:

Z14.10.1 In the event of any claims being made or actions brought against the *Employer*, on the ground that the *Contractor* infringed any patent, trade mark or copyright, the *Contractor* is notified thereof and at its own expense, conducts all negotiations in consultation with the *Employer* for the settlement of the claim and litigation that may arise from such alleged infringement, provided that the *Employer* will not bear any financial burden or losses.

Z14.10.2 Save where the *Contractor* fails to take over the conduct of the negotiation or litigation within a reasonable time of the notification of the alleged infringement, the *Employer* does not make any admission which might be prejudicial to the *Contractor*'s position. The *Employer*, at the request and the cost of the *Contractor* affords it all reasonable technical assistance that the *Employer* is able to provide for the purpose of contesting any such claim or action.

Z14.10.3 Should it be held in any such action that any such protected rights have been infringed, as definitely stated by a judgment of the court before which the action is brought, the *Contractor*, at its own expense and in consultation with the *Employer*, either:

a. procures for [Employer/Client/Purchaser] the right to continue to use the affected item or design, or
b. replaces the said affected item or design with a non-infringing item, or
c. provides a design of equivalent quality or modify such affected item or design so as to make it non-infringing without affecting the quality.

Z14.10.4 Notwithstanding anything contained in this contract, the foregoing sets forth the entire responsibility of [Contractor / Consultant / Supplier] with respect to claims relating to infringement.

Z14.10.5 Where it is alleged that the *Employer* has committed an infringement as intended vis-à-vis the *Contractor* as set out in the third party intellectual property infringement clause, the *Employer* has the same rights and obligations as the *Contractor*, mutatis mutandis, as regards such alleged infringement.

Z14.10.6 The *Contractor* herewith indemnifies the *Employer* and undertakes to keep the *Employer* indemnified against all claims of whatsoever nature, real or imagined, which may be made against the *Employer* arising from the infringement of any third party intellectual property rights.

Z15 Asbestos

For the purposes of this Z-clause, the following definitions apply:

AAIA	means approved asbestos inspection authority.
ACM	means asbestos containing materials.
AL	means action level, i.e. a level of 50% of the OEL, i.e. 0.1 regulated asbestos fibres per ml of air measured over a 4 hour period. The value at which proactive actions is required in order to control asbestos exposure to prevent exceeding the OEL.
Ambient Air	means breathable air in area of work with specific reference to breathing zone, which is defined to be a virtual area within a radius of approximately 30cm from the nose inlet.
Compliance Monitoring	means compliance sampling used to assess whether or not the personal exposure of workers to regulated asbestos fibres is in compliance with the Standard's requirements for safe processing, handling, storing, disposal and phase-out of asbestos and asbestos containing material, equipment and articles.
OEL	means occupational exposure limit.
Parallel Measurements	means measurements performed in parallel, yet separately, to existing measurements to verify validity of results.
Safe Levels	means airborne asbestos exposure levels conforming to the Standard's requirements for safe processing, handling, storing, disposal and phase-out of asbestos and asbestos containing material, equipment and articles.
Standard	means the *Employer*'s Asbestos Standard 32-303: Requirements for Safe Processing, Handling, Storing, Disposal and Phase-out of Asbestos and Asbestos Containing Material, Equipment and Articles.
SANAS	means the South African National Accreditation System.
TWA	means the average exposure, within a given workplace, to airborne asbestos fibres, normalised to the baseline of a 4 hour continuous period, also applicable to short term exposures, i.e. 10-minute TWA.

Z15.1 The *Employer* ensures that the Ambient Air in the area where the *Contractor* will Provide the Works conforms to the acceptable prescribed South African standard for asbestos, as per the regulations published in GNR 155 of 10 February 2002, under the Occupational Health and Safety Act, 1993 (Act 85 of 1993) ("Asbestos Regulations"). The OEL for asbestos is 0.2 regulated asbestos fibres per millilitre of air as a 4-hour TWA, averaged over any continuous period of four hours, and the short term exposure limit of 0.6 regulated asbestos fibres per millilitre of air as a 10-minute TWA, averaged over any 10 minutes, measured in accordance with HSG248 and monitored according to HSG173 and OESSM.

Z15.2 Upon written request by the *Contractor*, the *Employer* certifies that these conditions prevail. All measurements and reporting are effected by an independent, competent, and certified occupational hygiene inspection body, i.e. a SANAS accredited and Department of Employment and Labour approved AAIA. The *Contractor* may perform Parallel Measurements and related control measures at the *Contractor*'s expense. For the purposes of compliance the results generated from Parallel Measurements are evaluated only against South African statutory limits as detailed in clause Z15.1. Control measures conform to the requirements stipulated in the AAIA-approved asbestos work plan.

Z15.3 The *Employer* manages asbestos and ACM according to the Standard.

Z15.4 In the event that any asbestos is identified while Providing the Services, a risk assessment is conducted and if so required, with reference to possible exposure to an airborne concentration of above the AL for asbestos, immediate control measures are implemented and relevant air monitoring conducted in order to declare the area safe.

Z15.5 The *Contractor*'s personnel are entitled to stop working and leave the contaminated area forthwith until such time that the area of concern is declared safe by either Compliance Monitoring or an AAIA approved control measure intervention, for example, per the emergency asbestos work plan, if applicable.

Z15.6 The *Contractor* continues to Provide the Works , without additional control measures presented, on presentation of Safe Levels. The contractually agreed dates to Provide the Works , including the Completion Date, are adjusted accordingly. The contractually agreed dates are extended by the notification periods required by regulations 3 and 21 of the Asbestos Regulations, 2001.

Z15.7 Any removal and disposal of asbestos, asbestos containing materials and waste, is done by a registered asbestos contractor, instructed by the *Employer* at the *Employer*'s expense, and conducted in line with South African legislation.

C1.2 Contract Data

Part two - Data provided by the *Contractor*

Notes to a tendering contractor:

1. Please read both the NEC3 Engineering and Construction Contract (April 2013) and the relevant parts of its Guidance Notes (ECC3-GN)[2] in order to understand the implications of this Data which the tenderer is required to complete. An example of the completed Data is provided on pages 156 to 158 of the ECC3 (April 2013) Guidance Notes.
2. The number of the clause which requires the data is shown in the left hand column for each statement however other clauses may also use the same data
3. Where a form field like this [ ] appears, data is required to be inserted relevant to the option selected. Click on the form field ***once*** and type in the data. Otherwise complete by hand and in ink.

Completion of the data in full, according to Options chosen, is essential to create a complete contract.

Clause	Statement	Data
10.1	The *Contractor* is (Name): Address Tel No. Fax No.	
11.2(8)	The *direct fee percentage* is The *subcontracted fee percentage* is	**%** **%**
11.2(18)	The *working areas* are the Site and	
24.1	The *Contractor's* key persons are: 1 Name: Job: Responsibilities: Qualifications: Experience: 2 Name: Job Responsibilities: Qualifications: Experience:	**CV's (and further key persons data including CVs) are appended to Tender Schedule entitled .**

[2] Available from Engineering Contract Strategies Tel 011 803 3008, Fax 011 803 3009 or see www.ecs.co.za

11.2(3)	The *completion date* for the whole of the Works is			
11.2(14)	The following matters will be included in the Risk Register			
11.2(19)	The Works Information for the *Contractor*'s design is in:			
31.1	The programme identified in the Contract Data is			
B	**Priced contract with bill of quantities**			
11.2(21)	The *bill of quantities* is in			
11.2(31)	The tendered total of the Prices is	**(in figures)** **(in words), excluding VAT**		
	Data for Schedules of Cost Components	*Note "SCC" means Schedule of Cost Components starting on page 60, and "SSCC" means Shorter Schedule of Cost Components starting on page 63 of ECC3 (April 2013).*		
B	**Priced contract with bill of quantities**	**Data for the Shorter Schedule of Cost Components**		
41 in SSCC	The percentage for people overheads is:	**%**		
21 in SSCC	The published list of Equipment is the last edition of the list published by The percentage for adjustment for Equipment in the published list is	**Minus %**		
22 in SSCC	The rates of other Equipment are:	**Equipment**	**Size or capacity**	**Rate**
61 in SSCC	The hourly rates for Defined Cost of design outside the Working Areas are **Note: Hourly rates are estimated 'cost to company of the employee' and not selling rates.** **Please insert another schedule if foreign resources may also be used**	**Category of employee**	**Hourly rate**	
62 in SSCC	The percentage for design overheads is	**%**		

63 in SSCC	The categories of design employees whose travelling expenses to and from the Working Areas are included in Defined Cost are:	

C1.3 Forms of Securities

Pro formas for Bonds & Guarantees

For use with the NEC3 Engineering & Construction Contract

The *conditions of contract* stated in the Contract Data Part 1 include the following Secondary Options:

Option X16: Retention

The *Contractor* may provide a Retention Money Guarantee in the form stated here. When the *Employer* receives and accepts a Retention Money Guarantee exactly in the form stated he will instruct the *Project Manager* not to assess any amount be retained in terms of secondary Option X16.

The organisation providing the bond / guarantee does so by copying the pro forma document onto his letterhead without any change to the text or format and completing the required details. The completed document is then given to the *Employer* within the time stated in the contract

Pro forma Retention Money Guarantee (may be used when Option X16 applies)

(to be reproduced exactly as shown below on the letterhead of the Bank providing the Guarantee)

Eskom Holdings SOC Limited
Megawatt Park
Maxwell Drive
Sandton
Johannesburg Date:

Dear Sirs

Reference No. **[●]** *[Drafting Note: Bank reference number to be inserted]*

Retention Money Guarantee: *[Drafting Note: Name of Contractor to be inserted]*

Project [ ] : Contract Reference: *[Drafting Note: Contractor contract reference number to be inserted]*

1. In this Guarantee the following words and expressions shall have the following meanings:-

1.1 "Bank" - means [●], [●] Branch, (Registration No. [●]); [Drafting Note: Name of Bank to be inserted]

1.2 "Bank's Address" - means [●]; [Drafting Note: Bank's physical address to be inserted]

1.3 "Contract" – means the written agreement relating to the Project, entered into between Eskom and the Contractor, on or about the [●] day of [●] 200[●] (Contract Reference No. ……. as amended, varied, restated, novated or substituted from time to time; [Drafting Note: Signature Date and Contract reference number to be inserted]

1.4 "Contractor" – means [●] a company registered in accordance with the laws of [●] under Registration Number [●]. [Drafting Note: Name and details of Contractor to be inserted]

1.5 "Eskom" - means Eskom Holdings SOC Limited, a company registered in accordance with the laws of the Republic of South Africa under Registration Number 2002/015527/30

1.6 "Expiry Date" - means the date on which the Defects Certificate is issued in terms of the Contract.

1.7 "Guaranteed Sum" - means the sum of R [●] ([●] Rand); [Drafting Note: Insert amount of Retention Money Guarantee.].

1.8 "Project" - means the……..

2. At the instance of the Contractor, we the undersigned _____ and _____, in our respective capacities as _____ and _____ of the Bank, and duly authorized thereto, confirm that we hold the Guaranteed Sum at the disposal of Eskom, as security for the proper performance by the Contractor of all of its obligations in terms of and arising from the Contract and hereby undertake to pay to Eskom, on written demand from Eskom received prior to the Expiry Date, any sum or sums not exceeding in total the Guaranteed Sum.

3. A demand for payment under this guarantee shall be made in writing at the Bank's address and shall:

3.1 be signed on behalf of Eskom by a director of Eskom or his authorised delegate.

3.2 state the amount claimed ("the Demand Amount');

3.3 state that the Contractor has failed to carry out his obligation(s) to rectify certain defect(s) for which he

is responsible under the Contract (and the nature of such defect(s)) alternatively that the Demand Amount is payable to Eskom in the circumstances contemplated in the Contract.

4. Notwithstanding the reference herein to the Contract the liability of the Bank in terms hereof is as principal and not as surety and the Bank's obligation/s to make payment:

4.1 is and shall be absolute provided demand is made in terms of this bond in all circumstances; and

4.2 is not, and shall not be construed to be, accessory or collateral on any basis whatsoever.

5. The Bank's obligations in terms of this Guarantee:

5.1 shall be restricted to the payment of money only and shall be limited to the maximum of the Guaranteed Sum; and

5.2 shall not be discharged and compliance with any demand for payment received by the Bank in terms hereof shall not be delayed by the fact that a dispute may exist between Eskom and the Contractor.

6. Eskom shall be entitled to arrange its affairs with the Contractor in any manner which it sees fit, without advising us and without affecting our liability under this Guarantee. This includes, without limitation, any extensions, indulgences, release or compromise granted to the Contractor or any variation under or to the Contract.

7. Should Eskom cede its rights against the Contractor to a third party where such cession is permitted under the Contract, then Eskom shall be entitled to cede to such third party the rights of Eskom under this Guarantee on written notification to the Bank of such cession.

8. This Guarantee:

8.1 shall expire on the Expiry Date until which time it is irrevocable;

8.2 is, save as provided for in **Error! Reference source not found.** above, personal to Eskom and is neither negotiable nor transferable;

8.3 shall be returned to the Bank upon the earlier of payment of the full Guaranteed Sum or expiry hereof;

8.4 shall be regarded as a liquid document for the purpose of obtaining a court order; and

8.5 shall be governed by and construed in accordance with the law of the Republic of South Africa and shall be subject to the jurisdiction of the Courts of the Republic of South Africa.

8.6 Any claim which arises or demand for payment received after expiry date will be invalid and unenforceable.

9. The Bank chooses domicilium citandi et executandi for all purposes in connection with this Guarantee at the Bank's Address.

Signed at _____ Date _____ Bank's seal or stamp

For and behalf of the Bank

Bank Signatory: _____ Bank Signatory: _____

Witness: _____ Witness: _____

Part 2: Pricing Data

ECC3 Option B

Document reference	Title	No of pages
C2.1	Pricing assumptions: Option B	
C2.2	The *bill of quantities*	

C2.1 Pricing assumptions: Option B

How work is priced and assessed for payment
Clause 11 in NEC3 Engineering and Construction Contract (ECC3) Option B states:

Identified and defined terms	11 11.2	(21) The Bill of Quantities is the *bill of quantities* as changed in accordance with this contract to accommodate implemented compensation events and for accepted quotations for acceleration. (28) The Price for Work Done to Date is the total of • the quantity of the work which the *Contractor* has completed for each item in the Bill of Quantities multiplied by the rate and • a proportion of each lump sum which is the proportion of the work covered by the item which the *Contractor* has completed. Completed work is work without Defects which would either delay or be covered by immediately following work. (31) The Prices are the lump sums and the amounts obtained by multiplying the rates by the quantities for the items in the Bill of Quantities.

This confirms that Option B is a re-measurement contract and the bill comprises only items measured using quantities and rates or stated as lump sums. Value related items are not used. Time related items are items measured using rates where the rate is a unit of time.
Function of the Bill of Quantities
Clause 55.1 in Option B states, "Information in the Bill of Quantities is not Works Information or Site Information". This confirms that specifications and descriptions of the work or any constraints on how it is to be done are not included in the Bill, but in the Works Information. This is further confirmed by Clause 20.1 which states, "The *Contractor* Provides the Works in accordance with the Works Information". Hence the *Contractor* does **not** Provide the Works in accordance with the Bill of Quantities. The Bill of Quantities is only a pricing document.
Guidance before pricing and measuring
Employers preparing tenders or contract documents, and tendering contractors are advised to consult the sections dealing with the bill of quantities in the NEC3 Engineering and Construction Contract Guidance Notes before preparing the *bill of quantities* or before entering rates and lump sums into the *bill*.

There is no general provision in Option B for payment for materials on Site before incorporation into the Works. If secondary Option X14 Advanced payment has not been used then the tendering contractor may obtain the same effect by inserting appropriate items in the method related charges where the *method of measurement* allows, or alternatively making allowance in the rates of the *bill of quantities* for the financing of Plant and Materials until they are incorporated in the Works.

When compensation events arise, the default position is that the Bill of Quantities is not used to calculate the cost effect of the event. Defined Cost and the resulting Fee is used and Defined Cost includes all components of cost which the *Contractor* is likely to incur, including so called P & G items. Rates and lump sums from the Bill of Quantities, or from any other source, may be used instead of Defined Cost and the Fee only if the *Contractor* and *Project Manager* agree. If they are unable to agree, then Defined Cost plus Fee is used.

Measurement and payment

Symbols

The units of measurement described in the Bill of Quantities are metric units abbreviated as follows:

Abbreviation	Unit
%	percent
h	hour
ha	hectare
kg	kilogram
kl	kilolitre
km	kilometre
km-pass	kilometre-pass
kPa	kilopascal
kW	kilowatt
l	litre
m	metre
mm	millimetre
m^2	square metre
m^2-pass	square metre pass
m^3	cubic metre
m^3-km	cubic metre-kilometre
MN	meganewton
MN.m	meganewton-metre
MPa	megapascal
No.	number
sum	Lump sum
t	tonne (1000kg)

General assumptions

Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance has been made in the quantities for waste.

The Prices and rates stated for each item in the Bill of Quantities shall be treated as being fully inclusive of all work, risks, liabilities, obligations, overheads, profit and everything necessary as incurred or required by the *Contractor* in carrying out or providing that item.

An item against which no Price is entered will be treated as covered by other Prices or rates in the *bill of quantities*.

The quantities contained in the Bill of Quantities may not be final and do not necessarily represent the actual amount of work to be done. The quantities of work assessed and certified for payment by the *Project Manager* at each assessment date will be used for determining payments due.

The short descriptions of the items of payment given in the *bill of quantities* are only for the purposes of identifying the items. Detail regarding the extent of the work entailed under each item is provided in the Works Information.

Departures from the *method of measurement*

Amplification of or assumptions about measurement items

The following is provided to assist in the interpretation of descriptions given in the *method of measurement*. In the event of any ambiguity or inconsistency between the statements in the *method of measurement* and this section, the interpretation given in this section shall be used.

