



NEC3 Engineering & Construction Contract

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

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

for Manufacture, Supply, Delivery, Removal and
Installation of Air Heater Element Packs for Three
Units at Tutuka Power Station.

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CONTRACT No. [Insert at award stage]

Part C1: Agreements & Contract Data

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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:

Manufacture, Supply, Delivery, Removal and Installation of Air Heater Element Packs for Three Units at Tutuka Power Station.

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.

Options A	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*.

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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

Power Station General Manager

**for the
Employer**

*Eskom Holdings SOC Ltd, Megawatt Park
Maxwell Drive, Sandton, Johannesburg*

Name &
signature of
witness

Date

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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 _____

Power Station General Manager

On behalf of _____
(Insert name and address of organisation)

_____ *Eskom Holdings SOC Ltd, Megawatt Park
Maxwell Drive, Sandton, Johannesburg*

Name & signature of witness _____

Date _____

C1.2 ECC3 Contract Data

Part one - Data provided by the *Employer*

Clause	Statement	Data
1	General	
	The <i>conditions of contract</i> are the core clauses and the clauses for main Option	
	- dispute resolution Option - and secondary Options	A: Priced contract with activity schedule W1: Dispute resolution procedure X1 Price adjustment for inflation X2 Changes in the law X4: Parent company guarantee X5: Sectional Completion X7: Delay damages X13: Performance Bond X16: Retention X18: Limitation of liability X20: Key performance indicators Z: Additional conditions of contract
	of the NEC3 Engineering and Construction Contract, April 2013 (ECC3)	
10.1	The <i>Employer</i> 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 <i>Project Manager</i> is: (Name)	
	Address	Tutuka Power Station Bethal Road Standerton 2430
	Tel	
	e-mail	
10.1	The <i>Supervisor</i> is: (Name)	

MANUFACTURE, SUPPLY, DELIVERY, REMOVAL AND INSTALLATION OF AIR HEATER ELEMENT PACKS FOR THREE UNITS AT TUTUKA POWER STATION

Address

**Tutuka Power Station
Bethal Road
Standerton
2430**

Tel No.

e-mail

11.2(13)	The <i>works</i> are	Manufacture, Supply, Delivery, Removal and Installation of Air Heater Element Packs for Three Units at Tutuka Power Station
11.2(14)	The following matters will be included in the Risk Register	• Industrial action/Labour Unrest • Adverse weather conditions • Late Delivery of Equipment • Health and Safety Incidents • Plant Access restrictions • Contractor Interface Management • Testing and commissioning failures • Damage to existing plant and equipment • Lifting and rigging risks • Inadequate supervision <i>Any addition risk that arises during the execution of the works will be included in the risk register.</i>
11.2(15)	The <i>boundaries of the site</i> are	Tutuka Power Station (Unit 1, 4 and 5 Left Hand & Right-Hand Air Heaters)
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 Unique Identifier: 15ENG GEN-3206 Titled Replacement of Boiler 1 to 5 Air heater Element Packs and all documents and drawings to which it makes reference.
12.2	The <i>law of the contract</i> is the law of	the Republic of South Africa
13.1	The <i>language of this contract</i> is	English
13.3	The <i>period for reply</i> is	• Two (2) working days during a Unit Shutdown period. • Twelve (12) hours for matters that may compromise or threaten SHEQ principles, requirements, or policies, particularly where there is an actual or potential risk to the health and safety of employees, contractors, visitors, or members of the public.
2	The Contractor's main responsibilities	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data.