C2.2 the *bill of quantities*

ITEM NO	DESCRIPTION	UNIT	QTY	RATE (RAND)	AMOUNT (RAND)
	BILL NO 1 **PRELIMINARIES, GENERAL AND PHASED EXECUTION OBLIGATIONS**				
	SUPPLEMENTARY PREAMBLES / PRICING NOTES Rates include labour, materials, consumables, tools, plant, supervision, minor sundries, handling, waste control, testing and compliance necessary to complete each item unless separately measured. Quantities are remeasurable estimates. Descriptions do not replace or reduce obligations in the Works Information.				
1.1	Contract administration, contractual requirements, insurances, bonds, permits, communications and document-control system.	Sum	1	-	-
1.2	Project-specific SHE file, OHS appointments, risk assessments, 37(2) agreement, access clearances and initial induction arrangements.	Sum	1	-	-
1.3	Environmental method statement, waste plan, hazardous-substance controls and initial environmental arrangements.	Sum	1	-	-
1.4	Project QMS, master QCP / ITP framework, calibration register, sample / reference panel planning.	Sum	1	-	-
1.5	Baseline programme in native .mpp and PDF, showing separate access periods for Units 1, 2, 3 and Fuel Tanks.	Sum	1	-	-
1.6	Initial site establishment, offices, stores, welfare, workshop / welding bay, laydown and temporary utilities.	Sum	1	-	-
1.7	Initial design, certification and establishment of common temporary works, lifting, access and containment systems.	Sum	1	-	-
1.8	Contract management, construction management and supervision for overall contract duration.	Month	7	-	-
1.9	OHS personnel, audits, inspections, reporting and maintenance of SHE file.	Month	7	-	-
1.10	Environmental control, monitoring, waste records and housekeeping oversight.	Month	7	-	-
1.11	QA/QC personnel, document control, progress records and quality surveillance.	Month	7	-	-

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1.12	Security, maintenance and operation of site facilities, workshop and stores.	Month	7	-	-
1.17	Unit 1 execution period: mobilisation / remobilisation, permits, daily coordination, phase-specific protection, access set-up and demobilisation.	Sum	1	-	-
1.18	Unit 1 execution period: time-related site supervision, access systems, protection / containment and temporary services.	Week	6	-	-
1.19	Unit 2 execution period: mobilisation / remobilisation, permits, daily coordination, phase-specific protection, access set-up and demobilisation.	Sum	1	-	-
1.20	Unit 2 execution period: time-related site supervision, access systems, protection / containment and temporary services.	Week	6	-	-
1.21	Unit 3 execution period: mobilisation / remobilisation, permits, daily coordination, phase-specific protection, access set-up and demobilisation.	Sum	1	-	-
1.22	Unit 3 execution period: time-related site supervision, access systems, protection / containment and temporary services.	Week	6	-	-
1.23	Fuel Tanks execution period: mobilisation / remobilisation, permits, daily coordination, phase-specific protection, access set-up and demobilisation.	Sum	1	-	-
1.24	Fuel Tanks execution period: time-related site supervision, access systems, protection / containment and temporary services.	Week	6	-	-
1.26	Consolidated as-built records, O&M / maintenance information, final warranties and contract data book.	Sum	1	-	-
1.27	Final removal of site establishment, temporary works and facilities; clean and reinstate areas.	Sum	1	-	-
	Carried to Summary				-
	BILL NO 2 **UNIT 1 ENCLOSURE, MCC, BUSBAR, AIR INTAKE AND EXHAUST STACK**				
	SUPPLEMENTARY PREAMBLES / PRICING NOTES Rates include labour, materials, consumables, tools, plant, supervision, minor sundries, handling, waste control, testing and compliance necessary to complete each item unless separately measured. Quantities are remeasurable estimates.				

ITEM NO	DESCRIPTION Descriptions do not replace or reduce obligations in the Works Information.	UNIT	QTY	RATE	AMOUNT
2.1	Condition assessment and photographic survey with Employer, including thickness assessment and defect mapping.	Item	1	-	-
2.2	Asset-specific method statement, QCP / ITP, product data and accepted reference sample.	Item	1	-	-
2.3	Provide, maintain and remove safe access including scaffold / MEWP / rope access / ladders appropriate to the asset.	Sum	1	-	-
2.4	Protect adjacent operating plant, openings, signage, nameplates, valves, cabling and sensitive equipment from water, debris and overspray.	Sum	1	-	-
2.5	Mechanical surface preparation to existing coated steel, including scraping, abrasion, St 2 cleaning, vacuuming and removal of contaminants.	m2	1 120	-	-
2.6	High-pressure water washing at minimum 500 bar, containment, collection and legal disposal of wash water / residues.	m2	1 120	-	-
2.7	Abrasive / power-tool preparation of exposed corroded steel to specified cleanliness and profile.	m2	115	-	-
2.8	Primer to exposed steel: high-build surface-tolerant aluminium-pigmented epoxy mastic, DFT 175-250 microns.	m2	115	-	-
2.9	Stripe coat to edges, weld seams, bolt holes, fasteners and other critical areas.	m	111	-	-
2.10	First full coat: high-build aluminium-pigmented epoxy mastic, DFT 175-250 microns excluding aged coating.	m2	1 120	-	-
2.11	Finish coat: twin-pack aliphatic acrylic polyurethane enamel, DFT 50-90 microns, colour as instructed.	m2	1 120	-	-
2.12	Final cleaning, touch-up, colour coding, reinstatement of removed nameplates / signage and local fixtures.	Item	1	-	-
2.13	Remove existing failed waterproofing, sealants and loose materials; prepare and clean interface.	m	80	-	-
2.14	Apply accepted visco-elastic polyisobutylene waterproofing strip / wrap to joints, seams and interfaces, complete with overlaps and adhesion test.	m	80	-	-
2.15	Waterproof local flat areas / plate-patch perimeters where measured by area rather than length.	m2	35	-	-
2.16	Detailed MCC roof / structure assessment, mapping and sensitive-equipment protection.	Item	1	-	-

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
2.17	Remove existing waterproofing at MCC roof perimeter and interfaces.	m	25	-	-
2.18	Mechanical surface preparation to St 2-St 3, abrasion of aged coatings, solvent wiping and vacuum cleaning.	m2	15	-	-
2.19	Primer to exposed steel: high-build surface-tolerant aluminium-pigmented epoxy mastic, DFT 175-250 microns.	m2	15	-	-
2.20	Stripe coat to MCC edges, seams, welds, bolt holes and fasteners.	m	24	-	-
2.21	First full coat: high-build aluminium-pigmented epoxy mastic, DFT 175-250 microns.	m2	15	-	-
2.22	Finish coat: twin-pack aliphatic acrylic polyurethane enamel, DFT 50-90 microns.	m2	15	-	-
2.23	Waterproof MCC roof seams and MCC-to-concrete-base perimeter with accepted system.	m	18	-	-
2.24	Detailed busbar roof / structure assessment, mapping and critical equipment protection.	Item	1	-	-
2.25	Remove existing waterproofing from busbar roof sections and joints.	m	16	-	-
2.26	Mechanical surface preparation to St 2-St 3, aged-coating abrasion, solvent wiping and vacuum cleaning.	m2	80	-	-
2.27	Primer to exposed busbar structural steel, DFT 175-250 microns.	m2	80	-	-
2.28	Stripe coat to busbar edges, seams, welds, bolts and critical areas.	m	18	-	-
2.29	First full epoxy mastic coat, DFT 175-250 microns.	m2	80	-	-
2.30	Polyurethane finish coat, DFT 50-90 microns.	m2	80	-	-
2.31	Waterproof busbar roof sections, seams and interfaces with accepted visco-elastic system.	m	80	-	-
2.32	Repair doors in place; carefully remove, protect and reinstate existing hinges and locks.	No.	8	-	-
2.33	Remove and reinstate affected fixtures, ducts, covers, penetrations, air vents and signage.	Item	1	-	-
2.34	Climatic condition monitoring, wet / dry film measurements and signed inspection records for each coat and location.	Item	1	-	-
2.35	Final visual inspection, adhesion / specified tests, punch-list correction and sectional handover.	Item	1	-	-

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
2.36	Unit-specific quality data pack, photographs, warranties, maintenance guidance and as-built mark-ups.	Item	1	-	-
	Carried to Summary				-
	BILL NO 3 **UNIT 2 ENCLOSURE, MCC, BUSBAR, AIR INTAKE AND EXHAUST STACK**				
	SUPPLEMENTARY PREAMBLES / PRICING NOTES Rates include labour, materials, consumables, tools, plant, supervision, minor sundries, handling, waste control, testing and compliance necessary to complete each item unless separately measured. Quantities are remeasurable estimates. Descriptions do not replace or reduce obligations in the Works Information.				
3.1	Condition assessment and photographic survey with Employer, including thickness assessment and defect mapping.	Item	1	-	-
3.2	Asset-specific method statement, QCP / ITP, product data and accepted reference sample.	Item	1	-	-
3.3	Provide, maintain and remove safe access including scaffold / MEWP / rope access / ladders appropriate to the asset.	Sum	1	-	-
3.4	Protect adjacent operating plant, openings, signage, nameplates, valves, cabling and sensitive equipment from water, debris and overspray.	Sum	1	-	-
3.5	Mechanical surface preparation to existing coated steel, including scraping, abrasion, St 2 cleaning, vacuuming and removal of contaminants.	m2	1 120	-	-
3.6	High-pressure water washing at minimum 500 bar, containment, collection and legal disposal of wash water / residues.	m2	1 120	-	-
3.7	Abrasive / power-tool preparation of exposed corroded steel to specified cleanliness and profile.	m2	115	-	-
3.8	Primer to exposed steel: high-build surface-tolerant aluminium-pigmented epoxy mastic, DFT 175-250 microns.	m2	115	-	-
3.9	Stripe coat to edges, weld seams, bolt holes, fasteners and other critical areas.	m	111	-	-
3.10	First full coat: high-build aluminium-pigmented epoxy mastic, DFT 175-250 microns excluding aged coating.	m2	1 120	-	-

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
3.11	Finish coat: twin-pack aliphatic acrylic polyurethane enamel, DFT 50-90 microns, colour as instructed.	m2	1 120	-	-
3.12	Final cleaning, touch-up, colour coding, reinstatement of removed nameplates / signage and local fixtures.	Item	1	-	-
3.13	Remove existing failed waterproofing, sealants and loose materials; prepare and clean interface.	m	80	-	-
3.14	Apply accepted visco-elastic polyisobutylene waterproofing strip / wrap to joints, seams and interfaces, complete with overlaps and adhesion test.	m	80	-	-
3.15	Waterproof local flat areas / plate-patch perimeters where measured by area rather than length.	m2	35	-	-
3.16	Detailed MCC roof / structure assessment, mapping and sensitive-equipment protection.	Item	1	-	-
3.17	Remove existing waterproofing at MCC roof perimeter and interfaces.	m	25	-	-
3.18	Mechanical surface preparation to St 2-St 3, abrasion of aged coatings, solvent wiping and vacuum cleaning.	m2	15	-	-
3.19	Primer to exposed steel: high-build surface-tolerant aluminium-pigmented epoxy mastic, DFT 175-250 microns.	m2	15	-	-
3.20	Stripe coat to MCC edges, seams, welds, bolt holes and fasteners.	m	24	-	-
3.21	First full coat: high-build aluminium-pigmented epoxy mastic, DFT 175-250 microns.	m2	15	-	-
3.22	Finish coat: twin-pack aliphatic acrylic polyurethane enamel, DFT 50-90 microns.	m2	15	-	-
3.23	Waterproof MCC roof seams and MCC-to-concrete-base perimeter with accepted system.	m	18	-	-
3.24	Detailed busbar roof / structure assessment, mapping and critical equipment protection.	Item	1	-	-
3.25	Remove existing waterproofing from busbar roof sections and joints.	m	16	-	-
3.26	Mechanical surface preparation to St 2-St 3, aged-coating abrasion, solvent wiping and vacuum cleaning.	m2	80	-	-
3.27	Primer to exposed busbar structural steel, DFT 175-250 microns.	m2	80	-	-
3.28	Stripe coat to busbar edges, seams, welds, bolts and critical areas.	m	18	-	-
3.29	First full epoxy mastic coat, DFT 175-250 microns.	m2	80	-	-

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
3.30	Polyurethane finish coat, DFT 50-90 microns.	m2	80	-	-
3.31	Waterproof busbar roof sections, seams and interfaces with accepted visco-elastic system.	m	80	-	-
3.32	Repair doors in place; carefully remove, protect and reinstate existing hinges and locks.	No.	8	-	-
3.33	Remove and reinstate affected fixtures, ducts, covers, penetrations, air vents and signage.	Item	1	-	-
3.34	Climatic condition monitoring, wet / dry film measurements and signed inspection records for each coat and location.	Item	1	-	-
3.35	Final visual inspection, adhesion / specified tests, punch-list correction and sectional handover.	Item	1	-	-
3.36	Unit-specific quality data pack, photographs, warranties, maintenance guidance and as-built mark-ups.	Item	1	-	-
	Carried to Summary				**-**
	BILL NO 4 **UNIT 3 ENCLOSURE, MCC, BUSBAR, AIR INTAKE AND EXHAUST STACK**				
	SUPPLEMENTARY PREAMBLES / PRICING NOTES Rates include labour, materials, consumables, tools, plant, supervision, minor sundries, handling, waste control, testing and compliance necessary to complete each item unless separately measured. Quantities are remeasurable estimates. Descriptions do not replace or reduce obligations in the Works Information.				
4.1	Condition assessment and photographic survey with Employer, including thickness assessment and defect mapping.	Item	1	-	-
4.2	Asset-specific method statement, QCP / ITP, product data and accepted reference sample.	Item	1	-	-
4.3	Provide, maintain and remove safe access including scaffold / MEWP / rope access / ladders appropriate to the asset.	Sum	1	-	-
4.4	Protect adjacent operating plant, openings, signage, nameplates, valves, cabling and sensitive equipment from water, debris and overspray.	Sum	1	-	-
4.5	Mechanical surface preparation to existing coated steel, including scraping, abrasion, St 2 cleaning, vacuuming and removal of contaminants.	m2	1 120	-	-

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
4.6	High-pressure water washing at minimum 500 bar, containment, collection and legal disposal of wash water / residues.	m2	1 120	-	-
4.7	Abrasive / power-tool preparation of exposed corroded steel to specified cleanliness and profile.	m2	115	-	-
4.8	Primer to exposed steel: high-build surface-tolerant aluminium-pigmented epoxy mastic, DFT 175-250 microns.	m2	115	-	-
4.9	Stripe coat to edges, weld seams, bolt holes, fasteners and other critical areas.	m	111	-	-
4.10	First full coat: high-build aluminium-pigmented epoxy mastic, DFT 175-250 microns excluding aged coating.	m2	1 120	-	-
4.11	Finish coat: twin-pack aliphatic acrylic polyurethane enamel, DFT 50-90 microns, colour as instructed.	m2	1 120	-	-
4.12	Final cleaning, touch-up, colour coding, reinstatement of removed nameplates / signage and local fixtures.	Item	1	-	-
4.13	Remove existing failed waterproofing, sealants and loose materials; prepare and clean interface.	m	80	-	-
4.14	Apply accepted visco-elastic polyisobutylene waterproofing strip / wrap to joints, seams and interfaces, complete with overlaps and adhesion test.	m	80	-	-
4.15	Waterproof local flat areas / plate-patch perimeters where measured by area rather than length.	m2	35	-	-
4.16	Detailed MCC roof / structure assessment, mapping and sensitive-equipment protection.	Item	1	-	-
4.17	Remove existing waterproofing at MCC roof perimeter and interfaces.	m	25	-	-
4.18	Mechanical surface preparation to St 2-St 3, abrasion of aged coatings, solvent wiping and vacuum cleaning.	m2	15	-	-
4.19	Primer to exposed steel: high-build surface-tolerant aluminium-pigmented epoxy mastic, DFT 175-250 microns.	m2	15	-	-
4.20	Stripe coat to MCC edges, seams, welds, bolt holes and fasteners.	m	24	-	-
4.21	First full coat: high-build aluminium-pigmented epoxy mastic, DFT 175-250 microns.	m2	15	-	-
4.22	Finish coat: twin-pack aliphatic acrylic polyurethane enamel, DFT 50-90 microns.	m2	15	-	-
4.23	Waterproof MCC roof seams and MCC-to-concrete-base perimeter with accepted system.	m	18	-	-

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
4.24	Detailed busbar roof / structure assessment, mapping and critical equipment protection.	Item	1	-	-
4.25	Remove existing waterproofing from busbar roof sections and joints.	m	16	-	-
4.26	Mechanical surface preparation to St 2-St 3, aged-coating abrasion, solvent wiping and vacuum cleaning.	m2	80	-	-
4.27	Primer to exposed busbar structural steel, DFT 175-250 microns.	m2	80	-	-
4.28	Stripe coat to busbar edges, seams, welds, bolts and critical areas.	m	18	-	-
4.29	First full epoxy mastic coat, DFT 175-250 microns.	m2	80	-	-
4.30	Polyurethane finish coat, DFT 50-90 microns.	m2	80	-	-
4.31	Waterproof busbar roof sections, seams and interfaces with accepted visco-elastic system.	m	80	-	-
4.32	Repair doors in place; carefully remove, protect and reinstate existing hinges and locks.	No.	8	-	-
4.33	Remove and reinstate affected fixtures, ducts, covers, penetrations, air vents and signage.	Item	1	-	-
4.34	Climatic condition monitoring, wet / dry film measurements and signed inspection records for each coat and location.	Item	1	-	-
4.35	Final visual inspection, adhesion / specified tests, punch-list correction and sectional handover.	Item	1	-	-
4.36	Unit-specific quality data pack, photographs, warranties, maintenance guidance and as-built mark-ups.	Item	1	-	-
	Carried to Summary				-
	BILL NO 5 **STAND-ALONE LIQUID FUEL TANKS A AND B**				
	SUPPLEMENTARY PREAMBLES / PRICING NOTES Rates include labour, materials, consumables, tools, plant, supervision, minor sundries, handling, waste control, testing and compliance necessary to complete each item unless separately measured. Quantities are remeasurable estimates. Descriptions do not replace or reduce obligations in the Works Information.				

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
5.1	Condition assessment, thickness survey, defect mapping and photographic record for Fuel Tanks A and B and associated steel supports.	Item	1	-	-
5.2	Tank-specific method statement, QCP / ITP, product data and reference sample.	Item	1	-	-
5.3	Provide and remove access, scaffold / MEWP / rope access and certified fall-protection arrangements.	Sum	1	-	-
5.4	Provide splash-control hoarding, bund protection, masking and protection of fuel systems, valves, piping, signage and adjacent plant.	Sum	1	-	-
5.5	Mechanical preparation of existing coated steel, St 2 cleaning, abrasion and vacuum removal.	m2	1 146	-	-
5.6	HPWJ at minimum 500 bar including containment, collection and legal disposal of effluent.	m2	1 146	-	-
5.7	Preparation of exposed corroded steel to required cleanliness / profile.	m2	160	-	-
5.8	High-build surface-tolerant epoxy primer to exposed steel, DFT 175-250 microns.	m2	160	-	-
5.9	Stripe coat to edges, welds, seams, nozzles, supports, bolts and critical areas.	m	98	-	-
5.10	First full high-build aluminium-pigmented epoxy mastic coat, DFT 175-250 microns.	m2	826	-	-
5.11	Twin-pack aliphatic acrylic polyurethane enamel finish, DFT 50-90 microns.	m2	826	-	-
5.12	Remove failed sealant / waterproofing at tank-to-concrete-base interfaces.	m	72	-	-
5.13	Apply accepted visco-elastic waterproofing system to tank-to-base interfaces.	m	72	-	-
5.14	Reinstate nameplates, labels and tank identification; touch-up and clean.	Item	1	-	-
5.15	Testing, DFT records, final inspection, punch-list correction and tank quality data pack.	Item	1	-	-
	Carried to Summary				-
	BILL NO 6 **PROVISIONAL / REMEASURABLE CONDITION-DEPENDENT REPAIRS**				
	SUPPLEMENTARY PREAMBLES / PRICING NOTES Rates include labour, materials, consumables, tools, plant, supervision, minor sundries, handling, waste control, testing and compliance necessary to complete each item unless separately measured.				

ITEM NO	DESCRIPTION Quantities are remeasurable estimates. Descriptions do not replace or reduce obligations in the Works Information.	UNIT	QTY	RATE	AMOUNT
6.1	Additional ultrasonic thickness measurement / NDT beyond the included condition assessment.	No.	1	-	-
6.2	Engineering assessment and repair detail for a discrete defect.	No.	1	-	-
6.3	Riveted cover plate patch to perforated / severely pitted section, including same-thickness plate(6mm min thk plate), minimum 50 mm overlap, drilling, rivets, rust inhibitor, waterproof wrap and coating system.	m2	225	-	-
6.4	Cut out and welded replacement plate in site welding bay, including rigging, fit-up, weld preparation, NDT, reinstatement and coating.	kg	10 560	-	-
6.5	Off-site manufactured replacement plate component, delivered, rigged into position and coated.	kg	10 560	-	-
6.6	Replacement structural steel member, fabricated, delivered, erected, connected and coated.	kg	3 420	-	-
6.7	Seal-weld narrow gap / crevice or repair severely grooved weld, including preparation and NDT.	m	265	-	-
6.8	Replace corroded bolt, nut and washer set with matching approved fastener; solvent wipe and coat.	No.	255	-	-
6.9	Seal crevice / lap joint with accepted compatible sealant after completion of coating system.	m	265	-	-
6.10	Remove deteriorated non-shrink grout beneath baseplate, clean and assess baseplate, install new approved non-shrink grout up to 80 mm build-up and finish.	m2	45	-	-
6.11	Local repair / replacement of steel door sheet, frame, hinge or lock component.	No.	8	-	-
6.12	Replace faded or damaged safety / identification sign matching existing standard.	No.	34	-	-
6.13	Additional lifting / mobile crane operation for instructed removal and reinstatement of a component.	Hour	50	-	-
	Carried to Summary				-
	SUMMARY				
ITEM NO	**DESCRIPTION**	**UNIT**			**AMOUNT**

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1	Preliminaries, General And Phased Execution Obligations	Page			-
2	Unit 1 Enclosure, Mcc, Busbar, Air Intake And Exhaust Stack	Page			-
3	Unit 2 Enclosure, Mcc, Busbar, Air Intake And Exhaust Stack	Page			-
4	Unit 3 Enclosure, Mcc, Busbar, Air Intake And Exhaust Stack	Page			-
5	Stand-Alone Liquid Fuel Tanks A And B	Page			-
6	Provisional / Remeasurable Condition-Dependent Repairs	Page			-
	Sub-total				**-**
	Allow Fifteen per cent (15%) Value Added Tax	TAX	0		-
	Total Tender				**-**

Part 3: Scope of Work

Document reference	Title	No of pages
	This cover page	1
C3.1	*Employer*'s Works Information	
	Total number of pages	

C3.1: EMPLOYER'S WORKS INFORMATION

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1 Description of the Works

1.1 Executive overview

1. Acacia Power Station is a gas turbine power station located near Cape Town in the Western Cape. The station comprises three generating units and associated auxiliary plant housed within modular steel enclosures.
2. The Works comprise the refurbishment and corrosion protection of the Unit 1, Unit 2 and Unit 3 enclosures and associated structures, together with Fuel Storage Tanks A and B, as detailed in this Works Information.
3. The Works include, where applicable:
   - inspection and condition assessment of the areas identified in this Works Information;
   - localised repair or replacement of deteriorated steelwork and sheeting;
   - preparation of metallic surfaces;
   - application of the specified corrosion protection coating systems;
   - repair and application of waterproofing systems and joint seals;
   - removal and reinstatement of fixtures, doors, ducts, signage and other components where required to execute the Works;
   - inspection, testing and quality verification; and
   - reinstatement, cleaning and handover of the completed Works.
4. The extent of repair required is confirmed through the inspection and condition assessment process specified in this Works Information. Measurement and payment are in accordance with the Bill of Quantities and the conditions of contract.
5. The Works are predominantly carried out in situ. Components which cannot reasonably be repaired in situ may be removed and repaired within the designated Site working area or, where provided for in this Works Information, manufactured or repaired off Site.
6. The Works are carried out in phases and coordinated with the Employer's operational requirements. Generating units and plant not released for the Works remain operational unless otherwise instructed by the Project Manager.
7. The Contractor protects operating plant, equipment and infrastructure and executes the Works so as to minimise interference with the Employer's operations.

1.2 Employer’s objectives and purpose of the Works

1. The Employer’s objective is to maintain the operational readiness and asset integrity of Acacia Power Station by undertaking life-extension refurbishment of its ageing generator, turbine, and auxiliary enclosures. The enclosures form critical weatherproof and protective boundaries for high-value generation assets.
2. The project is intended to deliver the following key outcomes:
   - Restoration of protective enclosures to an acceptable structural and aesthetic condition, aligned with engineering and corrosion protection standards;
   - Prevent water ingress and corrosion to prevent future structural and performance issues.

- Improved maintainability, including access to components, safe working surfaces, and compliant signage reinstatement;
- Cost-effective life extension of existing infrastructure, with minimal to no maintenance required to maintain the corrosion protection system;
- Support for reliable on-demand generation dispatch.

1.3 Interpretation and terminology

This clause supplements the definitions provided in the NEC3 ECC Conditions of Contract. Words and abbreviations listed below apply only to this Work's Information and have the stated meanings wherever they appear, unless the context clearly indicates otherwise.

1.3.1 Interpretation of incorporated documentation

1.3.2 Defined Terms

The following abbreviations are used in this Works Information:

Term	Meaning within this Works Information
Acacia Power Station	Eskom Generation Peaking Division's gas-turbine facility, situated in Cape Town, Western Cape, forms the Site for the Works.
C5-M Environment	Very high corrosivity, marine atmosphere classification in accordance with ISO 12944-2.
Coating System	The complete, fully compatible sequence of surface preparation, primer, intermediate, finish coats and associated sealants specified for protective treatment of steelwork.
Data Certificate Pack	The compilation of all quality documents (QCPs, ITPs, DFT and environmental logs, NDT reports, warranties, as-built drawings and maintenance manuals) required to demonstrate that the Works meet the fitness-for-purpose
Defects Correction Period	The period stated in Contract Data during which the *Contractor* rectifies Defects after Completion includes any manufacturer or installer warranty periods that extend beyond the NEC core period.
High-Pressure Water Jetting (HPWJ)	Surface-preparation method utilising water at a minimum working pressure of 500 bar immediately upstream of the nozzle.
Principal *Contractor*	The *Contractor* appointed in writing by the *Employer* under the Occupational Health and Safety Act (Construction Regulations) to execute and co-ordinate construction activities on the Site.
Stopaq®	Visco-elastic corrosion-preventive wrap system (or proven equivalent accepted by the *Project Manager*) used for joint sealing and waterproofing interfaces, as specified in the Technical Specification.

1.3.3 Abbreviations

These definitions and abbreviations are intended solely to improve clarity in this Works Information and must not modify, supersede or conflict with any definition in the NEC3 ECC *conditions of contract.* Where a conflict appears to exist, the definition in the NEC3 ECC must prevail.

Abbreviation	Full wording
AS-BUILT	Record drawings and documents reflecting the Works as actually constructed or installed
AFC	Approved For Construction
C&I	Control and Instrumentation
DFT	Dry Film Thickness (µm)
GT	Gas Turbine
HPWJ	High-Pressure Water Jetting
ISO	International Organization for Standardization
ITP	Inspection and Test Plan
JSEA	Job Safety and Environmental Analysis
MCC	Motor Control Centre
MEWP	Mobile Elevating Work Platform
NDT	Non-Destructive Testing
OHS Act	Occupational Health and Safety Act, Act 85 of 1993 (South Africa)
PA	Protective Appliance (safety equipment)
PM	*Project Manager* (as defined in the NEC3 ECC)
QA/QC	Quality Assurance / Quality Control
QCP	Quality Control Plan
RA	Risk Assessment
RFQ	Request for Quotation
SHEQ	Safety, Health, Environment and Quality
WCC	Working-at-Heights Competency Certificate

2 Management and start up.

2.1 Management meetings

1. To support the effective administration of the contract, the Contractor attends and participates in management meetings convened by the Project Manager.
2. These meetings are intended to:
   - Monitor and coordinate progress,
   - Address risks and safety issues,
   - Review quality assurance and testing milestones,
   - Confirm contract deliverables and communication obligations.
3. Meeting minutes or registers are prepared by the person convening the meeting and circulated within five (5) working days. These will not substitute for formal communications issued in accordance with Clause 13 of the Contract.
4. Meetings may be held on-site or via Microsoft Teams, depending on the nature of the discussion and the Parties' availability.
5. The Project Manager may convene additional meetings as required to address technical, programme-related, or commercial issues.

2.1.1 General Execution Meetings

2.1.1.1 Project kick-off meeting

A project kick-off meeting is convened and chaired by the *Project Manager* before Works commences:

Interval	Location	Attendance by:
Once-off meeting	MSTEAMS or on-site	*Project Manager*, *Contractor*, Project Engineer, Power Station Manager and Others as required

2.1.1.2 Implementation meetings for specific progress/QC, and feedback

Title and purpose	Approximate time & interval	Location	Attendance by:
Risk Register and Compensation Events	As required	MSTEAMS or on-site	*Project Manager*, *Contractor*, Project Co-Ordinator, Quantity Surveyor, Project Engineer and Others as required
Overall contract progress and feedback	Minimum Bi-weekly or as required by the *Project Manager*.	MSTEAMS or on-site	*Project Manager*, *Contractor*, Project Co-Ordinator, Project Engineer and Others as required
On-site integration meetings	Daily	on-site	*Contractor*, *Project Manager*, Project Co-Ordinator and relevant Engineer and Others as required

2.1.3 Meetings of a specialist nature

1. The Project Manager or the Contractor may convene specialist meetings to address:
   a. Design review and clarification (see Section 3.3), Procedure for submission and acceptance of the Contractor's design.
   b. Interface management with Third Parties or stakeholders,
   c. Quality Control Plan (QCP) or Inspection and Test Plan (ITP) reviews,
   d. Safety audits and technical compliance discussions.
2. The attendance, frequency, and location of such meetings are to be fit for purpose and recorded accordingly.
3. Records of specialist meetings must be submitted to the Project Manager within five (5) working days after the meeting.

2.1.4 Post-implementation meeting for project feedback and review

1. The post-implementation meeting is held between the Employer, Contractor and Others as required to report on implementation issues and reviews, for project close-out, if needed:

Interval	Location	Attendance by:
Once-off	MSTEAMS or on-site	*Project Manager*, *Contractor*, Project Engineer, Power Station Manager and Others as required

2.2 Documentation control

1. The Contractor establishes and maintains a document management system for all project documentation throughout the contract. This document management system applies to all documents related to correspondence, design, procurement, manufacturing, construction, commissioning, handover, and as-builts.
2. The documentation control system provides complete traceability, version control, transmittal records, and clear identification of document status (e.g. "Issued for Review", "Approved for Construction", "As-Built").
3. The *Contractor* complies with the following *Employer* Document control standards:
   a. 240-86973501: Engineering Drawing Standard – Common Requirements,
   b. 240-54179170: Classification and Designation of Technical Documentation,
   c. 32-644: Documentation Management Standard.
4. All documentation must:
   a. Be submitted in South African English and use SI units.
   b. Be legible, professionally prepared, and signed by authorised personnel,
   c. Be submitted in editable electronic formats (no password protection or write protection) unless otherwise agreed,
   d. Be issued with a formal transmittal form, uniquely numbered, indicating:
      i. Document title and number,
      ii. Revision number and status,
      iii. Date of issue,
      iv. Purpose of issue (e.g. "For Review", "For Acceptance").

5. Final “As-Built” submissions must include:
   a. One complete hardcopy drawing set with signed title blocks,
   b. Editable electronic copies of all documentation,
   c. Operating and Maintenance (O&M) manuals, maintenance schedules, and configuration data.
6. All formal communications, including document submissions and technical queries, must:
   a. Be issued as signed letters or forms on the *Contractor*’s letterhead,
   b. Be submitted as PDFs attached to an email (not in the email body),
   c. Be acknowledged by the recipient, with a record of receipt returned to the sender,
   d. Reference the applicable ECC clause (if contractual), the Contract number, subject, and any relevant cross-references.
7. All document deliverables must be routed to the Project Manager and aligned with the design review and acceptance process outlined in Section 3.3 Procedure for submission and acceptance of the Contractor’s design, of this Works Information.

2.3 Communication Requirements

All communication from the *Contractor* must be addressed to the *Project Manager*, as specified in the ECC contract. All communication must refer to:

1. The Contract number that is issued by the Employer (typically a 46000xxxxx number),
2. The title of the Contract,
3. Any previous references relating to the specific communiqué (i.e., a response to a Project Manager’s communication),
4. The specific ECC clause under which the communication is issued, whether a reply is required, and a unique letter reference number
5. All document deliverables transmitted to the Project Manager for review, acceptance, record, or information are transmitted under formal communication with an associated document transmittal cover document.
6. The title of each letter summarises the purpose of the letter, and each notification deals with only one specific issue at a time.
7. In the case where letters are submitted electronically by means of email, the title of the letter must be reflected in the subject line, and only one letter is submitted per email.

2.4 Health and safety risk management

1. The Contractor complies with the health and safety requirements contained in the Employer's SHE Specification and the approved safety file. Eskom reserves the right to review the OHS Requirements to address operational risks, and the Contractor must comply with the latest OHS Requirements as amended, at no additional cost.
2. Contractor and Employer representatives must sign the 37(2) agreements.
3. The Contractor OHS professional must conduct internal audits at planned intervals to monitor compliance with the Contractual health and safety requirements.
4. The Employer or his representative will conduct inspections at planned intervals to monitor compliance with the Contractual health, safety and legal requirements.

5. The Contractor may be selected during internal and/or external Power Station audits to verify compliance with legal and contractual OHS requirements. The Project Manager will communicate this at relevant periods, and the Contractor will be available for this audit.
6. In addition to the requirements of the applicable laws governing occupational health and safety, the Power Station OHS requirements particular to the service and the Affected Property for this contract must be adhered to for the duration of the Contract.
7. The minimum requirements for the Contractor to gain access to Peaking Generation Power Stations include, but are not limited to:
    a. A valid medical fitness certificate
    b. Police clearance from SAPS or an accredited supplier/service provider linked to the SAPS AFIS system, not older than thirty (30) calendar days.
    c. Identification document (RSA ID or equivalent)
    d. National Driver's Licence (applicable to drivers)
    e. Adherence to the Eskom Life-saving rules.
    f. Applicable risk-based PPE
    g. A Valid letter of good standing at all times (COIDA or equivalent). Access to the site to perform the Works will be denied should the letter of good standing not be valid.
    h. The Contractor/supplier/consultant who is working alone and not eligible to register with the compensation fund must provide Eskom with the member benefit statement of the insurance cover, which includes life and disability cover, to the minimum fund of R500,000.

Note: Induction will only be done after the above documents have been submitted and accepted by the *Employer.*

2.4.1 Key Performance Indicators

The *Contractor* must monitor, manage, and report on the following Key Performance Indicators (KPIs) related to health and safety performance for the duration of the Contract. These indicators will be used to assess compliance with the *Employer*'s OHS Specification, legal obligations, and safe work practices.

The *Contractor* must:

1. Maintain a Health and Safety file and ensure compliance with the health and safety plan, Eskom OHS specification, and applicable legislation as amended.
2. Always maintain good housekeeping where the task is being executed and/or within the area of responsibility.
3. Implement and monitor near-miss reporting strategy/programme (reporting of near misses).
4. Develop and comply with Behavioural Safety Observation (BSO) and Planned Job Observation programmes (PJO).
5. Maintain Zero Fatalities for the duration of the Contract.
6. At any given point, the OHS performance must be within the lost time injury (LTI) tolerance level as amended.
7. All incidents must be reported immediately or before the end of the shift in which the incident occurred.

8. All incident investigations must be completed within seven (7) working days of the occurrence of an incident.
9. Incident investigation recommendations will be closed within the recommended time frame recorded in the Incident investigation report.
10. Close audit findings as per the Employer's procedure or audit report recommended time frames.
11. Close Non-conformance as per the recommended time frames.

Note: The KPIs listed above will be subject to regular monitoring through audits and site inspections conducted by the *Employer*.

2.4.2 Contract Completion and sign-off

Upon Completion of the Works, the Parties will conduct a final meeting to identify any outstanding Defects or information before the Contract is closed out.

The *Contractor* ensures the following requirements are met before Completion of the Works:

1. Close all incidents and audit findings.
2. Clean the respective site establishment areas and ensure good housekeeping where the Contractor was working.
3. The Contractor must submit safety statistics and a safety file to the Employer's BU Safety department for closeout and filing.
4. Completion of a closeout report (as per 32-726) to close the Contractual work

2.5 Environmental constraints and management

The *Contractor* complies with all the National and Local legislation requirements as well as the *Employer's* procedures and policies as stated in this Works Information.

1. The Contractor complies with:
   a. All applicable national, provincial, and municipal environmental legislation and by-laws, including but not limited to:
      - National Environmental Management Act (Act 107 of 1998)
      - National Water Act (Act 36 of 1998)
      - National Environmental Management Waste Act (Act 59 of 2008)
      - Applicable Eskom environmental procedures and standards
   b. The requirements of the site's ISO 14001 Environmental Management System, where applicable.
2. The *Contractor* must:
   a. Prepare and implement a site-specific Environmental Method Statement, including but not limited to:
      - Identification of potential environmental impacts of the Works
      - Management of waste streams
      - Hazardous materials handling and spill prevention
      - Protection of flora, fauna, and cultural heritage sites
      - Noise, dust, and emissions control

- Stormwater and wastewater management

b. Submit this Environmental Method Statement to the Employer for acceptance prior to commencement of any Works on site.
c. Provide Safety Data Sheets for all hazardous substances brought onto the site.
d. Immediately report any environmental incidents or potential non-compliances to the Employer.
e. Maintain proper temporary storage and clearly demarcated areas for all waste and hazardous materials, in line with best practice and legal requirements.

3. The Contractor's activities must be planned and executed to minimise the risk of harm to the environment and must reflect a principle of zero harm to the environment, in line with Eskom's environmental policy.
4. The Contractor's compliance with environmental requirements will be monitored through audits and inspections conducted by the Employer.
5. The Contractor is fully responsible for the safe collection, handling, storage, transportation, and legal disposal of all waste generated from the Works.

   This includes:

   a. General waste, construction debris, surplus materials, and hazardous waste,
   b. Segregation and labelling of waste streams where required by regulation or Employer procedure,
   c. Maintaining clean and organised work areas to prevent environmental contamination or safety risks,
   d. Records and disposal certificates for all waste removed off-site must be kept and made available to the Employer upon request.
6. Disposal must only be to licensed and approved facilities in accordance with the National Environmental Management Waste Act and any other applicable legislation. Under no circumstances may waste be buried, burned, or disposed of on the Employer's premises.