3 Time

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11.2(3)	The <i>completion date</i> for the whole of the <i>works</i> is	TBC		
11.2(9)	The <i>key dates</i> and the <i>conditions</i> to be met are:	Condition to be met	key date	
		1	Delivery of Air heater Element Packs for the 1 st Unit	A per Accepted Programme
		2	Delivery of Air heater Element Packs for 2 nd Unit	A per Accepted Programme
		3	Delivery of Air heater Element Packs for 3 rd Unit	A per Accepted Programme
		4	Completion of installation works 1 st Unit 1- Left & Right-hand Air Heater	A per Accepted Programme
		5	Completion of installation works 2 nd Unit 1- Left & Right-hand Air Heater	A per Accepted Programme
		6	Completion of installation works 3 rd Unit 1- Left & Right-hand Air Heater	A per Accepted Programme
		7	Fulfilment of SDL&I Obligations	A per Accepted Programme
30.1	The <i>access dates</i> are:	Part of the Site	Date	
		1	1 st Unit - Left & Right-hand Air Heaters	As per outage listing
		2	2 nd Unit - Left & Right-hand Air Heaters	As per outage listing
		3	3 rd Unit - Left & Right-hand Air Heaters	As per outage listing
31.1	The <i>Contractor</i> is to submit a first programme for acceptance within	Two (2) weeks after Contract Date.		
31.2	The <i>starting date</i> is	Contract Signature Date.		
32.2	The <i>Contractor</i> submits revised programmes at intervals no longer than	2 days during Unit outage.		
35.1	The <i>Employer</i> is not willing to take over the <i>works</i> before the Completion Date.			
4	Testing and Defects			
42.2	The <i>defects date</i> is	52 weeks after Completion of the <i>works</i>		
43.2	The <i>defect correction period</i> is	Within 48 hours after notification of defects		
5	Payment			

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50.1	The <i>assessment interval</i> is	4 weeks
51.1	The <i>currency of this contract</i> is the	South African Rand.
51.2	The period within which payments are made is	60 days after submission of a valid invoice
51.4	The <i>interest rate</i> 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 <i>mutatis mutandis</i> 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	Compensation events will be deal with in accordance with the NEC3ECC Clause 60 - 65
60.1(13)	Assumed values for the ten-year return <i>weather data</i> for each <i>weather measurement</i> for each calendar month are:	As stated in Annexure A to this Contract Data provided by the <i>Employer</i>.
7	Title	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data.
8	Risks and insurance	
80.1	These are additional <i>Employer's</i> risks	None
9	Termination	Termination will be dealt with in accordance with the NEC 3ECC Termination clauses
10	Data for main Option clause	
A	Priced contract with activity schedule	
11	Data for Option W1	

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W1.1	The <i>Adjudicator</i> 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 <i>Adjudicator nominating body</i> 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 <i>tribunal</i> is:	arbitration.		
W1.4(5)	The <i>arbitration procedure</i> 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	Mpumalanga, 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			
X1	Price adjustment for inflation			
X1.1(a)	The <i>base date</i> for indices is	One month prior to enquiry closing date		
X1.1(c)	The proportions used to calculate the Price Adjustment Factor are:	proportion	linked to index for	Index prepared by
		15%	non-adjustable	
	Total	1.00		

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X2	Changes in the law	There is no reference to Contract Data in this Option and terms in italics are identified elsewhere in this Contract Data.		
X4	Parent company guarantee	If the successful Contractor is a subsidiary company, the Contractor shall provide a Parent Company Guarantee from its holding company. The details of the Parent Company shall be completed by the Contractor in Contract Data Part Two.		
X5 & X7	Sectional Completion and delay damages used together			
X7.1 X5.1	Delay damages for late Completion of the <i>sections</i> of the <i>works</i> are:	section	Description	Amount per day
		1	Completion of installation works 1 st Unit	1% of the total of the Prices for the Section, capped at 10% of the total of the Prices for the Section.
		2	Completion of installation works 2 nd Unit	1% of the total of the Prices for the Section, capped at 10% of the total of the Prices for the Section.
		3	Completion of installation works 3 rd Unit	1% of the total of the Prices for the Section, capped at 10% of the total of the Prices for the Section.
	The total delay damages payable by the Contractor does not exceed:	10% of the total of the Prices		
X13	Performance bond			
X13.1	The amount of the performance bond is	10% of the total of the Prices		
X16	Retention			
X16.1	The <i>retention free amount</i> is			
	The <i>retention percentage</i> is	5 %		