2.6 Quality assurance requirements

1. The Contractor must develop, implement, and maintain a Quality Management System (QMS) for the duration of the Works. Where the Contractor operates an ISO 9001:2015-certified system, the level of self-certification for materials and components will be agreed with the Project Manager prior to the commencement of any Works.
2. If no certified QMS exists, the Contractor must:
3. Establish a formal quality management plan specific to the Works.
   a. Perform all required inspections and tests,
   b. Maintain complete records of quality control activities, and
   c. Submit all documentation for acceptance by the Project Manager.
4. The Contractor must submit a complete and project-specific Quality Control Plan (QCP) aligned with the Works in the Accepted Programme and Method Statement. The QCP must be submitted at least ten (10) working days before the planned start of any Works or inspections and must include, at a minimum:
   a. Defined responsibilities and quality objectives,
   b. Document and record control procedures,

c. Hold points, witness points, and inspection points,
d. Non-conformance control procedures,
e. Acceptance criteria,
f. Final documentation and data book handover requirements.

5. The QCP must identify and describe all key activities in logical execution order, cross-referenced to the relevant specifications and work packages. Each activity must include:
6. Provisions for signature by the Contractor upon Completion, and
7. Signature by the Employer confirming acceptance.
8. The Contractor will ensure that all Witness and Hold Points are agreed in advance with the Project Manager and are included in the approved QCP. The Contractor must not proceed past any Hold Point without written instruction from the Project Manager.
9. All QCP submissions must be accompanied by supporting documentation, including:
   a. Fitment, application, and installation procedures,
   b. Inspection and test procedures,
   c. Calibration certificates for monitoring and measuring equipment,
   d. Details of qualified personnel allocated to QA/QC activities.
10. The Contractor will provide competent QA personnel and suitable equipment necessary to implement and verify the Works against the agreed standards and specifications.
11. The following minimum quality records will be generated and retained on Site:
    a. Material batch and delivery records,
    b. Signed Product Data Sheets (e.g., coating systems, sealants),
    c. Surface preparation records and inspection reports,
    d. Climatic condition records for each work shift during coating application,
    e. Application logs detailing date, time, and method of each coating layer, including repair coats,
    f. Dry Film Thickness (DFT) measurements per coat and location,
    g. NDT reports and data sheets for all site or off-site welding,
    h. Technical records for all consumables and materials used in the Works.
12. The QCP must cover both on-site and off-site Works, including but not limited to:
    a. Surface preparation and coating application,
    b. Steelwork repair and fabrication,
    c. Quality documentation verification,
    d. Storage and handling of materials.
13. The Contractor must programme all quality inspections and testing in coordination with the Employer. Inspection access must be granted at reasonable notice to allow the Employer's review of Works at all critical stages.
14. The Contractor is responsible for the preparation and submission of complete Quality Data Packs prior to Completion. These will include all required records, certificates, reports, and as-built drawings, and must be accepted by the Project Manager before the Completion Certificate is issued.

15. The Contractor must ensure all monitoring and measuring equipment is calibrated and verified for serviceability before use. Calibration certificates must be kept on-site and made available for inspection.
16. The Employer reserves the right to carry out audits and surveillance inspections at any time. The Contractor must grant unrestricted access to all documentation, QA/QC activities, trials, and test results as requested.

2.7 Programming constraints

1. The Contractor must develop, maintain, and update a programme for the Works. The programme must reflect the full scope of activities required to complete the enclosure refurbishment Works at Acacia Power Station, taking into account operational constraints, outage coordination, and sequencing.
2. The programme is prepared using:
    a. Microsoft Project (.mpp format) and must be submitted in native editable format and PDF.
3. The programme must:
    a. Be detailed, logically linked, and reflect all activities and dependencies.
    b. Include start and Completion Dates for the Works.
    c. Identify access dates and sequencing of work on each enclosure (Generator, Turbine, and Auxiliary).
    d. Indicate the timeframes for Employer reviews, inspections, and hold/witness points.
    e. Include allowance for Employer-required isolations, permits, and interface meetings.
4. The Contractor programmes the Works in accordance with the following constraints:
    a. Works will be sequenced to avoid disruption to generation or plant safety systems. Works in any live area must be pre-approved by the Employer and scheduled within permit windows.
    b. External Works, including coating and access activities, must consider wind loading, humidity, temperature, and curing times to meet specifications.
    c. Scaffolding, rope access, and temporary Works must be coordinated to maintain safety and limit access overlaps.
    d. Activities generating high-pressure wash effluent, paint waste, or debris must be coordinated with waste management operations and comply with environmental regulations.
    e. Only one enclosure may be under refurbishment at a time unless otherwise agreed in writing by the Project Manager.
5. The programme must also identify:
    a. Key milestones include mobilisation, start/finish of each enclosure, inspections, punch-list clearance, and handover.
    b. Critical path and available float.
    c. Time required for off-site preparation of materials and equipment.
    d. Coordination of access and close-out per area to support uninterrupted operations.
6. The Contractor submits the first programme for acceptance within the period stated in Contract Data.
7. The Contractor submits revised programmes at intervals no longer than the interval stated in Contract Data and otherwise as required by Clause 32 of the conditions of contract.
8. All programme submissions must clearly identify:

a. Changes made since the last submission.
b. Revised Completion Date and critical path impacts.
c. Status of Employer responsibilities and any constraints to access or progress.

9. No Works impacting safety systems, weatherproofing integrity, or live plant areas may be carried out unless:
   a. Reflected in the latest accepted programme, and
   b. Explicitly approved by the *Employer* under the site permit-to-work system.
10. Failure to maintain a realistic, accurate, and coordinated programme may result in delayed approvals, rejected submissions, or non-payment for uncoordinated work

2.8 Contractor's management, supervision and key people

1. The Contractor will provide a project-specific organogram showing names, roles, reporting lines, and communication for all personnel directly involved in the Works, including subcontractors. A revised organogram including contact details is submitted within five (5) working days of the Contract Date.
2. The Contractor ensures that all key people identified in the Contract Data or subsequently nominated hold relevant qualifications and experience appropriate to their role. Supporting documentation (e.g. CVs, trade certificates, proof of professional registration) is provided to the Project Manager or Others.
3. No replacement of key people may take place without the Project Manager's prior written approval. Any replacement must have equivalent or better competence and be subject to the same verification.
4. At all times, during working hours, a key person with delegated authority is present on the Site to:
   a. Instruct the cessation of unsafe or non-conforming work; and
   b. Commit the Contractor to immediate corrective action where required, at no cost to the Employer.
5. The working language of the Contract is English. All key people must be fluent in spoken and written English and able to conduct meetings, issue instructions, and generate reports without translation.
6. The Contractor ensures that key people attend all required progress, SHEQ, and commercial meetings, as well as any other coordination, planning or risk-review meetings requested by the Project Manager.
7. Failure to comply with this requirement may result in the Project Manager exercising the rights available under the conditions of contract in respect of the affected person

2.9 Invoicing and payment

1. Within one (1) week of receiving a Payment certificate from the Project Manager in terms of core clause 51.1, the Contractor submits a tax invoice to the Employer, showing the amount due for payment equal to that stated in the Project Manager's Payment Certificate.
2. The Project Manager should be copied on all electronic invoices emailed.
3. Failure to submit the invoice to the correct address could result in payment delays.
4. The Contractor's Tax Invoices comply with the requirements as stated in clause Z7 of the Contract Data
5. Invoices are submitted electronically to:
   - Local Eskom Invoices - invoiceseskomlocal@eskom.co.za
   - Foreign Eskom Invoices - invoiceseskomforeign@eskom.co.za

6. The following details are required when submitting invoices and additional data:
    c. The subject line of your email should only contain your vendor number.
    d. Each PDF invoice should be named with your invoice number only.
    e. All electronic invoices are sent in PDF format only.
    f. Attach the proof of delivery to your invoice.
    g. Where applicable, supporting documents are attached to the scanned PDF invoice as one attachment.
    h. A copy of the signed assessment certificate
    i. Cost Price Adjustment (CPA) calculation sheet
    j. Retention Certificate, which is a retention invoice.
    k. Any other appropriate documents, e.g.
        i. For shipping invoices, please ensure the following documents are attached.
        ii. Invoice (this should only reflect the shipping cost)
        iii. Commercial invoice
        iv. Delivery note
        v. Your shipping costs calculation is relevant to that invoice – not a generic calculation (The amount of the shipping costs calculation has to balance on the amount on the invoice.)
        vi. Forwarding agent's invoice
        vii. The customs document.
    l. Please do not attach unnecessary documents, as this will make the file too large.
7. Other requirements:
    a. For foreign invoices, suppliers will still be required to physically deliver hard copies of original documents to the respective Document Management centres even though the invoices have been submitted electronically.
    b. Ensure compliance with the tax requirements for submitting invoices electronically.
    c. Each PDF should contain one credit note, one debit note, or one credit note only. More than one invoice can be submitted per email.
    d. Any CPA applicable is invoiced separately, allowing the rest of the invoices to be paid while CPA issues are resolved.
8. Include the following information on the Invoice:
    a. Name and address of the Contractor and the Project Manager
    b. The Contract number and title
    c. Contractor's VAT registration number
    d. The Employer's VAT registration number 4740101508
    e. The total amount invoiced, excluding VAT, the VAT and the invoiced amount including VAT
    f. Contractor's company registration number, if applicable
    g. Contractor's banking details
    h. Name and address of the recipient
    i. Tax invoice number and date of issue
    j. Description of goods/services provided

k. Quantity or volume of goods/services
l. Period time for which the Tax Invoice is being rendered
m. Relevant Task Order Number (commencing with a 45 prefix)
n. Relevant line-item number
o. State whether the value-added tax is included or excluded

2.10 Contract change management

Contract change management will be conducted in accordance with Clauses 16 (Early Warning) and 60 to 64 (Compensation Events). In addition to these core provisions, the following project-specific requirements apply to ensure efficient communication and control of changes:

1. All proposed changes, Early Warnings, or potential Compensation Events must be recorded in an Event Register, maintained and updated by the Project Manager.
2. In accordance with Clause 16, the Project Manager or Contractor must issue Early Warning notifications when events that could increase the total cost, delay Completion, or affect performance are identified.
3. For Compensation Events notified under Clause 61:
   a. The Contractor must submit a written quotation which includes:
      - A description of the event and its cause;
      - A breakdown of the assessed cost and time impact;
      - Supporting documentation as reasonably required by the *Project Manager*
4. The Project Manager will evaluate and respond to the quotation in writing as per Clause 62.
5. The Contractor implements instructions issued by the Project Manager in accordance with the conditions of contract. Where an instruction or event is a Compensation Event, its effect upon the Prices, Completion Date and any Key Dates is assessed and implemented in accordance with Clauses 60 to 65. Implementation of an instruction is not conditional upon prior agreement of the Compensation Event quotation.
6. The Contractor must:
   a. Notify the Project Manager of any proposed changes to subcontractors or their scope which may impact the contract;
   b. Ensure that any change to the Completion Date is incorporated into the latest Accepted Programme in accordance with Compensation Event outcomes.

2.11 Provision of bonds and guarantees

1. No performance bond or other contractual security is required unless expressly stated in Contract Data. Product, manufacturer and workmanship warranties expressly required by this Works Information remain applicable.

2.12 Records of Defined Cost, payments & assessments of Compensation Events to be kept by the *Contractor*

1. The Contractor must keep and maintain proper records of Defined Cost, payments and assessments of Compensation Events, in accordance with Clause 52.2 of the conditions of contract.

2. The following records must be kept, as a minimum:

Type of Cost	Type of Record
People employed by the *Contractor* (labour)	Signed timesheets, payroll reports, payslips
People employed by Sub-Contractors (labour)	Signed timesheets, certified payroll reports from Sub-Contractors
Equipment owned or hired	Equipment hire agreements, delivery notes, usage logs, plant daily reports and actual paid invoices
Plant and Materials	Delivery notes, invoices, stock issue records, material usage records and actual paid invoices
Work sub-contracted by the *Contractor*	Sub-Contract agreements, invoices, proof of payment, and relevant correspondence
Other Third-Party Costs	Third-party invoices, proof of payment
Accommodation	Invoices, proof of payment
Transport and Logistics	Vehicle logs, fuel records, transport invoices
Testing and Certification	Test certificates, inspection reports, laboratory results, calibration certificates
Insurance Costs (if reimbursable)	Insurance policy documents, premium invoices, proof of payment

3 Engineering and the *Contractor's* design.

1. The Employer provides the specifications of the corrosion protection coating system and the waterproofing system for all 3-unit enclosures, including their respective Air Intake structures and Exhaust stack structures.
2. This also includes the corrosion protection coating system and the waterproofing system for the MCC and Liquid Fuel Storage Tanks and associated structural steel supports, steel sheets (solid or perforated).
3. The Contractor is responsible for the full execution of the Works as specified below and ensures compliance with the relevant standards and the manufacturer's specifications.

3.1 *Employer's* design

3.1.1 Scope of Work

Scope of Works
General

• The *Contractor* must provide safe access to perform inspections and repairs. Qualified corrosion protection coating applicators and waterproofing applicators must perform the work as per the technical evaluation criteria. • Mark out all corroded and affected areas with the *Employer*. • Perform overall condition assessment of each Unit's Enclosure Structural Steel Work, including the units' Air Intake Steel structure and Exhaust Stack Steel Structure. Associated unit plant enclosures, such as the MCC and Busbar structure, are included, as well as the station's Liquid Fuel Storage Steel Tanks. The assessment should include, but is not limited to, material thickness assessment of parts to be coated to determine whether the part is in good condition or suitable to be coated, or the extent of material replacement required. Where the assessment requires NDT techniques, it should comply with Eskom's NDT standards. NDT testing to be approved after assessment and in consultation with the *Employer*. • Where the base material or substrate of the Unit Enclosure, MCC and Busbar structure has completely degraded and cannot be repaired and coated with the appropriate corrosion protection coating system, the affected portion of material should be replaced with similarly approved material. The *Contractor* must note that the replacement of sheeting material is limited to the area of the defect only and not full replacement of a panel or panel/s, unless the *Employer* requests full replacement. This also applies to the replacement of structural steel members if identified and agreed with the *Employer*. • The *Contractor* notes that all corrosion protection coating system preparations, repairs and coating applications are done in situ (i.e., with the components attached to the unit enclosure). Panels/sections/components that cannot be repaired in situ must be removed/rigged off by the *Contractor* and then repaired on-site. These Panels/sections/components will be identified and agreed upon by the *Employer* and *Contractor* during the assessment. • Deteriorated non-shrink grout under the structural steel baseplates is to be removed and replaced with new non-shrink grout. Grout should be packed in layers according to the manufacturer's specifications. Non-shrink grout to be used for high built-up spaces, max.80mm. Corrosion assessment of the existing baseplate and applicable coating system to be applied. • Existing door hinges and locks to be reused. The *Contractor* may remove hinges and locks during door repairs and reinstate them when complete. All doors are to be repaired in place.	
Environment	C5 M as per ISO 12944-2 Table 1 – Categories of Corrosion, Plant Structures, Tanks, Vessels and Associated Piping Steel surfaces. External surfaces of concrete plinths and embedded structural steel are exposed to industrial coastal atmospheric conditions. • Operating Temperature: Ambient temperatures, 5 - 50°C Exhaust Stacks External Temperature approximately 60°C - 80°C. • Atmospheric conditions

Applicable Structure	**Coating System 1**
	Surface Preparation

Unit Enclosure incl. Air Intake and Exhaust Stack Structural Steel Work **Liquid Fuel Tanks**	**Mechanical Cleaning (all components where abrasive blast cleaning using high-pressure water washing is not possible/practical, due to visible corrosion and may lead to water ingress into sensitive areas).** • Remove all loosely adherent corrosion product using wire brushes and/or scrapers. All exposed steel surfaces must be cleaned to Grade St 2 • All previously coated surfaces must be thoroughly abraded with sandpaper to loosen chalking compound and to provide a mechanical anchor profile for the new coating. • This must be followed by high-pressure water washing (≥ 500 bar working pressure). NOTE:1 of the surfaces to remove salts, chalking compounds, corrosion products and other loose contaminants. Allow to dry completely. • **No more than four hours must elapse between cleaning and the application of the coating system.** • All nuts and bolts showing signs of significant metal loss must be replaced with new fasteners (match existing with similar replacement), whereafter they will be solvent wiped and coated with the same coating system. **Abrasive Blast Cleaning with high-pressure water washing (all components where abrasive blast cleaning is possible/practical).** • All surfaces must be high-pressure water-washed (≥ 500 bar working pressure) to remove salts and other loose contaminants. Allow to dry completely. • All exposed steel surfaces must be cleaned to Grade St 2 • **No more than 4 hours must elapse between cleaning and the application of the coating system.** • All nuts and bolts showing signs of significant metal loss must be replaced with new fasteners (match existing with similar replacement), whereafter they will be solvent wiped and coated with the same coating system. • Where material loss is evident, the affected section must be cleaned, and rust inhibitor paint protection applied. The affected section is covered by installing a piece of steel metal plate of the same thickness (6mm may be used where the existing sheet is less than 6mm), cut to fit over the opening with an overlap of 50mm onto the good remaining material. Holes will be drilled, and rivets will be installed to secure the opening in place. Apply the waterproofing wrapping system around the perimeter of the new plate before the Coating System application. • Where material loss is significant, rendering part of the plate/s of a component or all the plates of an entire component structurally compromised. This component/part component must be removed/rigged off the unit and repaired as follows. **Plate component replacement (On-site in demarcated Workshop with Welding Bay area)**

	• The component is rigged off the unit and moved to the site-demarcated Workshop. • The compromise plate is removed and replaced with a similarly approved plate. • The new plate is welded into position (all welding in the demarcated welding bay) and NDT tested. • Component is rigged back into position. **Note:** Alternatively, the component may be replaced by manufacturing it off-site by a specialist manufacturer. This option is allowed if the Contract offers benefits in terms of time and cost compared to on-site repairs/manufacturing in a demarcated area.
	Primer Layer • Apply a single layer of High Build (≥85% volume solids content), Surface Tolerant Aluminium Pigmented Epoxy mastic by brush and/or roller to the metal substrate that is exposed. During application, work the coating into all irregularities. **Dry film thickness (DFT) = 175 to 250 microns.**
	Stripe Coat • Apply by brush and/or roller, one coat, High Build (≥85 % volume solids content), Aluminium Pigmented Epoxy Mastic Coating to all accessible edges, weld seams, bolt holes and other crucial areas with the same material as the following/second coat. Work coating into all surface irregularities.
	First Coat. • Apply by spray or roller, one coat, High Build (≥85 % volume solids content), Aluminium Pigmented Epoxy Mastic Coating over existing aged coating. **Dry film thickness (DFT) = 175 to 250 microns (Excluding previous layer of aged coating).**
	Second Coat • Allowing sufficient time for the first and stripe coats to cure, the manufacturer's recommendations must be adhered to in this regard. Overcoat all surfaces with a single layer of Twin Pack Aliphatic Acrylic Polyurethane Enamel. Depending on the final colour to be selected and the application methods to be used, complete coverage or hiding of the substrate may only be achieved with the application of a second coat of Twin Pack Aliphatic Acrylic Polyurethane Enamel. Colour to match the existing. • The colour of the final/finishing coat must be as per the instructions of the *Employer* or requirements of 240-145581571: Standard for the Identification of the Contents of Pipelines and Vessels. **Dry film thickness (DFT) = 50 to 90 microns.** **Dry film thickness (DFT) of complete system = 400 to 590 microns.**

<table>
<tr><td colspan="2">Generic System for all exposed steel substrates. Epoxy Mastic/Urethane system</td></tr>
<tr><td><u>Applicable Structure</u></td><td><u>Coating System 2</u></td></tr>
<tr><td rowspan="4"><u>MCC and Busbar Structural Steel Work</u></td><td><u>Surface Preparation</u>

<u>Mechanical Cleaning where high-pressure water washing is not permitted (Extremely sensitive equipment).</u>

• Remove all loosely adherent corrosion product using wire brushes and/or scrapers. All exposed steel surfaces must be cleaned to Grade St 2-St3.

• All previously coated surfaces must be thoroughly abraded with sandpaper/mechanical wire brush to loosen chalking compound and to provide a mechanical anchor profile for the new coating.

• Existing waterproofing on Busbar is to be removed. Existing waterproofing along the perimeter of the MCC and the roof is to be removed.

• All nuts and bolts showing signs of significant metal loss must be replaced with new fasteners, where after they will be solvent wiped and coated with the same coating system.

• All exposed steel surfaces must be cleaned to Grade St 2

• Where material loss is evident, the affected section must be cleaned, and rust inhibitor paint protection applied. The affected section is covered by installing a piece of steel metal plate of the same thickness (6mm may be used where the existing sheet is less than 6mm), cut to fit over the opening with an overlap of 50mm onto the good remaining material. Holes will be drilled, and rivets will be installed to secure the opening in place. Apply the waterproofing wrapping system around the perimeter of the new plate before the Coating System application.</td></tr>
<tr><td><u>Primer Layer</u>

• Apply a single layer of High Build (≥85% volume solids content), Surface Tolerant Aluminium Pigmented Epoxy mastic by brush and/or roller to the metal substrate that is exposed. During application, work the coating into all irregularities.

Dry film thickness (DFT) = 175 to 250 microns.</td></tr>
<tr><td><u>Stripe Coat</u>

• Apply by brush and/or roller, one coat, High Build (≥85 % volume solids content), Aluminium Pigmented Epoxy Mastic Coating to all accessible edges, weld seams, bolt holes and other crucial areas with the same material as the following/second coat. Work coating into all surface irregularities.</td></tr>
<tr><td><u>First Coat.</u>

• Apply by spray or roller, one coat, High Build (≥85 % volume solids content), Aluminium Pigmented Epoxy Mastic Coating over existing aged coating.</td></tr>
</table>

	Dry film thickness (DFT) = 175 to 250 microns (Excluding previous layer of aged coating).
	Second Coat • Allowing sufficient time for the first and stripe coats to cure, the manufacturer's recommendations must be adhered to in this regard. Overcoat all surfaces with a single layer of Twin Pack Aliphatic Acrylic Polyurethane Enamel. Depending on the final colour to be selected and the application methods to be used, complete coverage or hiding of the substrate may only be achieved with the application of a second coat of Twin Pack Aliphatic Acrylic Polyurethane Enamel. • The colour of the final/finishing coat must be as per the instructions of the *Employer* or requirements of 240-145581571: Standard for the Identification of the Contents of Pipelines and Vessels. **Dry film thickness (DFT) = 50 to 90 microns.** **Dry film thickness (DFT) of complete system = 400 to 590 microns.**

WATERPROOFING COATING SYSTEM	
Applicable Structure	**Waterproof Coating System**
Interface between concrete base and Unit Enclosure perimeter **Air Intake structure interface with horizontal structure** **Exhaust Stack Structure interface with horizontal structure, i.e. Roof hatch / Roof panels**	**Surface Preparation** • Ensure the surface is completely dry with relative humidity not greater than 85% • Coating to be at least 24 hours past full cure prior to application • Ensure the surface temperature is greater than 3 degrees above the dew point • No specific profile or chloride tests are required • Use an appropriate tool, such as MBX, to lightly dull the surface of the coating in the application area • Wipe the application surface area with isopropanol alcohol • Carry out a Visco-elastic pure Polyisobutylene strip test on the surface to check surface cleanliness, ensuring a greater than 95% adhesion is achieved, and the removal of all dirt, loose particles and any other contaminants has been achieved
Liquid Fuel Tanks interface with concrete base. **MCC Roofs and MCC Structure interface with concrete base**	**Application Procedure** • Material to be cut to appropriate lengths from the rolls of Stopaq supplied, or as directed by the manufacturer. • Stopaq Wrapping band EZR pure homopolymer Polyisobutene material to be placed along the joints from the bolt edge covering over the seams, where applicable. • Press firmly along the seam line, making sure no tenting occurs • Where vertical and horizontal seams meet, press firmly at the cross over • Max 15mm overlaps to be provided where vertical and horizontal corners interface or in all overlapping instances (i.e., covering of flat surface, both vertical and horizontal)

Busbar Structure Roof Sections	• Method statement to clearly indicate all application scenarios per location to be waterproofed. Reference to include areas where patch repairs are intended to cover openings.
	Inspection Procedure • Once the application is completed in each specific area, as agreed in the QCP and program, a visual inspection is conducted to verify full adhesion to the surface by the certified and approved applicator. • The Stopaq inspector will inspect the work carried out by a certified and approved applicator to finalise the application and issue a guarantee to the *Project Manager*.

The waterproofing coating system specified above is specific to the STOPAQ Range for the waterproofing system. A similar waterproofing system may be presented as an alternative; however, it must match or provide better performance, if cost-effective.

In all cases, only a qualified and approved installer of the approved waterproofing coating system will be allowed. Coating system manufacturers must ensure that a warranty and guarantee of the system are issued upon completion of the coating system for both workmanship (installation) and materials. QCP documents must include the coating system manufacturer's intervention point.

IN RESPECT TO ALL THE ABOVE-MENTIONED COATING SYSTEMS

With respect to aspects not mentioned in the above coating specification table (e.g. mixing ratios, pot life, straining, thinning, induction times, over-coating and curing times), the manufacturer's recommendations must be strictly adhered to.

This specification sheet covers repairs to existing external component coatings and is applicable to the Acacia Plant Structures and their associated components.

NOTE 1: Refer to the "Safety Requirements and Considerations" section below for safety requirements when conducting high-pressure water washing. Specific Safety Requirements in Relation to High-Pressure Water Washing/Jetting (HPWJ)

- Operators must wear CE (European Economic Area Conformity Marking) certified water jetting suits and face shields rated for the working pressure as stated in the tables above.
- All foot and leg protection equipment is to be appropriately rated for the working pressure as stated in the tables above.
- The *Contractor* must work in accordance with a safety procedure/instruction aligned to industry recognised HPWJ practices and standards to protect personnel using HPWJ equipment.
- HPWJ operators must be trained and certified by an independent industry-recognised HPWJ authority affiliated to either WJA or WJTA.
- All HPWJ hoses, pressure accessories, pressure equipment, and pressure vessels in the HPWJ system must be designed for the pressures stated in the tables above. All previously mentioned equipment must be pressure tested to 1.25 times the design pressure of the equipment.
- All hose end connections are to be fitted with the appropriate "hose checks" to prevent injury by restraining the hose in the event of an end fitting failure.

- The HPWJ pump discharge must be fitted with a calibrated pressure gauge and safety relief valve or rupture diaphragm.
- Barriers and Warning notices must be in place before any work commences.
- Specific requirements related to Eskom's "Life Saving Rules" that would be applicable to this activity.

3.2 Parts of the Works which the *Contractor* is to design

1. The Contractor's "Design," as mentioned in the heading above and referenced in this document, refers to the execution of the scope of work.
2. The Contractor is responsible for the execution of the scope of work as listed in 3.1, and in doing so would need to ensure that it includes, but is not limited to, the following specific project requirements:
3. Contractor to conduct, per unit, a visual inspection/survey/condition assessment of all corrosion affected areas on the Unit Enclosure (inside and outside), Air intake structure, Exhaust stack structure, Steel ducts and covers, hinges, doors, bolts, MCC, Busbar, Liquid fuel tanks and every steel member/sheets/perforated sheets associated with structure mentioned prior and provide as part of their method-statement with photos, of the affected areas and structural members to be treated. Employer to sign off on method statements, QCP, and data sheets prior to the Works commencing. Visual inspection/survey/condition assessment will be done with the Employer present.
4. Contractor to use Employer-issued drawings of the unit enclosure and associated plant as mentioned above to mark-up affected areas and structural members as part of the method statement to determine the exact and full extent of affected areas and structural members. Where changes to the plant are required that alter the base of the affected equipment or component, an As-Built drawing must be provided upon completion of the corrosion protection coating systems application, serving as a reference for both repaired and non-repaired areas.
5. The Contractor will be required to submit method statements, QCP documents, and data sheets of products to be used as part of the corrosion protection coating or waterproofing systems, detailing the following as a minimum:
    a. Overall condition of the Unit Enclosure, Air intake structure, Exhaust stack structure, MCC, Busbar and Liquid fuel tanks and associated structural steel member and or equipment and components
    b. Quantify the nature and extent of Defects identified compared to the quantity measured in the BOQ as provided in the tender enquiry.
    c. Baseline of Defects for future inspection.
    d. Complete repair methodology of Defects found.
    e. Life-cycle structural performance and maintenance strategies.
    f. Recommendations on which Corrosion Protection Coating System or Waterproofing system is applicable to the different equipment/components, and conclusions.
6. The Contractor will take cognisance of the fact that after initial surface preparation as above, the Employer may require access for a further inspection and assessment to determine the need for possible mechanical repairs, i.e. welding. This inspection can only be carried out once the surfaces have been blast cleaned in preparation for coating. The depth and morphology of corrosion damage, as well as the extent of component wall thickness loss and pitting, need to be considered.

7. For steel, the following guide (dependent on installed wall thickness) can be applied to all areas of extensive deep pitting:
   a. All pits less than 5mm in depth and all edges and weld seams must be stripe-coated after application of the primer/first coat.
   b. All severely grooved/corroded welds must be filled by welding (repair procedure must be submitted to Employer for approval). Perforations and defects, such as pitting, that are close to the wall thickness must be repaired by placing a new plate over the affected area with a 50mm overlap onto sound base material. The plate must be drilled and riveted onto the external/exposed surface prior to applying Stopaq wrapping to cover the plate and finish with the topcoat of the coating system.
   c. The inspected surfaces will be re-blasted with high-pressure water washing if more than four hours have elapsed since the initial surface preparation.
8. At all times, care must be taken to ensure adequate protection of any surfaces and parts of components or systems not requiring blast cleaning and coating (for example, the name plates, valves, and piping), and every effort must be taken to prevent water and other dirt from entering the system. Name plates to be removed, cleaned and reinstalled after painting. Faded signage to be redone as part of the Works.
9. No coatings must be applied over any surfaces where this will adversely affect the performance of the item or component. The Contractor must engage the Employer to verify such surfaces prior to execution.
10. All materials, i.e. paint, solvents and cleaning agents for a specific paint system must be supplied by the same manufacturer. The solvents used must be those recommended and manufactured by the paint manufacturer. Where the recommended ‘solvent’ and ‘clean-up thinners’ for a material differ, the ‘clean-up’ solvent must not be added to the paint for dilution purposes.
11. Corrosion Protection must only proceed once all mechanical activities have been completed and released in terms of the manufacturing/fabrication Quality Control Plan (QCP).
12. Removal of dust and debris must be performed by vacuuming. The process must be repeated until the required level of dust and debris removal is achieved.
13. The level of cleanliness required must be less than “dust quality rating 2” when tested in accordance with ISO 8502-3.
14. Plural spray equipment is not permitted. Coating application by airless spray must be performed by means of conventional airless spray equipment with the capability of suitably pumping and atomising the paint over a 20-metre distance from the spray pump. The spray nozzle and spray pattern must be as per the manufacturer’s recommendations. (If this method of application is used).
15. The Contractor is responsible for the complete surface preparation and coating application. The coated surfaces must meet the DFT as required by this specification sheet and aspects thereof in the referenced documents.
16. Narrow gaps, blind crevices, and lap joints should, wherever practical and possible, be seal-welded. This must be identified by the Contractor and approved by the Employer in a timely manner. Where this is not possible, then the crevice/gap must be filled with a sufficient bead of sealant after completion

of the complete coating system to form a continuous gasket/seal. Prior to application of the sealant, the joint/gap must be blown clean using suitable compressed air to remove dust and debris.

17. Hand-tool cleaning for isolated/localised areas may be utilised, provided the required standard of finish is achieved. This is also applicable to plant areas where blasting is not recommended due to the sensitivity of equipment, i.e., Busbar and MCC.
18. Substrate cleaning by means of hand or power-tools, i.e. wire brushes, chipping hammers, scrapers, grinders, sanders, needle descalers, bristle blasters etc. may only be used where accepted by the Eskom engineer and where the position and condition of the substrate metal is such that efficient cleaning and surface profile can be achieved and where the protective coating system is designed for application to brushed or ground surfaces i.e. specifically formulated surface tolerant coatings.
19. All welds must be free of slag, slag inclusions and pinholes. Adjacent areas must be free of weld spatter, which must be removed by grinding or scraping.
20. Burnishing of the surface must not be permitted.
21. Prior to any surface preparation, all surfaces that are or are likely to be contaminated with oil must be solvent cleaned with a suitable water-soluble biodegradable alkaline cleaner/detergent or with appropriate organic solvents.
22. Cleaning may be performed by using white, lint-free rags for small areas or a spray gun for large areas. The detergent/solvent-cleaned surfaces must then be thoroughly washed down with fresh/clean water, ensuring that the oil-water emulsion formed is completely removed from the metal. Special attention must be paid to drillings, bolt holes, etc.
23. In all cases, after wire brushing or grinding, all traces of loose material must be removed from the surface by compressed air and vacuum cleaning.
24. Mobile Crane and/or Cherry picker and/or Fixed Scaffolding and/or Mobile Scaffolding required during inspection and execution of the Works, Contractor to provide all equipment necessary to inspect and/or execute Works.
25. All corrosion protection coating and repair work to be conducted in place (i.e., panels/stacks left in original position during preparation, local remedial, if required, and coating application). Contractor to allow for minor fabrication and welding on-site (if needed). Engage the Employer regarding the designated area for this activity to be performed. Employer and Contractor to agree on all minor fabrication.
26. Contractor with Employer guidance to develop critical equipment protection. This is different to the general protection of equipment. If temporary hoarding is required based on site clarification, then this must be included in the project plan and Method statement.
27. The Contractor must determine surface preparation, measure climatic conditions, and verify every applied paint coat to ensure the specified dry film thickness is achieved before applying the next coat (QCP must indicate a specific hold point for testing and verification of the application process). Complete data pack to be issued to the Employer upon Completion.
28. Contractor to communicate to Employer prior to site establishment, specific requirements to ensure the Works are executed as per Employer's specification or methods to consider, which may lead to saving time and cost. The Employer reserves the right to engage in such deliberations.

29. Employer cannot be held liable if not able to assist with any or all of Contractor's specific requests besides what's in the NEC contract.
30. The Contractor must not rely on the completeness or accuracy of Employer-supplied drawings or data without verification and must ensure that all aspects are fully compliant with the Employer's requirements, applicable legislation, and best practice standards.
31. Acceptance or use of any Employer-supplied information does not relieve the Contractor of any obligations regarding the execution of the coating systems.

3.3 Procedure for submission and acceptance of the Contractor's design

1. Acceptance of reports and drawings by the Project Manager will imply that:
    a. Detailed method statement with QCPs and data sheets of corrosion protection coating system and waterproofing system application of all reported locations and conditions.
    b. A detailed program with an activity matrix is to be submitted for approval. The Works are to be programmed in stages to ensure a logical approach to all activities and resource utilisation. Information to be presented, per unit, i.e., Unit Enclosure 1 (incl. Air Intake, Exhaust Stack, MCC & Busbar), Unit Enclosure 2 (incl. Air Intake, Exhaust Stack, MCC & Busbar), Unit Enclosure 3 (incl. Air Intake, Exhaust Stack, MCC & Busbar) and Liquid Fuel Tanks A & B. The Contractor is to take due notice of all applications and curing times required in the application of the coating and waterproofing systems. Specific product requirements must be adhered to.
    c. Acceptance of the method statement, QCP, or samples does not relieve the Contractor of his total liability to complete the Works in accordance with the Works Information, Schedules, and the Conditions of Contract, nor does it exonerate him from any of his guarantees.
    d. All correspondence and submittals are to be prominently identified as relating to the Works. They are submitted under the cover of appropriate letters or transmittal notes in accordance with the correspondence procedures, which the Project Manager will advise after the signing of the Contract. All documentation supplied by the Contractor to the Project Manager in hard copy is provided in electronic format.
    e. Paint & Waterproofing Manufacturers and Contractors' workmanship guarantee to be issued to the Employer on Completion.
2. All documentation must be specific to the Works on:
    a. Unit Enclosure 2: Air Intake, Exhaust Stack, MCC, and Busbar;
    b. Unit Enclosure 3: Air Intake, Exhaust Stack, MCC, and Busbar;
    c. Liquid Fuel Tanks A and B.
3. Each submission must clearly state:
    a. The section of the Works Information it relates to;
    b. The relevant plant area, system, or equipment;
    c. Any associated Bill of Quantities (BoQ) item reference.

3.3.1 Contractor responsibility and guarantees

1. Acceptance of any submission by the Project Manager does not relieve the Contractor of its responsibility for:
    a. The correctness, completeness, and suitability of the submitted documents;

b. Execution of the Works in accordance with the Works Information;
c. Achieving the required performance standards and outcomes;
d. Rectification of any non-conformances, Defects, or deficiencies discovered during or after execution.

2. At Completion, the Contractor must submit:
   a. A guarantee or warranty issued by the manufacturer(s) of the coatings and waterproofing systems confirming application as per the manufacturer's specifications;
   b. A workmanship warranty issued by the certified applicator confirming installation in accordance with the manufacturer's instructions;
   c. A comprehensive final data pack containing all inspection records, calibrated instrument logs, signed QCPs, photographic records, DFT readings, environmental condition logs, and certificates of compliance.
3. The Project Manager does not certify Completion until the documentation required to demonstrate compliance of the completed Works has been submitted, except for those post-Completion deliverables expressly permitted under Section 5.2.1.

3.4 Other requirements of the Contractor's design

The *Contractor* notifies the *Project Manager* in a timely manner when part of their Works necessitates interaction with existing plant and structures or outage-related activities, thereby enabling the Completion of their Works for acceptance.

3.5 Use of the Contractor's design

1. The Contractor grants the Employer a perpetual, royalty-free, irrevocable, non-exclusive licence to use, copy, adapt and translate all drawings, models, calculations, method statements, manuals and other design outputs prepared by (or for) the Contractor for:
   a. Operation, inspection, maintenance, repair and modification of the Works.
   b. training of Employer's personnel; and
   c. eventual decommissioning and disposal of the plant.
2. The Employer may disclose the Contractor's design information to:
   a. Its employees, advisers, insurers and regulators; and
   b. Future Contractors engaged on related Works at Acacia Power Station, provided such recipients are bound by confidentiality obligations no less stringent than those in the Contract.
3. Where the Contractor intends to incorporate proprietary software, specialist systems or copyrighted data owned by a third party, the Contractor will:
   a. obtain a written sub-licence that permits the Employer to exercise the rights listed in point 1; and
   b. include the sub-licence in the relevant design-submission package.
   c. If the Contractor cannot secure such rights, he must propose an alternative that gives the Employer equivalent functionality without additional cost.
4. Granting the above licence does not relieve the Contractor of any design responsibility or liability under the Contract, nor does the Employer's use of the design constitute acceptance of any error, omission or Defect.