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		The Employer shall retain five per cent (5%) from each amount due to the Contractor until the accumulated retention reaches five per cent (5%) of the total of the Prices. Fifty per cent (50%) of the retained amount shall be released upon Completion of the whole of the works. The remaining fifty per cent (50%) shall be released upon the Defects Date, provided that all notified Defects have been corrected and the Project Manager has confirmed that the Contractor has fulfilled all obligations relating to the correction of Defects
X18	Limitation of liability	
X18.1	The <i>Contractor's</i> liability to the <i>Employer</i> for indirect or consequential loss is limited to:	R0.0 (zero Rand)
X18.2	For any one event, the <i>Contractor's</i> liability to the <i>Employer</i> for loss of or damage to the <i>Employer's</i> property is limited to:	The amount of the deductibles relevant to the event
X18.3	The <i>Contractor's</i> 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 <i>Employer's</i> 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 <i>Contractor's</i> total liability to the <i>Employer</i> 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 <i>Contractor's</i> total liability for the additional excluded matters is not limited. The additional excluded matters are amounts for which the <i>Contractor</i> 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 <i>end of liability date</i> is	(i) 5 years after the <i>defects date</i> for latent Defects and

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(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.

X20	Key Performance Indicators	Refer to Annexure B for the table of KPI
X20.1	The <i>incentive schedule</i> for Key Performance Indicators is in	Note that No incentives will be provided by the employer the KPI are for monitoring purposes.
X20.2	A report of performance against each Key Performance Indicator is provided at intervals of	Monthly
Z	The <i>Additional conditions of contract</i> 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.

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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

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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.

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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 Services 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 Services for this reason.

Z12.3 If the *Employer* terminates the *Contractor's* obligation to Provide the Services 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.

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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 minimum limit of indemnity
Loss of or damage to the works, Plant and Materials	The replacement cost where covered by the <i>Employer's</i> insurance The <i>Employer's</i> policy deductible, at Contract Date, where covered by <i>Employer's</i> 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 <i>Contractor</i>) caused by activity in connection with this contract	<u>Loss of or damage to property</u> <u><i>Employer's property</i></u> The replacement cost where covered by the <i>Employer's</i> insurance The <i>Employer's</i> policy deductible, at Contract Date, where covered by <i>Employer's</i> insurance <u>Other property</u> The replacement cost <u>Bodily injury to or death of a person</u> The amount required by applicable law
Liability for death of or bodily injury to employees of the <i>Contractor</i> arising out of and in the course of their employment in connection with this contract	The amount required by the applicable law

Z 13.2

Replace core clause 87 with the following:

The *Employer* provides the insurances stated in the Insurance Table B.

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INSURANCE TABLE B

Insurance against or name of policy	Minimum amount of cover or minimum 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 Nuclear Liability

- Z14.1 The *Employer* is the operator of the Koeberg Nuclear Power Station (KNPS), a nuclear installation, as designated by the National Nuclear Regulator of the Republic of South Africa, and is the holder of a nuclear licence in respect of the KNPS.
- Z14.2 The *Employer* is solely responsible for and indemnifies the *Contractor* or any other person against any and all liabilities which the *Contractor* or any person may incur arising out of or resulting from nuclear damage, as defined in Act 47 of 1999, save to the extent that any liabilities are incurred due to the unlawful intent of the *Contractor* or any other person or the presence of the *Contractor* or that person or any property of the *Contractor* or such person at or in the KNPS or on the KNPS site, without the permission of the *Employer* or of a person acting on behalf of the *Employer*.
- Z14.3 Subject to clause Z14.4 below, the *Employer* waives all rights of recourse, arising from the aforesaid, save to the extent that any claims arise or liability is incurred due or attributable to the unlawful intent of the *Contractor* or any other person, or the presence of the *Contractor* or that person or any property of the *Contractor* or such person at or in the KNPS or on the KNPS site, without the permission of the *Employer* or of a person acting on behalf of the *Employer*.
- Z14.4 The *Employer* does not waive its rights provided for in section 30 (7) of Act 47 of 1999, or any replacement section dealing with the same subject matter.
- Z14.5 The protection afforded by the provisions hereof shall be in effect until the KNPS is decommissioned.