5. The Contractor indemnifies the Employer against all claims, proceedings and costs arising from any alleged infringement of intellectual-property rights in connection with the Contractor's design, except to the extent that such infringement results from misuse or unauthorised alteration by the Employer.

3.6 Design of Equipment

1. The Contractor must ensure that all temporary and specialist equipment used during execution of the Works is appropriately designed, selected, and configured to enable safe, efficient, and uninterrupted progress of the Works, and to ensure that all critical plant and infrastructure are adequately protected at all times.
2. This includes, but is not limited to, the following categories of Equipment:
    a. Mobile cranes and any associated lifting devices required for installation, repair, or access work;
    b. Scaffolding systems (fixed, mobile, or suspended) are used for surface preparation, inspection, and coating activities.
    c. Temporary hoarding or shielding structures are necessary around sensitive equipment, such as fuel tanks, switchgear, and control panels, particularly when abrasive blast cleaning is used with high-pressure water jetting to contain the spread of the material during the water blasting process.
    d. Access platforms, MEWPs, or ladders are used to reach elevated work areas.
3. The Contractor is responsible for ensuring that all such equipment is:
    a. Appropriately rated for the intended purpose and complies with relevant SANS or ISO standards;
    b. Designed to avoid any interference with the operation or safety systems of adjacent plant and equipment;
    c. Positioned and secured in a manner that ensures worker safety and allows for clear escape routes and emergency access;
    d. Designed to enable protection of critical infrastructure from contamination, mechanical damage, or overspray (for example, splash control hoarding around Liquid Fuel Tanks during HPWJ activities).
4. If instructed by the Project Manager, the Contractor will submit the design particulars of any Equipment for acceptance prior to its use. These particulars may include layout drawings, structural certifications, method statements, and risk assessments, as required by the Project Manager.
5. The Contractor will not proceed with the use of such Equipment until the Project Manager has accepted the submission. Acceptance does not absolve the Contractor of responsibility for the adequacy or safety of the Equipment.

3.7 Equipment required to be included in the Works

1. The Contractor provides all resources, equipment, and services in compliance with the OHS Act. This includes all working at heights requirements, certification, equipment, and compliance needed to carry out the Works
2. The Contractor provides all mobile access, scaffolding, ladders, rope access and lifting/rigging to perform the Works. The Contractor provides and erects such scaffolds, hoarding and rigging as and when it may be required. All scaffolding and/or rigging must comply with the requirements of the OHS Act.

3. Contractor allows for mobile crane use where conventional rigging is not possible or is required to remove, move to a demarcated Workshop area, and/or re-install after remedial work is complete. The Contractor must decide the size of the mobile crane to ensure the Works are executed safely. Eskom is available to assist with providing specific weights of plant equipment upon enquiry.

3.8 As-built drawings, operating manuals and maintenance schedules

1. Before the Project Manager may issue the certificate of Completion, the Contractor must provide all documentation required to demonstrate that the permanent Works have been completed in accordance with the Works Information. This documentation includes, but is not limited to:
    a. As-built drawings reflecting all modifications or deviations from the original Employer-issued designs;
    b. Signed test certificates, including but not limited to corrosion protection coating thickness results, adhesion testing, waterproofing application verification, and any other agreed tests listed in the QCP;
    c. Signed Quality Control Plans (QCPs) and associated check sheets for each stage of the Works;
    d. Data from Dry Film Thickness (DFT) test results, recorded per coat and location, with final system totals clearly stated and signed off;
    e. Inspection and acceptance records of Stopaq or other waterproofing system installations, verified by both the certified applicator and the Stopaq inspector, as applicable;
    f. Operating manuals and product datasheets, provided for any proprietary systems, coatings, or products used in the execution of the Works, including manufacturer instructions for touch-up and future maintenance;
    g. Maintenance schedules, including frequency, inspection criteria, surface preparation requirements and product compatibility information for future touch-ups or recoating activities.
2. The Contractor will:
    a. Submit as-built drawings and updates reflecting any changes to existing plant as per the Employer's supplied drawing standards;
    b. Ensure all drawings are reviewed and verified by a competent person and marked clearly as “As-Built”;
    c. Deliver all drawings in the following formats:
        i. Electronic format: MicroStation Version 8 (Bentley Systems Inc.) and DWG (AutoCAD compatible);
        ii. One PDF version for document control.
        iii. Two hard copies printed on full-size paper A0.
3. Throughout the execution of the Works, the Contractor must supply any information necessary for the Project Manager to check the ongoing development of “as-built” records. Such information must be submitted regularly and timeously, and in full prior to Completion.
4. Failure to provide documentation required for Completion may prevent the relevant work from satisfying the Completion requirements stated in this Works Information.

4 Procurement

1. The Contractor provides all labour, supervision, tools, equipment, vehicles, scaffolding, hoarding, temporary Works, consumables, cleaning materials, lifting gear, and accessories necessary to Provide the Works.
2. The Contractor is responsible for the procurement, fabrication, manufacturing, delivery, off-loading, handling, storage, installation, testing, and commissioning of all Plant and Materials required to Provide the Works, including disposal of waste and final finishing.

4.1 People

4.1.1 Minimum requirements of people employed on the Site

1. The Contractor ensures that all people employed on the Site:
   a. Are legally entitled to work in the Republic of South Africa.
   b. Foreign Workers must only be employed where:
      i. Appropriate work permits or other legal authorisations are in place.
      ii. Approval has been obtained from the *Employer* prior to engagement.
2. Have received appropriate training and qualifications relevant to their tasks on the project (excluding Health and Safety training, which is addressed separately).
3. Hold required competency certifications (electrical work, working at heights, lifting operations, etc.).
4. Have completed the Employer's site-specific induction programme before commencing work.
5. They are included in a site-specific register, which must be maintained by the Contractor and made available to the Project Manager upon request.

4.1.2 BBBEE and preferencing scheme

1. The Contractor complies with and fulfils the Contractor's obligations in respect of the Broad-Based Black Economic Empowerment (as per clause Z3 of ECC3).
2. The Contractor, as well as his subcontractors, provides valid B-BBEE certificates to the Project Manager when updates are required.

4.1.3 Accelerated Shared Growth Initiative – South Africa (ASGI-SA)

1. The Contractor complies with and fulfils the Contractor's obligations in respect of the Accelerated and Shared Growth Initiative - South Africa in accordance with and as provided for in the Contractor's ASGI-SA Compliance Schedule stated
2. The Contractor keeps accurate records and provides the Project Manager with reports on the Contractor's actual delivery against the above-stated ASGI-SA criteria.
3. The Contractor's failure to comply with his ASGI-SA obligations constitutes a substantial failure on the part of the Contractor to comply with his obligations under this contract.

4.2 Subcontracting

4.2.1 Preferred subcontractors

None

4.2.2 Subcontract documentation and assessment of subcontract tenders

1. The *Contractor* prepares subcontract documentation in a manner consistent with:
   a. The main contract and this Works Information.
   b. The Employer's standards and expectations regarding quality, safety, compliance, and reporting.
2. The use of the NEC family of contracts (NEC3 ECS or NEC3 SC) for subcontracting is strongly recommended. If the Contractor proposes to use other forms of subcontract, this must be approved in writing by the Project Manager prior to the issue of subcontract documentation.
3. Subcontract tenders must be:
   a. Issued following a process that ensures transparency and fairness.
   b. Assessed by the Contractor in consultation with the Project Manager, where practical (through submission of a joint assessment report for major subcontract packages exceeding R500,000 or as otherwise instructed).
   c. Awarded on the basis of:
      i. Technical compliance.
      ii. B-BBEE requirements.
      iii. Cost effectiveness.
      iv. Proven ability to meet the required delivery schedule

4.2.3 Limitations on subcontracting

The *Contractor* must not subcontract more than 30% of the total value of the Contract without prior written approval from the *Project Manager*.

4.2.4 Attendance of subcontractors

1. Any subcontractor is required to work under the direct supervision of the Contractor.
2. The Contractor's organograms indicate the lines of authority and communication of all the Contractor's site employees, including subcontractors.

4.3 Plant and Materials

The *Contractor* must provide proof of compliance with all material specifications, including submission of samples and supporting documentation where required. This requirement applies equally to Plant and Materials and Equipment provided by Subcontractors.

4.3.1 Quality

1. The Contractor ensures that corrosion protection meets the quality requirements of Eskom Standard 240-106365693 for the External Corrosion Protection of Plant, Equipment and Associated Piping with Coatings.
2. The quality requirements are as per Employer's Standard 240-105658000: Supplier Quality Management Specification.
3. The Contractor establishes and implements a system that, as a minimum, meets the requirements of the ISO 9000 series for quality management systems.
4. The main objectives of this series are to ensure that appropriate quality requirements are employed to comply with the services.
5. The Contractor ensures that appropriate quality requirements are in place to comply with the services.
6. The Contractor notifies the Employer of any proposed changes to the quality management system that will affect the contract quality requirements, prior to implementing such changes.
7. Corrosion protection coating system application, Quality Control Plans (QCPs) and detailed method statements to be presented by the Contractor for Employer’s Acceptance.
8. Civil Engineering Works to meet the quality requirements of the standards listed in Section 6.3. Civil engineering and structural Works

4.3.2 Plant & Materials provided “free issue” by the *Employer*

No Plant or Materials will be provided free issue by the *Employer* under this contract.

4.3.3 *Contractor*’s procurement of Plant and Materials

1. The Contractor is responsible for ordering, tracking, storing, handling, transporting, and protecting all Plant and Materials required for the Works.
2. The Contractor ensures that all procured items comply with specified standards and are compatible with the installation and operational requirements defined in the Works Information.
3. Where applicable, the Employer may require that warranties or guarantees from suppliers be issued in favour of the Employer rather than the Contractor.
4. Vendor documentation (e.g., product datasheets, test reports, certificates of origin, warranties) needed by the Employer for operation and maintenance is submitted prior to Completion.

4.3.4 Guarantee Inspection

1. The Contractor provides a guarantee on the Works and further includes labour and materials in his guarantees.
2. The Latent Defects Period is as per the NEC Contract. Product guarantees as per the manufacturer’s specifications

4.3.5 Spares and consumables

If additional spares or consumables are required under the Works Information, these will be supplied by the *Contractor* as part of their obligation to Provide the Works.

4.4 Tests and inspections before delivery

1. The Contractor will provide a reference sample of the corrosion protection coating system to the Project Manager for acceptance. This sample must:
    a. Be submitted as part of the Contractor's Inspection and Test Plan (ITP);
    b. Be used to establish a benchmark for future inspections.
    c. Be accepted by the Employer prior to the commencement of the large-scale application.
2. The Contractor must manage this submission and acceptance process to ensure that it does not delay the start of the Works or adversely affect the Accepted Programme.

4.5 Marking Plant and Materials outside the Working Areas

All Equipment, Plant and Materials located outside the *working areas* and intended for payment prior to incorporation into the Works are clearly marked with the following:

- Acacia Power Station – [*Contractor*'s Name]

4.6 *Contractor*'s Equipment (including temporary Works).

1. The Contractor must provide all Plant and Materials, Equipment, tools, machinery, and access systems necessary to execute the Works, including:
    a. Certified working-at-height systems and anchor points;
    b. Lifting equipment compliant with the OHS Act and included in the approved safety file;
    c. Mobile elevated work platforms, scaffolding, and hoarding;
    d. Temporary utilities and facilities for personnel and equipment.
2. The Contractor must:
    a. Ensure that any sophisticated or specialised equipment required to perform the Works is notified in writing to the Project Manager prior to procurement;
    b. Provide photographs of above-ground work areas during construction as part of the project QA records.
    c. Remain responsible for all transportation of Equipment, Plant and Materials to and from the Site;
    d. Maintain and secure all Contractor's Equipment throughout the Works;
    e. Ensure that Contractor's Equipment does not obstruct plant access or impair Employer operations.

4.7 Cataloguing requirements by the *Contractor*

Cataloguing is not applicable to this Contract.

5 Construction

5.1 Temporary Works, Site services & construction constraints

5.1.1 Employer's Site entry and security control, permits, and Site regulations

1. Access to the Power Station is strictly controlled by the Employer's security protocols and procedures. No personnel must be permitted onto the Site without prior security clearance and completion of the Employer's mandatory Site Induction.
2. The Contractor must ensure that all employees, subcontractors, and visitors undergo and complete the full Site Induction prior to commencing any work on the Site. Attendance records must be maintained and submitted upon request.
3. It remains the Contractor's responsibility to familiarise themselves with and fully comply with all current site rules, safety requirements, and access control protocols, including any updates or temporary changes issued by the Employer or Site Security.
4. A valid, approved Safety, Health and Environmental (SHE) File must be submitted and accepted by the Employer's Safety Representative before any work or site establishment commences.
5. The Contractor must obtain and maintain all necessary permits and authorisations required to carry out the Works, including but not limited to Permits to Work, Hot Work Permits, and Working at Heights Permits, where applicable. These permits must be available on-site at all times and presented during inspections.
6. Daily site entry and exit must be logged in accordance with the Employer's requirements.
7. The Contractor is required to appoint a competent Construction Manager who is permanently present on Site during all construction activities. This person must be responsible for ensuring workforce compliance with Site safety, environmental and security protocols.
8. The Contractor will attend daily coordination meetings with the Project Manager prior to commencement of work for the day. During these meetings, work activities, access restrictions, interface coordination and safety considerations will be confirmed.
9. The Employer may revise site regulations and access procedures at any time in response to changing operational, environmental or security conditions. The Contractor is expected to cooperate fully with such changes without delay or claim.
10. No unauthorised photography, drone use, or public communication regarding the Works must occur without the Employer's prior written approval.
11. All Contractor personnel must carry valid identification at all times while on Site. Access to restricted areas will only be granted to personnel with appropriate authorisation.
12. The Employer reserves the right to deny access or remove any person from the Site for non-compliance with Site regulations, safety requirements, or for conduct deemed inappropriate or unsafe.

5.1.2 Restrictions to access on Site, roads, walkways and barricades

1. The Contractor must strictly adhere to all access restrictions imposed by the Employer within the boundaries of the Site. These include designated access routes, restricted zones, operational areas, and exclusion zones as defined in the Site layout plan or as instructed by the Project Manager.

2. The Contractor must ensure that all roads, walkways, stairwells, plant access points, and emergency escape routes remain clear and unobstructed at all times. Storage of materials, equipment, or waste in these areas is strictly prohibited.
3. All temporary access points, routes, or crossings required by the Contractor must be submitted in advance for acceptance by the Project Manager. Once approved, these routes must be clearly demarcated, maintained, and removed upon Completion.
4. Any unauthorised restriction or obstruction of Site access routes, or failure to maintain adequate protection for personnel and plant in shared access zones, may result in the removal of personnel or suspension of affected work at the Contractor's cost.
5. The Contractor must implement and maintain appropriate lighting, safety barriers, and delineation for all Works in areas used by Others or near operational plant.
6. All barricades, fencing, and temporary access structures must comply with applicable health and safety legislation and must be regularly inspected and maintained in good working condition.
7. Upon Completion of the Works or when access is no longer required, the Contractor will remove all temporary access facilities and barricades, and the area will be reinstated to the condition specified by the Employer or Project Manager.

5.1.3 People restrictions on Site; hours of work, conduct and records

1. The Contractor ensures that all personnel employed on Site, including subcontractors, are recorded daily. These records must include full names, ID/passport numbers, contact details, job descriptions, and times of arrival and departure. These records must be kept up to date and made available to the Project Manager at any time for review or audit purposes. Records may be used when assessing Compensation Events.
2. The Contractor must ensure that only personnel with valid Site induction and access permits are allowed on Site. The Contractor is responsible for controlling Site access for its personnel and subcontractors and must adhere strictly to all security and safety requirements.
3. Normal working hours on Site must be:
   - Monday to Thursday: 07:30 – 16:45
   - Friday: 07:30 – 12:30

   Note: Fuel tank refurbishment will be done during normal working hours or outages (when applicable and station support staff is available).
4. During outages or when otherwise approved in writing by the Project Manager, extended working hours are permitted as follows:
   - Monday to Saturday: 07:00 – 17:30

   Note: Acacia Unit Enclosures for unit 1,2 and 3 will be done during outages.
5. All Contractor personnel must at all times behave professionally and safely while on Site. Misconduct, non-compliance with safety rules, or any illegal activity will result in immediate removal from Site and possible further action.
6. The Contractor ensures that the same standards of conduct and recordkeeping apply to all subcontractors.

5.1.4 Health and safety facilities on Site

1. The Contractor establishes, maintains, and demobilises all health and safety facilities required for the proper execution of the Works, in compliance with the Occupational Health and Safety Act (Act No. 85 of 1993), Construction Regulations, and Eskom's Safety, Health, Environmental and Quality (SHEQ) requirements.
2. The Contractor provides and maintains, at their own cost, the following minimum health and safety facilities at the Site:
    a. A fully equipped first aid station, including certified first aid kits.
    b. Trained and certified first aiders on-site during all working hours.
    c. Clearly demarcated and equipped emergency assembly points.
    d. Signage displaying emergency contact numbers and evacuation procedures.
    e. Facilities for safe storage and handling of hazardous substances in compliance with MSDS requirements.
    f. Provision for clean drinking water and toilet facilities compliant with applicable legislation.
3. The Contractor ensures that all safety notices, statutory warning signs, and directional indicators are installed and maintained in areas visible to all Site personnel and visitors.
4. Emergency equipment such as fire extinguishers must be available and regularly inspected. Extinguishers must be appropriately placed based on the risk classification of the activity or substance in the area.
5. All Site personnel must receive Site-specific safety induction and must comply with personal protective equipment (PPE) requirements, including but not limited to:
    - Hard hats
    - Safety boots
    - Flame-retardant overall (pants and jacket)
    - Eye and hearing protection (where applicable)
    - Respiratory protection and harnesses for working at heights (as required)
6. The Contractor is responsible for maintaining health and hygiene standards in all Site accommodation and facilities. This includes regular cleaning, waste management, pest control, and ensuring a safe and healthy working environment.
7. In addition to the above, the Contractor's Health and Safety Officer (CHSO) ensures that:
    a. Daily inspections of health and safety facilities are conducted.
    b. All incidents are reported and recorded in accordance with legislative and Employer requirements.
    c. Relevant safety documentation (e.g. risk assessments, method statements, fall protection plans) is reviewed, signed, and filed as part of the SHE File.
8. The Employer reserves the right to audit the Contractor's health and safety facilities and processes at any time and may instruct immediate corrective actions where deficiencies are identified.