Z15 Asbestos

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

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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 <i>Employer's</i> 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 <i>Employer</i> ensures that the Ambient Air in the area where the <i>Contractor</i> will Provide the Services 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 <i>Contractor</i> , the <i>Employer</i> 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 <i>Contractor</i> may perform Parallel Measurements and related control measures at the <i>Contractor's</i> 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 <i>Employer</i> 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

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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 Services, without additional control measures presented, on presentation of Safe Levels. The contractually agreed dates to Provide the Services, 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.

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Annexure A: One-in-ten-year-return *weather data* obtained from SA Weather Bureau for [weather station]

If any one of these *weather measurements* recorded within a calendar month, before the Completion Date for the whole of the *works* and at the place stated in this Contract Data is shown to be more adverse than the amount stated below then the *Contractor* may notify a compensation event.

	<i>Weather measurement</i>				
Month	Cumulative rainfall (mm)	Number of days with rain more than 10mm	Number of days with min air temp < 0 deg.C	Number of days with snow lying at 08:00 CAT	[Other measurements if applicable]
January	200	6	0	0	
February	150	6	0	0	
March	120	5	0	0	
April	110	4	0	0	
May	40	3	7	0	
June	20	2	21	11	
July	30	2	22	14	
August	30	2	12	0	
September	60	3	2	0	
October	180	15	0	0	
November	160	7	0	0	
December	170	6	0	0	

Only the difference between the more adverse recorded weather and the equivalent measurement given above is taken into account in assessing a compensation event.

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 <i>Contractor</i> is (Name): Address Tel No. Fax No.	
11.2(8)	The <i>direct fee percentage</i> is The <i>subcontracted fee percentage</i> is	% %
11.2(18)	The <i>working areas</i> are the Site and	
24.1	The <i>Contractor's</i> 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

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11.2(3)	The <i>completion date</i> for the whole of the <i>works</i> is			
11.2(14)	The following matters will be included in the Risk Register			
11.2(19)	The Works Information for the <i>Contractor's</i> design is in:			
31.1	The programme identified in the Contract Data is			
A	Priced contract with activity schedule			
11.2(20)	The <i>activity schedule</i> is in	(in figures) (in words), excluding VAT		
11.2(30)	The tendered total of the Prices is			
	1.1 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).		
A	Priced contract with activity schedule	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	%		

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63 in SSCC	The categories of design employees whose travelling expenses to and from the Working Areas are included in Defined Cost are:	
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PART 2: PRICING DATA

ECC3 Option A

Document reference	Title	No of pages
C2.1	Pricing assumptions: Option A	
C2.2	The <i>activity schedule</i>	

C2.1 Pricing assumptions: Option A

How work is priced and assessed for payment

Clause 11 in NEC3 Engineering and Construction Contract, (ECC3) Option A states:

Identified and defined terms	11	
	11.2	(20) The Activity Schedule is the <i>activity schedule</i> unless later changed in accordance with this contract.

(27) The Price for Work Done to Date is the total of the Prices for

- each group of completed activities and
- each completed activity which is not in a group.

A completed activity is one which is without Defects which would either delay or be covered by immediately following work.

(30) The Prices are the lump sum prices for each of the activities on the Activity Schedule unless later changed in accordance with this contract.

This confirms that Option A is a lump sum form of contract where the work is broken down into activities, each of which is priced by the tendering contractor as a lump sum. Only completed activities are assessed for payment at each assessment date; no part payment is made if the activity is not completed by the assessment date.

Function of the Activity Schedule

Clause 54.1 in Option A states: "Information in the Activity Schedule 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 Activity Schedule 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 Activity Schedule. The Activity Schedule is only a pricing document.

Link to the programme

Clause 31.4 states that "The *Contractor* provides information which shows how each activity on the Activity Schedule relates to the operations on each programme which he submits for acceptance". Ideally the tendering contractor will develop a high level programme first then resource each activity and thus arrive at the lump sum price for that activity both of which can be entered into the *activity schedule*.

Preparing the *activity schedule*

Generally it is the tendering contractor who prepares the *activity schedule* by breaking down the work described within the Works Information into suitable activities which can be well defined, shown on a programme and priced as a lump sum.

The *Employer*, in his Instructions to Tenderers or in a Tender Schedule, may have listed some items that he requires the *Contractor* to include in his *activity schedule* and be priced accordingly.

It is assumed that in preparing his *activity schedule* the *Contractor*:

- Has taken account of the guidance given in the ECC3 Guidance Notes pages 19 and 20;

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- Understands the function of the Activity Schedule and how work is priced and paid for;
- Is aware of the need to link the Activity Schedule to activities shown on his programme;
- Has listed and priced activities in the *activity schedule* which are inclusive of everything necessary and incidental to Providing the Works in accordance with the Works Information, as it was at the time of tender, as well as correct any Defects not caused by an *Employer's* risk;
- Has priced work he decides not to show as a separate activity within the Prices of other listed activities in order to fulfil the obligation to complete the *works* for the tendered total of the Prices.
- Understands there is no adjustment to the lump sum Activity Schedule price if the amount, or quantity, of work within that activity later turns out to be different to that which the *Contractor* estimated at time of tender. The only basis for a change to the Prices is as a result of a compensation event.

C2.2 the *activity schedule*

No.	Activity description	UOM	Quantity	Total Outages	Rate	Amount
1	PRELIMINARY AND GENERAL (P&G'S) FOR 3 BOILER UNITS					
1.1	Office and storage shed	Per Unit	1	3		
1.2	Overheads for Unit/Boiler Pack Change (Staff, Traveling and Accommodation) (Installation)	Per Unit	1	3		
1.3	Forklift	Per Unit	1	3		
1.4	Compressor	Per Unit	1	3		
1.6	Crane	Per Unit	1	3		
1.7	Safety file	Per Unit	1	3		
1.8	Medicals, inductions and PPE	Per Unit	1	3		
2	SCOPE FOR REMOVAL & INSTALLATION					
2.1	Removal of Old Air Heater element packs as per the scope of work/works information	Per Unit	1	3		
2.2	Installation of new element Air heater packs as per the scope of work/works information	Per Unit	1	3		
2.3	Provide equipment necessary to carry out the works as per scope of work/works information	Per Unit	1	3		
2.4	Carry out Inspections of relevant areas as identified in the scope of work/works information	Per Unit	1	3		
2.5	Carry out repairs of the relevant areas as per the inspection report for affected areas	Per Unit	1	3		
2	SUPPLY AND DELIVERY FOR THREE BOILER UNITS					

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No.	Ring	Stock Number	Description	Unit	Quantity (for 3 Units)		Rate	Price
1	1	590953	Cold End	Each	378			
2	2	590951	Cold End	Each	378			
3	3	590892	Cold End	Each	378			
4	4	590897	Cold End	Each	378			
5	5	590893	Cold End	Each	378			
6	6	590948	Cold End	Each	378			
7	7	590954	Cold End	Each	378			
8	1	590904	Intermediate	Each	378			
9	2	590903	Intermediate	Each	378			
10	3	590900	Intermediate	Each	378			
11	4	590905	Intermediate	Each	378			
12	5	590894	Intermediate	Each	378			
13	6	590946	Intermediate	Each	378			
14	7	590949	Intermediate	Each	378			
15	1	590952	Hot End	Each	378			
16	2	590947	Hot End	Each	378			
17	3	590950	Hot End	Each	378			
18	4	590896	Hot End	Each	378			
19	5	590895	Hot End	Each	378			
20	6	590898	Hot End	Each	378			
21	7	590955	Hot End	Each	378			
22		0774092	U brackets/support	Each	10584			
23			Spacer box ring 1		378			