5.1.5 Environmental controls, fauna & flora, dealing with objects of historical interest

The *Contractor* complies with all applicable environmental legislation, standards, and Eskom's environmental management procedures throughout the execution of the Works. Particular attention must be paid to the following:

1. The Contractor prevents pollution of the environment, including air, water, and land, and avoids the creation of nuisance conditions such as noise, dust, and visual intrusion. Waste materials generated during the Works, including coatings, packaging, and construction debris, are to be managed, stored, and disposed of in accordance with the Employer's environmental guidelines and the requirements of relevant legislation. Burning or burying of waste on Site is strictly prohibited.
2. The Contractor ensures that no harm, disturbance, or removal occurs to local fauna and flora. No indigenous plants, animals, or trees may be removed, disturbed, or damaged without written approval from the Project Manager and the Environmental Officer. Any accidental disturbance must be reported immediately to the Project Manager.
3. All potentially hazardous materials (e.g. solvents, paints, coatings, oils, fuels) used in the Works must be handled in accordance with approved safety and environmental procedures. The Contractor provides and maintains appropriate storage facilities with bunding to prevent soil or groundwater contamination.
4. Should the Contractor encounter any objects of historical, archaeological, paleontological, or cultural interest during execution of the Works, work in that area must immediately cease. The Contractor must secure the area and notify the Project Manager and Environmental Officer without delay. No item must be removed, altered, or interfered with until formal instruction is given.
5. Upon Completion of the Works, the Contractor restores all working areas to their original or agreed-upon state to the satisfaction of the Project Manager and Environmental Officer. Temporary construction areas, storage zones, and laydown areas must be cleaned and all debris removed unless otherwise agreed.
6. The Contractor submits an Environmental Management Plan (EMP) or relevant method statements addressing the above items prior to commencement of work. The Project Manager must accept these. Any updates or non-conformances during the Works must be logged and rectified in accordance with Eskom's environmental procedures.

5.1.6 Title to materials from demolition and excavation

1. The Contractor does not have title to any materials arising from demolition or excavation Works unless expressly stated otherwise in this Works Information.
2. All materials, equipment, scrap metal (e.g. steel, copper, aluminium), and debris removed during the execution of the Works remain the property of the Employer.
3. The Contractor will:
    - Handle, store, and secure such materials appropriately during demolition or excavation;
    - Transport materials to a designated laydown or salvage area on Site as directed by the *Project Manager*;
    - Not dispose of or remove any such materials from Site without the written instruction of the *Project Manager*.

4. Where the Employer identifies specific items for reuse, refurbishment, or disposal through a third party, the Contractor must ensure traceability, recordkeeping, and controlled handover of such materials.
5. Any valuable or hazardous materials uncovered during demolition or excavation (e.g. cables, tanks, oils, or legacy components) must be brought to the immediate attention of the Project Manager for instruction.

5.1.7 Cooperating with and obtaining acceptance of Others

1. The Contractor cooperates with Others as identified by the Employer and facilitates safe and effective coordination of activities within shared or adjacent working areas.
2. "Others" may include, but are not limited to:
    - Eskom operational staff and plant maintenance teams,
    - Eskom-appointed consultants, specialists, or *Contractor*s performing parallel Works,
    - Regulatory inspectors, service providers, and statutory authorities,
    - Environmental officers or safety auditors acting on behalf of the *Employer*.
3. The Contractor must:
    - Attend daily or weekly coordination meetings as scheduled by the *Project Manager*;
    - Liaise with Others in relation to access, interface scheduling, shared use of facilities, or operational restrictions;
    - Submit method statements and interface risk assessments where work overlaps with or affects Others.
4. Where acceptance or approvals are required from statutory bodies (e.g., environmental regulators, heritage authorities, building control), the Contractor must obtain such acceptance in accordance with the Accepted Programme, unless otherwise instructed by the Employer. The Contractor must provide copies of approvals or permits to the Project Manager upon receipt.
5. The Contractor must not hinder or delay the work of Others and must report any conflict or obstruction to the Project Manager immediately for resolution.
6. No changes to work sequencing, access arrangements, or area occupancy that may impact Others must be made without prior consultation and acceptance by the Project Manager.

5.1.8 Publicity and progress photographs

1. The Contractor must not issue any media releases, engage with the press, publish photographs, or communicate project-related information via social media, websites, or marketing material without the prior written approval of the Employer.
2. All signage, banners, and branding to be installed by the Contractor within the Site boundaries must be pre-approved by the Project Manager. Unauthorised advertising is not permitted.
3. The Contractor must take digital progress photographs at key stages of the Works, as instructed by the Project Manager. As a minimum, photographs must be:
    - Dated and geo-referenced (where applicable),
    - Categorised by location, activity, and plant area,
    - Submitted monthly or upon request in electronic format.

4. The Employer retains the right to use all submitted photographic material for internal reporting, audit, compliance, or publicity purposes.
5. A photographic record of above-ground and difficult-to-access work areas (e.g. roofs, stacks, enclosures) must form part of the project Quality Data Pack submitted at Completion.
6. The use of drones or aerial photography is prohibited unless:
    - Approved in writing by the Project Manager,
    - Operated by a certified pilot holding valid aviation authority approvals,
    - Compliant with all Employer safety and security protocols.

5.1.9 Contractor's Equipment

1. The Contractor keeps records of all equipment, whether owned or hired, brought onto and removed from the Site. These records must:
    - Include equipment description, serial numbers, ownership details, and date of entry/exit;
    - Be updated regularly and shared with Site security.
    - The document is available for inspection by the Project Manager and Others at any time.
2. For this Contract, temporary Works include all Contractor-supplied infrastructure, services, and facilities necessary to Provide the Works. This includes, but is not limited to:
    - Site offices, stores, and welfare units;
    - Temporary water, sewer, and electrical connections;
    - On-site laboratories, testing bays, fabrication or welding areas;
    - Scaffolding, hoardings, and laydown areas.
3. All temporary Works must be:
    - Maintained in a safe and serviceable condition throughout the Works;
    - Decommissioned and removed from Site upon Completion;
    - The surrounding area is restored to its original or agreed-upon condition, to the satisfaction of the Project Manager.
4. Prior to the commencement of any work involving Contractor's Equipment or temporary Works, the Contractor must submit relevant method statements for the acceptance of the Project Manager. These must detail safety considerations, access arrangements, lifting or rigging plans, and interaction with existing infrastructure.
5. All associated costs for the provision, operation, maintenance, and removal of Contractor's Equipment and temporary Works must be borne by the Contractor.
6. The Contractor complies at all times with the Employer's safety procedures, site access protocols, and requirements for work within operational areas.

5.1.10 Equipment provided by the Employer

1. The Employer does not provide any tools, construction equipment, temporary Works, or machinery for the execution of the Works unless explicitly stated elsewhere in the Contract or this Works Information.
2. If any fixed plant, lifting points, or built-in structural features of the existing facility are to be used by the Contractor during the execution of the Works (e.g. for rigging or support), this must be:
    - Pre-approved in writing by the Project Manager;

- Assessed for load capacity and safety suitability by the Contractor;
- Used strictly in accordance with the method statements and safety requirements accepted by the Project Manager.

3. The Contractor requests in writing any access to Employer infrastructure (e.g. utility connections, existing platforms) at least five (5) working days in advance and must not proceed until written acceptance is granted.
4. Any damage to Employer-provided or Employer-owned equipment resulting from misuse or unauthorised handling by the Contractor is repaired or replaced at the Contractor's cost.
5. The Contractor remains fully responsible for supplying all other equipment necessary for executing the Works.

5.1.11 Site services and facilities

1. The Contractor is responsible for providing all services and facilities required to carry out and complete the Works, except where explicitly stated otherwise in this Works Information.
2. The Employer will make available electrical power points at agreed locations, subject to the following conditions:
   - All connections must be pre-arranged and approved by the Project Manager.
   - A 3-phase power supply is available upon request.
   - The Contractor supplies all other required electrical equipment, including extension leads, distribution boards, and adaptors.
3. The Contractor must:
   - Make independent arrangements for water, waste disposal, telecommunications, ablutions, fire extinguishers, and lighting unless specifically provided for elsewhere;
   - Supply, install, maintain, and remove all temporary construction services and utility connections necessary to execute the Works.
4. Where the Contractor intends to rig or remove equipment using existing plant lifting points, advice must first be sought from the Employer. The Contractor remains fully responsible for:
   - Verifying the suitability of lifting points;
   - All rigging, hoisting, and removal operations;
   - The condition and safe handling of the equipment during dismantling, repair, and reinstatement.
5. The Contractor must ensure that none of its temporary services or activities obstruct or interfere with the operation of the Employer's plant or access routes.

5.1.12 Facilities provided by the Contractor

1. The Contractor provides all necessary facilities to support execution of the Works, including but not limited to:
   - Site accommodation for Contractor's personnel;
   - A dedicated Workshop area, including a welding bay and fabrication space;
   - Storage areas for Equipment, Plant and Materials;
   - Vehicles, office equipment, tools, and temporary medical facilities.
2. All Contractor facilities must be:

- Installed within the boundaries of the designated site area provided by the Employer;
- Positioned so as not to interfere with ongoing operations or access by Others;
- Maintained in a clean, safe, and serviceable condition;
- Removed from the Site at Completion of the Works unless otherwise agreed in writing by the Project Manager.

3. The Contractor must ensure all storage and laydown areas are:
   - Established only with the Project Manager's acceptance.
   - Properly secured and clearly demarcated.
   - Managed to prevent environmental contamination or safety hazards.
4. The Employer will allocate a defined area for use as a site camp and minor fabrication zone. The Contractor is to confirm location, boundaries, and access requirements prior to mobilisation.
5. The Contractor is responsible for arranging and maintaining their own:
   - Telephone and internet connectivity.
   - Fuel and power distribution within their facilities.
   - Waste removal, cleaning, and hygiene services.
6. All Contractor transport vehicles used to carry personnel must be roadworthy, legally compliant, and fitted with safety belts for all passengers, airbags, and an anti-lock braking system (ABS). Vehicles must be approved for passenger use under applicable legislation.
7. The Contractor is solely responsible for the security of all temporary Works, materials, equipment, personnel belongings, and partially completed sections of the Works. Adequate lighting, fencing, surveillance, or guards must be provided as necessary to safeguard the Site against theft, loss, or damage.
8. The Contractor is encouraged to visit the Site prior to commencing work to familiarise themselves with the terrain, access routes, infrastructure, and environmental conditions.

5.1.13 Existing premises, inspection of adjoining properties and checking work of Others

1. The Contractor must exercise extreme caution when working in areas containing existing infrastructure, including but not limited to:
   - Water and sewer lines, electrical cables, instrumentation wiring, motors, control panels, structural supports, and operational systems.
2. Prior to commencing any work in an area, the Contractor must:
   - Liaise with the Project Manager to identify and confirm the presence and condition of any existing services or equipment;
   - Conduct a joint inspection with the Project Manager to record and document existing conditions.
   - Clearly mark and protect services and interfaces to prevent accidental damage.
   - Submit revised sequencing or access plans for acceptance if deviating from the planned work area.
3. Daily, the Contractor must:
   - Notify the Project Manager of the intended work area and receive clearance to proceed.

- Ensure that all service protection measures are implemented and visually verified before starting work.
- Coordinate closely with the Employer to address unexpected discoveries of infrastructure.

4. The Contractor must not interfere with or assume the functionality of any existing system or the work of Others unless specifically instructed by the Project Manager.
5. The Contractor remains fully responsible for:
   - The protection of all known and unknown existing services within or adjacent to the Site;
   - Any damage caused due to negligence, poor planning, or lack of proper inspection;
   - Implementing immediate corrective action and bearing all costs for repair or reinstatement of affected assets.
6. Where the Contractor is required to connect to, modify, or verify the work of Others, this must be done only after inspection, agreement of the interface scope, and receipt of instructions from the Project Manager

5.1.14 Survey control and setting out of the Works

The *Contractor* is responsible for all setting out required to execute the Works in accordance with the Accepted Programme, *Employer's* work plan and the Works Information.

5.1.15 Excavations and associated water control

1. No excavation activities are anticipated within the scope of this contract. However, if any excavation activities are required during the execution of the Works, the Contractor will carry them out safely and in compliance with applicable legislation and the Employer's safety and environmental requirements.
2. The Contractor must:
   - Submit a method statement for any excavation activity prior to commencing work, including details of access, protection, compaction, and reinstatement.
   - Identify and protect all adjacent structures, services, or equipment potentially affected by ground disturbance;
   - Implement appropriate barricading, signage, and fall protection measures around open excavations or trenches.
   - Perform ground penetrating radar scans to identify all services within the excavation route, and protect the services against any damage.
3. The Contractor must provide effective water control for any excavations, including measures to prevent the accumulation of stormwater, seepage, or washout. This may include:
   - Temporary drainage channels;
   - Localised pumping;
   - Silt control barriers;
   - Protection against erosion or contamination
4. Reinstatement of excavated areas must be to the original or specified condition, compacted and finished as required by the Works Information, and to the satisfaction of the Project Manager.

5. The Contractor is responsible for all safety, structural, and environmental risks associated with excavations and must take all necessary precautions to prevent collapse, damage to adjacent facilities, or environmental harm.

5.1.16 Underground services, other existing services, cable and pipe trenches and covers

1. Within the vicinity of the Works, numerous existing services may be encountered, including but not limited to:
   - Water and sewer pipelines, electrical cables, compressed air lines, oil pipes, gas bottles, valves, gauges, and other live or dormant plant infrastructure.
2. The Contractor must take extreme care to avoid damage to any such services during execution of the Works. This includes services both known and unknown to the Employer or Contractor at the time of execution.
3. Prior to commencing any excavation, trenching, or surface-breaking activity, the Contractor must:
   - Liaise with the Project Manager and obtain clearance for the proposed work area.
   - Participate in a joint inspection with the Project Manager to identify and mark out the location of any known services.
4. Submit a method statement detailing how services will be located, exposed, protected, or worked around.
5. Where directed by the Project Manager, the Contractor must carefully expose known services using hand tools or non-destructive methods. All exposure and protection activities must be performed under Site supervision.
6. The Contractor must install physical barricading and warning signage around all open trenches, holes, or hazardous areas. Protective measures must meet occupational health and safety standards and prevent accidental entry or injury.
7. Any damage caused by the Contractor to services, whether previously identified or not, must be reported immediately to the Project Manager. The Employer will direct remedial action, and the Contractor must bear all associated costs.
8. No trench or pit must be left open overnight or unattended without adequate lighting, barricading, and signage. The Contractor is responsible for the safety of all personnel and plant in and around excavated or service-affected areas.

5.1.17 Control of noise, dust, water and waste

1. The Contractor must execute the Works in a manner that minimises noise, dust, water pollution, and waste generation. All activities must be planned and controlled to avoid nuisance or harm to personnel, plant operations, the public, and the environment.
2. The Contractor must manage all construction and domestic waste in accordance with the Employer's environmental procedures and applicable regulations. Waste must be segregated at source where practicable (e.g., general, hazardous, recyclable). Waste bins and containment areas must be clearly labelled and maintained in a clean and orderly condition. No on-site burning or uncontrolled disposal of waste is permitted.
3. The Contractor is responsible for:

- The removal and legal disposal of all waste generated by the Works;
- Keeping records of waste disposal, including volumes, classifications, and disposal sites;
- Restoring all areas affected by waste storage or transfer to their original or agreed condition upon Completion.

5.1.18 Sequences of construction or installation

1. The Accepted Programme must clearly outline and sequence the activities of all project work to be undertaken by the Contractor, as well as the other work covered by the contract that is being performed by the sub-contractors.
2. The following activities are to be included, as a minimum, in the programme. Please note the illustration only indicates a generic sequence. It's the Contractor's responsibility to ensure that all activities are covered in the sequence they will be executed, aligned to the duration as per the NEC:
   a. Preconstruction Documentation Submission:
      - Final SHE File Submission to the *Employer* for review and acceptance
      - Site Inspection with *Contractor, Employer* and Engineering as a pre-site establishment visit for coordination with Site, outage team/activities (if applicable).
      - Discuss the site establishment area, including tie-in to existing services, etc.
      - Visual inspection/survey/condition assessment of all corrosion-affected areas on the Unit Enclosure, Air intake structure, Exhaust stack structure, MCC, Busbar and Liquid fuel tanks and associated structures.
      - *Contractor* to provide a detailed method statement, QCP, and data sheets specific to the agreed Works to receive corrosion protection coating, repairs and waterproofing systems compiled by a technical specialist in coating and waterproofing systems. This includes the corrosion protection coating system for structural steel members, as per the Works Information.
      - *Contractor* submits the Quality Control Plan to the *Employer* for review and acceptance.
      - *Employer* to obtain Implementation Approval from the Employer's technical committee with the *Contractor's* method statement, QCP, and data sheet submission prior to construction activities.
   b. Construction Activities:
      - Site Establishment
      - Setting up the demarcation of Workshop area for minor fabrication and welding bay areas
      - Mark out all corroded and affected areas with the Employer
      - All activities must be split into the respective plant components or equipment, i.e., Unit Enclosure, Air Intake Structure, Exhaust Stack, Doors, Air vents/Box/Cable Covers.
      - Dismantling of existing components/equipment if required for repair work and reinstatement.
      - Corrosion coating protection preparation work,
      - Apply primer coat
      - Testing DFT
      - Apply the First coat

- Testing DFT
- Apply the Second/Final coat
- Testing DFT
- Waterproofing preparation, application, etc.
- Testing: Commissioning/ Testing Works

c. Post-Construction Documentation Submission:

- Data Books, Testing results from paint coating film thickness - Submission to the Employer for review and acceptance
- Signed off on QCP documentation.

3. The Contractor is to note further that all quality documents and Method Statements require a fourteen (14) calendar day review period.

5.1.19 Giving notice of work to be covered up

1. The Contractor will give the Project Manager at least Two (2) working days' notice before executing any Works that will be covered up or become inaccessible for inspection, testing, or verification.
2. Such Works include, but are not limited to:
   - Surface preparation prior to coating or waterproofing;
   - Application of corrosion protection systems before subsequent layers;
   - Repairs, modifications, or reinforcements to structural elements;
   - Areas to be backfilled, insulated, or concealed by permanent Works.
3. No work must be covered up or made inaccessible without prior inspection or formal release by the Project Manager, unless the Project Manager has confirmed in writing that inspection is not required.
4. If the Contractor fails to provide timely notice and proceeds to cover up the Works without inspection:
   - The Employer may instruct the Contractor to uncover or dismantle such Works at the Contractor's cost;
   - Any resulting delay must not be a Compensation Event.
5. Hold and witness points must be clearly identified in the Contractor's accepted Quality Control Plan (QCP) and referenced in relevant method statements submitted for approval.
6. The Contractor must maintain records of all inspections carried out prior to the Works being covered up and must include these in the final quality documentation handed over at Completion.

5.1.20 Hook-ups to existing Works

1. The Contractor must coordinate all tie-ins or hook-ups to existing plant, structures, services, or systems with the Project Manager. No such connections must be made without prior written instruction or acceptance.
2. Before any hook-up or interface work begins, the Contractor must:
   - Submit a method statement detailing the sequence, risks, and control measures;
   - Identify all interface points on drawings or isometric layouts.
   - Conduct a joint inspection with the Employer to confirm conditions and access.
   - Clearly define any requirements for isolations, outages, or permit-to-work systems.
3. All hook-up activities must be:

- Scheduled to avoid disruption to plant operations;
- Carried out in compliance with the Employer's safety procedures and interface protocols;
- Supervised by competent personnel and monitored for quality.