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24			Spacer box ring 2		378			
25			Spacer box ring 3		378			
26			Spacer box ring 4		378			
27			Spacer box ring 5		378			
28			Spacer box ring 6		378			
29			Spacer box ring 7		378			
30		0775110 & 0775111	Safe working platform		64 (1set)			
31		0737609	U-channels (6m length)	Each	1080			
32			Transportation of element packs & U- bracket	Per Unit	3			
33			Transportation of spacer boxes	sum	1			
34			Transportation of safe working	sum	1			

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1 Description of the works

1.1 Executive overview

The air heater element packs are subjected to fly ash erosion and fouling during operation and the life of the element packs is expended or consumed. The life of the element packs ends when the thermal performance drops rapidly (reduction heat transfer surface area as a result of fly ash erosion and partial blocked air heater packs as a result of fouling). When the thermal performance of the air heater element packs starts to decrease mainly as a result of fly ash erosion, it is necessary to replace the air heater element packs to avoid rapid thermal performance decrease in future.

For partially blocked (fouled) air heater element packs, washing is the only refurbishment method currently used. The fouled air heater element packs are washed with high pressure water in order to improve thermal heat transfer and reduce the differential pressure across the air heaters. The washing of air heater element packs has limitations in that the element packs are never restored to their original state as it is difficult to remove all the ash especially from the intermediate element packs. The ash that remains in the air heater element packs after washing will act as an insulating layer affecting effective heat transfer and fouling will start from this ash.

Worn air heater element pack plates cannot be refurbished and therefore need replacement. Erosion of air heater element packs is monitored by mass loss measurements (only done during major outages) and visual inspection of the packs on the hot end accumulation of pieces of pack plates in the casing below the air heaters. Hence worn air heater packs are replaced and sold as scrap.

1.2 Employer's objectives and purpose of the works

The air heater element packs of all the boilers have reached the 9-year replacement interval as per maintenance philosophy. The thermal performance of air heater element packs is expected to deteriorate beyond the 9-interval. The worn air heater element packs cannot be refurbished and therefore will need to be replaced.

1.3 Interpretation and terminology

The following abbreviations are used in this Works Information:

Abbreviation	Meaning given to the abbreviation
AFC	Approved for construction
OBL	Outside battery limits
QA	Quality Assurance

2 Management and start up.

2.1 Management meetings

Regular meetings of a general nature may be convened and chaired by the *Project Manager* as follows:

Title and purpose	Approximate time interval	Location	Attendance by:
Risk and compensation meetings	As and when the needs arise	Project board room/ Virtual Meeting	Key members and Contractor
Overall contract progress and feedback	Monthly on ____ at ____ (TBC)	Project board room/ Virtual Meeting	<i>Employer, Contractor, Supervisor, and ____</i>

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<i>Contractor</i> safety meeting	Monthly for 2 hrs	Production boardroom/ Virtual Meeting	<i>Employer, Contractor</i>
Project progress meeting	Daily on installation program and monthly on design	Project board room/ Virtual Meeting	<i>Employer, Contractor</i>
Early Warning Meeting	As and when the needs arise	Virtual Meeting/Project Boardroom	Key members and <i>Contractor</i>
Daily Outage meeting	Daily at 09H00-10H00 Or as determined suitable by Outage department	Unit 6 production Boardroom	<i>Contractors; Project coordinator</i>
Compulsory Safety Fridays	Every Friday at 07H15	Virtual Meeting	All
Departmental SHEQ meeting	Time varies (To be shared when its scheduled)	Project board room/ Virtual Meeting	<i>Project management and Contractor</i>

Meetings of a specialist nature may be convened as specified elsewhere in this Works Information or if not so specified by persons and at times and locations to suit the Parties, the nature and the progress of the works. Records of these meetings shall be submitted to the *Project Manager* by the person convening the meeting within five days of the meeting.

All meetings shall be recorded using minutes or MS team recording and transcript or a register prepared and circulated by the person who convened the meeting. Such minutes or register shall not be used for the purpose of confirming actions or instructions under the contract as these shall be done separately by the person identified in the *conditions of contract* to carry out such actions or instructions.