4. Where hook-ups involve mechanical, electrical, or control systems, the Contractor must:
   - Ensure compatibility with existing infrastructure;
   - Conduct verification testing and obtain Employer sign-off prior to final integration;
   - Restore all affected areas to operational condition and submit updated as-built records.
5. The Contractor will take full responsibility for any damage, operational impact, or delay resulting from unauthorised, unsafe, or incorrectly executed hook-ups.
6. All temporary services or bypasses implemented for hook-up purposes must be removed and the system restored to full function before Completion, unless otherwise agreed.

5.2 Completion, testing, commissioning and correction of Defects

5.2.1 Work to be done by the Completion Date

1. On or before the Completion Date, the Contractor must have done everything required to Provide the Works, including the physical execution, testing, and documentation, except for the specific Post-Completion items listed below.
2. The Project Manager will not certify Completion until:
   - All required Works (excluding listed items below) are complete and free from Defects that, in the Project Manager's opinion, would prevent the Employer from using the Works or prevent Others from carrying out their work;
   - All critical documentation required to demonstrate the functionality and compliance of the Works is submitted.
3. The following items may be completed after the Completion Date, but no later than the dates stated.

	Item of work	**To be completed by**
	As-built drawings of all Works	Within 15 working days after Completion
	Performance testing of the Works in use as specified in this Works Information and relevant national, international codes and Eskom standards. (i.e., data pack from DFT testing, paint specification data pack, etc.)	Date of completion.
	The *Contractor* has done everything required to Provide the Works, including the documentation as set out under section 5.8 and the site is cleared of all rubble and refuse due to the *Contractor* Providing the Works.	On or before the Completion Date

4. All remaining activities must be completed in accordance with the timescales stated above, failing which the Works will be considered incomplete, and the Project Manager will not issue a Completion certificate.

5.2.2 Use of the Works before Completion has been certified

1. The Works are to be executed, one generating unit at a time, while the remaining two units and their associated plant remain fully operational to meet the Power Station's ongoing requirements. The

refurbishment of Fuel Tanks A and B does not require any outage and may be carried out as per the Sectional Completion dates in the Contract Data.

2. The Contractor must:
   - Plan, sequence, and execute the Works to avoid disruption to the Employer's plant operations;
   - Coordinate with the Project Manager and Station Operations to confirm allowable working times, access arrangements, and any restrictions;
   - Take all necessary steps to prevent water ingress, dust, dirt, and debris from affecting plant areas and equipment not under refurbishment;
   - Ensure all existing plant and adjacent equipment are fully protected at all times during the Works.
3. Under no circumstances must the Contractor:
   - Obstruct or restrict access to operating units, control rooms, or essential infrastructure;
   - Interfere with equipment outside the designated unit under refurbishment without express instruction or acceptance.
4. All roads and access routes within the Site are in constant use by Eskom personnel and other Contractors. The Contractor must:
   - Ensure that unrestricted access is maintained for all road users at all times.
   - Plan vehicle and material movement in a way that prevents obstruction.
   - Provide clear signage, flag personnel, and traffic control measures as required.
5. Any failure by the Contractor to ensure access or avoid contamination that results in third-party claims, operational losses, or delays will result in such claims and associated costs being passed on to the Contractor.

5.2.3 Materials, facilities and samples for tests and inspections

1. The Contractor must make available, at their cost, all materials, samples, and facilities necessary to carry out the inspections and tests required under the Contract and the Works Information.
2. Where specified or required for acceptance, the Contractor must:
   - Prepare and provide representative samples of materials, coatings, or components for the Project Manager's acceptance;
   - Establish on-site facilities or designated areas for testing, mock-ups, or sample application (e.g., reference panels for corrosion protection systems);
   - Provide safe access, lighting, and protection of test areas to facilitate accurate inspection.
3. The Project Manager may carry out routine inspections of:
   - Works in progress;
   - Surface preparation and pre-coating activities;
   - Coating application processes;
   - Final finishes and reinstated components.
4. The Contractor must:
   - Allow unrestricted access to the Works at any time during working hours for the *Project Manager* and any authorised representative;

- Cooperate fully with requests for inspection, testing, or demonstration of compliance with the Works Information;
- Maintain records of all tests performed, including material certificates, test results, and calibration records, and include these in the final Data Pack at Completion.

5. The Contractor does not delay in providing the required samples, access, or facilities for inspection.

5.2.4 Commissioning

1. The nature of the Works under this Contract does not require commissioning in the traditional sense (e.g. energisation, functional testing of integrated systems), but does require quality-based verification and performance validation of the applied corrosion protection and waterproofing systems.
2. The Contractor must ensure that all inspection, testing, and verification activities required to demonstrate successful Completion of the Works are conducted in accordance with:
   a) The accepted Quality Control Plans (QCPs);
   b) Manufacturer specifications and application procedures;
   c) Applicable Eskom standards and national or international codes.
   d) Commissioning-related responsibilities of the Contractor include:
      i. Confirming that all coatings, repairs, and waterproofing systems have been applied and cured according to specification;
      ii. Submitting dry film thickness (DFT) records for each layer of coating per surface/component;
      iii. Submitting any applicable performance or adhesion test results (e.g. cross-hatch or pull-off testing) where required by the Works Information;
      iv. Conducting final visual inspections with the *Employer* and *Project Manager*;
      v. Ensuring that any outstanding punch list items or Defects are rectified prior to submission of Completion documentation.

1) The *Employer* may request manufacturer or OEM representatives to witness and sign off on certain phases of the work, particularly with proprietary products (e.g. Stopaq or similar systems). The *Contractor* must coordinate such inspections and include them in the Accepted Programme.

2) No part of the Works must be deemed complete until all quality documentation, inspections, and performance confirmations are accepted by the *Project Manager*

5.2.5 Start-up procedures required to put the Works into operation

No start-up or operational commissioning procedures are required under the scope of this Contract.

5.2.6 Completion and handover procedures

1) Completion and handover of the Works or a section of the Works is administered in accordance with the conditions of contract and this Works Information. Nothing in this section constitutes or implies Take Over. Any Take Over is administered in accordance with Clause 35
2) The *Employer* will take over the Works or a section of the Works when:
   a) The Contractor has completed all work required to Provide the Works as defined in the Works Information;

b) The Works are free of Defects that, in the opinion of the Project Manager, would prevent the Employer from safely using them or would obstruct Others from doing their work;
c) All Completion documentation has been submitted, reviewed, and accepted by the Project Manager.

3) The *Contractor* must notify the *Project Manager* in writing when the Works or a defined section are ready for take over. The notice must be accompanied by:
   a) A request for inspection or punch list walkdown;
   b) A draft of the Completion certificate or checklist, as applicable;
   c) A list of any minor outstanding items (snag list), if agreed in advance, and their proposed Completion Dates.

4) No Completion certificate will be issued unless the following are submitted and accepted:
   a) Final as-built drawings;
   b) Signed-off Quality Control Plans (QCPs);
   c) Test and inspection results, including DFT readings and coating/waterproofing records;
   d) Manufacturer guarantees and applicator warranties as required under Section 3.3.1 Contractor responsibility and guarantee.
   e) Confirmation of site clean-up and removal of all Contractor's Equipment, temporary Works, and waste;
   f) Any other documentation required as stated in the Work Information and/or instructed by the Project Manager.

5) Where sectional Completion or handover is agreed (e.g. unit-by-unit), the procedures above apply individually to each section.

6) The *Contractor* remains responsible for correcting any Defects notified before the Defects date, even after take-over of the Works

5.2.7 Access given by the Employer for the correction of Defects

1) The *Contractor* will:
   - Be granted access to the Site or relevant part of the Works at times agreed with the *Project Manager*;
   - Correct notified Defects by the dates stated in the Defect notification or as otherwise instructed;
   - Coordinate all *defect correction* activities to avoid disruption to the *Employer*'s operations and the work of Others.

2) Any equipment, facilities, or services required by the *Contractor* during the *defect correction period* must be provided by the *Contractor* unless otherwise agreed.

3) All safety, environmental, and site conduct requirements applicable during the main Works will continue to apply during the Defects Correction Period.

4) Access for *defect correction* does not relieve the *Contractor* from any other contractual obligation, including meeting Defect resolution timeframes and quality standards.

5.2.8 Performance tests after Completion

No performance tests are required after Completion under the scope of this contract. All quality and compliance requirements are to be verified prior to Completion through inspections, documented tests, and submission of final quality records as specified in the Works Information.

5.2.9 Training and technology transfer

1) The *Contractor* must include, as part of the accepted method statement, a section addressing the ongoing maintenance and repair procedures for the corrosion protection coating system and the waterproofing system applied during the Works.

2) This section must:
   - Identify common forms of degradation or damage over time.
   - Provide touch-up or localised repair procedures suitable for use by *Employer* personnel;
   - Include details of required surface preparation, compatible repair products, and application techniques;
   - State the frequency and method of future condition assessments, where relevant.

5.2.10 Operational maintenance after Completion

1) The Works under this Contract do not require routine operational maintenance by the *Contractor* after Completion. However, the *Contractor* must ensure that all completed Works:
   - Are delivered in a condition that minimises the need for early maintenance;
   - Include guidance for future maintenance where applicable, particularly in relation to corrosion protection and waterproofing systems.

2) As part of the Completion documentation, the *Contractor* must provide:
   - Manufacturer-recommended maintenance guidelines for applied coatings and waterproofing systems;
   - A list of materials and procedures for touch-up or localised repairs;
   - Applicable product warranties and technical support contacts.

3) The *Employer* will assume responsibility for operational maintenance from the date of Completion, based on the information and warranties provided by the *Contractor*.

6 Plant and Materials standards and workmanship

6.1 Investigation, survey and Site clearance

1) Prior to commencing any part of the Works, the *Contractor* carries out a comprehensive investigation and condition survey of all existing facilities and areas within or adjacent to the Site that may be affected by the execution of the Works.

2) The purpose of this investigation is to:
   - Identify any constraints, hazards, or risks associated with the surrounding environment.
   - Confirm access, protection, and clearance requirements;
   - Avoid accidental damage to *Employer* assets, buried services, or structures.

3) The *Contractor* must:
   - Request access to specific areas through the *Project Manager*, with sufficient notice to allow for coordination;
   - Protect all identified and discovered plant, services, and equipment during the Works;
   - Immediately notify the *Project Manager* of any previously undocumented services or obstructions encountered on Site;
   - Dispose of all waste and debris generated from the Works, directly or indirectly, in accordance with the *Employer*'s environmental requirements and legal regulations.

4) The cost of any repairs due to negligent damage to the plant or services caused during the Works must be borne by the *Contractor.*

6.2 Building Works

There are no building Works required under the scope of this contract.

6.3 Civil engineering and structural Works

All civil and structural Works comply with the latest revision of the applicable national and international standards as referenced in this Works Information. These include, but are not limited to:

Reference Number	Title
240-106365693	Standard for the External Corrosion Protection of Plant, Equipment and Associated Piping with Coatings
240-101712128	Standard for the Internal Corrosion Protection of Water Systems, Chemical Tanks and Vessels and Associated Piping with Linings
ASTM D4414	Standard practice for measurement of wet film DFT by notch gauges
ASTM D4541	Standard Method for Pull-off Strength of Coatings using Portable Adhesion Testers
ASTM D5162	Standard Practice for Discontinuity (Holiday) Testing of Nonconductive Protective Coating on Metallic Substrates
ASTM E376	Measuring coating DFT by magnetic field or eddy current electromagnetic test Methods
ASTM F21	Standard Test Method for Hydrophobic Surface Films by the Atomiser Test

Reference Number	Title
ISO 8501-1	Preparation of steel substrates before application of paints and related products – Visual assessment of surface cleanliness – Part 1: Rust grades and preparation grades of uncoated steel substrates and of steel substrates after overall removal of previous coatings
ISO 8502-3	Preparation of steel substrates before application of paint and related products – Test for the assessment of surface cleanliness – Part 3: Assessment of dust on steel surfaces prepared for painting (pressure sensitive tape method)
ISO 8502-6	Preparation of steel substrates before application of paint and related products – Test for the assessment of surface cleanliness – Part 6: Extraction of soluble contaminants for analysis – The Bresle method
ISO 8503-4	Preparation of steel substrates before application of paint and related products – Surface roughness characteristics of blast-cleaned steel substrates – Part 4: Method for the calibration of ISO surface profile comparators and for the determination of surface profile – Stylus instrument procedure. (May be used as an alternative to SANS 5772)
ISO 12944-3	Paint and varnishes – Corrosion protection of steel structures by protective paint systems. Part 3: Design considerations
ISO 9223	Corrosion of metal and alloys – Corrosivity of atmospheres – Classification
SANS 10064	The preparation of steel surfaces for coating
SANS / ISO 2808	Paints and Varnishes: Determination of film DFTs (Can be used as an alternative to ASTM E376)
SANS 5770	Preparation of steel substrates before the application of paints and related products – Test for the assessment of cleanliness of blast-cleaned steel surface – Freedom from certain soluble salts
SANS 5772	Preparation of steel substrates before the application of paints and related products – Surface roughness characteristics of blast-cleaned steel surfaces – Profile of blast-cleaned surfaces determined by a micrometre profile gauge (Can be used as an alternative to ISO 8503-4)
SANS 10400-D	The application of the National Building Regulations Part D: Public safety
SANS 10400-F	The application of the National Building Regulations Part F: Site operations
SIS 055900	Swedish Code of Practice - Pictorial surface preparation standard for painted steel surfaces. (Can be used as an alternative to ISO 8501 – 1)
Note: Where there is a conflict between referenced standards or specifications, the more stringent requirement must apply, unless otherwise instructed or accepted by the *Project Manager*	

6.4 Electrical & mechanical engineering Works

1) The *Contractor* will take full responsibility for safeguarding all electrical and mechanical equipment located in or adjacent to the areas where the Works are being executed.

2) The *Employer* will assist the *Contractor* in identifying all sensitive and critical equipment requiring protection. This may include, but is not limited to:
   - Live switchgear and control panels;
   - Motors and MCCs;
   - Cable trays, junction boxes, instrumentation, and signal cabling;
   - Ventilation and exhaust fans;
   - Fuel handling and fire protection systems.

3) No Works may commence in the affected areas until the *Contractor* has:
   - Installed all necessary protective measures (e.g. covers, barriers, insulation, shielding);
   - Received acceptance from the *Project Manager* confirming that protection is adequate.

4) The *Contractor* must:
   - Maintain the integrity of protective measures for the whole duration of the Works.
   - Regularly inspect and adjust these protections as the Works progress.
   - Avoid exposure of sensitive equipment to water, dust, vibration, or mechanical impact.
   - Immediately report and rectify any accidental damage or exposure at the *Contractor*'s cost.

5) Any work that compromises the safety or operability of electrical or mechanical equipment without prior approval will be stopped and rectified at the *Contractor*'s expense and may result in a formal notification under the contract.

6.5 Process control and IT Works.

There are no process control or IT-related Works included within the scope of this Contract. However, the *Contractor* must ensure that all adjacent process control systems, cabling, instrumentation, and IT-related infrastructure are not disturbed or interfered with during the execution of the Works.

7 List of drawings

7.1 Drawings issued by the *Employer*

This section lists the drawings issued by the *Employer* at or before the Contract Date, which form part of the Works Information and may also contain Site Information. These drawings are provided to assist the *Contractor* in planning and executing the Works.

Note: The *Contractor* must sign a Non-Disclosure Agreement (NDA) prior to receiving any *Employer*-issued drawings. Drawings are issued for use strictly in relation to this contract only and may not be shared or reproduced outside of authorised project stakeholders.

Drawing number	Revision	Title
0.49/10100	**5**	**Acacia Power Station Sets 1-3 Plant Layout**
0.49/10022	**3**	**General Arrangement Acacia Station**
0.49/10052	**0**	**Bus Duct**
0.49/10051-3	**3**	**Enclosure, Generator Assembly & Details**
0.49/10051-1	**3**	**Enclosure, Generator Assembly & Details**
0.49/10050-1	**2**	**Dimensional Layout, Enclosure Twin Pack**
0.49/10094-1	**1**	**Twin Pack Enclosure, Assembly & Installation**

PART C4: SITE INFORMATION

1 General description

Acacia Power Station is situated at the southern end of Eskom's National Grid near Cape Town in the Western Cape (Coordinates 33°52'59.43"S 18°32'08.32"E).

It operates predominantly in synchronous condenser mode to regulate voltage and also provides a dedicated off-site electrical supply to Koeberg Nuclear Power Station, as required by the National Nuclear Regulator (NNR) licensing conditions.



Figure 1: Layout of Acacia Power Station

The station comprises three modular gas turbine generating units, commissioned in 1976. Each unit produces a base load output of 57.1 MW and a peak output of 60.8 MW under design atmospheric conditions, giving a total installed capacity of 171 MW.

The modular industrial gas turbines are aeroderivative designs capable of operating on both oil and gas fuels. Their modular configuration allows faster maintenance and higher plant availability compared to conventional gas turbine stations.

The Site includes, but is not limited to:

- Generator and turbine enclosures;
- Fuel tank enclosures (Tanks A and B);
- Air intake and exhaust structures;
- Control room and MCC enclosures; and

- Associated civil and structural foundations and accessways.

The surrounding area includes other Eskom facilities and operational infrastructure. The Works will be executed within the secure boundary of the Power Station, under controlled access

2 Existing buildings, structures, and plant & machinery on the Site

The Works involve refurbishment of existing enclosures and interfaces with operational generation units, fuel systems, and auxiliary structures. The Contractor shall take note of the following existing conditions:

- Steel and cladded enclosures forming weatherproof housings for the GTs, generators, and auxiliaries.
- Existing civil plinths and foundations supporting the enclosures.
- Adjacent operating plant and electrical systems to remain live during the Works.
- Limited laydown and storage areas due to the operational nature of the Site.

All interfacing points with existing structures and systems shall be verified on Site before construction. “As-built” and reference drawings of the original enclosures and fuel tank structures are available from the Employer upon request through the Project Manager

3 Subsoil information

The Acacia site is located on coastal sedimentary ground conditions typical of the Cape Flats region, comprising variable fill and underlying sandy soils with shallow calcareous layers. Existing foundation structures appear stable with no significant evidence of differential settlement.

No deep excavation is envisaged for these Works. Where localised excavations or anchor installations are required for temporary Works (e.g., scaffolding or lifting equipment), the Contractor shall assess bearing capacity and stability to ensure safety.

No new geotechnical investigation is currently planned by the Employer. Should the Contractor require further information, this shall be requested in writing and, if approved, executed at the Contractor’s cost unless otherwise instructed.

4 Hidden services

The Site contains underground electrical cables, earthing grids, communication lines, and limited service pipework (stormwater and fuel drainage systems). Accurate as-built records for certain legacy services may be incomplete due to the age of the installation.

Before any excavation, the Contractor shall:

- Obtain current service layouts from the Employer’s Engineering and Maintenance Department.

- Confirm service locations by means of site scanning and trial holes under the Project Manager's supervision; and
- Assume the presence of unidentified buried services and proceed with due caution.

Damage to hidden services due to negligence shall be repaired at the Contractor's cost and to the satisfaction of the Employer.