2.2 Documentation control

All documentation will be controlled as per the requirements of the Supplier Contract Quality Requirements Specification. All existing documentation that will be affected by the project will be updated as part of the documentation of the project. The documentation requirements cover the various stages of the works, from the procurement stages, through installation and the commissioning of the project. Comprehensive document control of all documents will be provided for the duration of the works. The documentation register/VDSS contains the following information and must be submitted monthly/Weekly/or when required to do so to the Project Manager:

- Documentation number (Employer and Contractor's number).
- Revision number.
- Approval status.
- Location of documentation at that stage.
- Documentation description.
- Reference number

Documents may be submitted as an attachment in an e-mail or hand delivered addressed to the Project Manager and may be copied to others as required in terms of this project. The format for engineering documentation will be as prescribed in the works information. All documents will be managed, controlled and stored in accordance with ISO 9001:2008 Quality Management System or latest available version. The Contractor will maintain a master document list.

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2.3 Health and safety risk management

Project shall adhere to the requirements of the applicable South African Legislation, Eskom Policies, Procedures and Processes. Prior to the Execution of activities, Eskom shall provide the Contractor with a list of hazards associated with the scope as well as SHEQ Specifications for Contractors for the project. The Contractor shall be required to provide a Safety, Health, and Environment Plan (SHE) based on the Client documented SHEQ Specification. The SHEQ Plan will be reviewed by representatives of Tutuka Project Management and Safety Department.

The Contractor shall provide Eskom with a Safety File prior the commencement work execution. During the compilation of the Safety file, the Contractor shall be required to use a SHE Contractor checklist that will be provided by the Client. The SHE File will be reviewed by Tutuka Safety Officer. A Specific rigging plan is required to be submitted by the Contractor and must be reviewed by Employer. If areas for improvement are applicable, for all the documents submitted by the Contractor this will be communicated to the contractor and the contractor will be required to address the comments. ALL contractor documents must be approved by the client (Eskom) prior to work being executed.

The SHE plans shall provide details as to the management of specific aspects as identified within the Client SHE Specification requirements. i.e., creation and implementation of pro-active and reactive plans to effectively address emergency, the emergency communications procedure, incident investigation reports, Radiation protection etc.

- The Contractor always ensures safety awareness through continuous training.
- The Contractor shall always be responsible for the supervision of his employees, agents, and sub-Contractors, and shall take full responsibility and accountability in ensuring that they are competent, compliant and aware of the legal requirements and other applicable requirements and shall execute the works accordingly.
- The Contractor shall ensure that all statutory appointments, and appointments required by any Eskom Policy, standard and Procedure, are recorded in writing and that all its appointees and/or agents fully understand their responsibilities and are trained and competent to execute their duties.
- The Employer, or any person appointed by the Employer, may, at any stage during the term of the contract:
 - Conduct health and safety audits by a competent person regarding all aspects of compliance with the SHEQ requirements, at any off-Site place of work, or the Site establishment of the Contractor.
 - Refuse any employee, sub-Contractor or agent of the Contractor access to the premises if such person has been found to commit an unsafe act or if any work is found not to be compliant or authorized.
 - Issue the Contractor with a STOP WORK ORDER should the Employer become aware of any unsafe working procedure or condition, or any non-compliance.
- The Contractor shall immediately report all incidents as well as any threat to safety and health of which he becomes aware at the Site, to the Project Manager.
- The Contractor agrees that the Employer is relieved of any and all of its responsibilities and liabilities in terms of the Occupational Health and Safety Act no 85 of 1993 in respect of any acts or omissions of the Contractor, and the Contractor's employees, agents or sub-Contractors, to the extent permitted by the Occupational Health and Safety Act no 85 of 1993.

All persons entering the Site shall undergo the Employer's safety induction course.

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Safety of workers

The Contractor is to ensure the safety of all persons working on the Site. Any hot work, including welding, will be applied for in accordance with the permit to work system. No hot work will be allowed on Site unless a hot work permit is granted in writing.

The Contractor shall ensure that all welding, flame cutting and grinding work is properly screened to protect persons from arc flashes or eye injuries. Precautions shall be taken to prevent any objects, welding or grinding sparks from falling beyond the immediate working area. Ear protection and all required PPE shall be provided to all personnel by the Contractor.

ESKOM LIFE-SAVING RULES

1. Eskom places a high value on health and safety and urges every organization that undertakes work for Eskom to do the same.
2. Eskom has developed five life-saving guidelines that will apply to all Eskom employees, agents, consultants, and contractors. Any Eskom employee or employee of a Main Contractor or appointed contractor who fails to follow these rules would be deemed a serious violation. These rules are in place to protect any employee, labour broker, or contractor working from significant injury or death.
3. If any contractual work (including delivery of any product) is to be undertaken on Eskom premises, the rules shall be obeyed by any contractor and their employees.

The rules are:

RULE	DESCRIPTION OF RULE
Rule 1	OPEN, ISOLATE, TEST, EARTH, BOND, AND CREATE AN EQUIPOTENTIAL ZONE BEFORE TOUCH (That is plant, any plant operating above 1000 V)
Rule 2	HOOK UP AT HEIGHTS Working at height is defined as any work performed above a stable work surface or where a person puts himself/herself in a position where he/she exposes himself/herself to a fall from or into.
Rule 3	BUCKLE UP No person may drive any vehicle on Eskom business and/or on Eskom premises: Unless the driver and all passengers are wearing seat belts.
Rule 4	BE SOBER No person is allowed to be under the influence of intoxicating liquor or drugs while on duty
Rule 5	PERMIT TO WORK Where an authorisation limitation exists, no person shall work without the required permit to work.
Rule 6	ENSURE SAFE LIVE WORKING Ensure all live work basic principles are adhered to as outlined for the method being used in the High Voltage Live Working Standard for the respective division.

Eskom will take a zero-tolerance approach to these policies.

Noncompliance to Life-saving rules is regarded serious misconduct and will result in serious disciplinary action, which may include dismissal.

This is to ensure that everyone who works on or visits an Eskom facility returns home

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to their families safely.

Security / Criminal Clearance Check.

- Acceptance of this tender is subject to the condition that both the contracting company's management and its employees will provide Eskom with a clear criminal record not older than thirty (30) days from a reputable screening company. If the principal contractor appoints a subcontractor, the same provisions and measures will apply to the subcontractor.
- Acceptance of the tender is also subject to the condition that the contractor will implement all such security measures for the safe performance of the work as required in the scope of the contract.
- Contractors are to submit proof of verification record(s) (Security clearance) from SAPS or accredited supplier linked to SAPS AFIS system not older than thirty (30) days, as part of Risk Management process in order to curb any threats against the Installation. It is compulsory for these documents to be submitted to Security for verification before access to site is granted. Only individuals with clear criminal records will be considered.
- Contractors are required to submit the SAPS Clearance Certificate obtained by the employee along with a copy of his/her Identity Document or Passport to the site Security Manager. The Security Manager is required to verify the authenticity of the CRC Certificate with SAPS and to cross reference the employee seeking access against known HR databases and site databases to determine if the employee in question has in the past participated in disruptive labour actions and if the individual was dismissed from Eskom and the reason for such dismissal.

Fire Protection

The Contractor shall ensure that adequate firefighting apparatus is provided in all his work sites, and that his employees are trained in the use of this apparatus.

The Contractor shall take precautions to prevent any occurrence of fires or explosions while carrying out any work near flammable gas and liquid systems. Any tampering with the Employer's fire equipment is strictly forbidden. All exit doors, fire escape routes, walkways, stairways, stair landings and access to electrical distribution boards shall be kept free of obstruction and shall not be used for work or storage at any time. Firefighting equipment shall always remain accessible.

In case of a fire, the Contractor shall immediately report the location and extent of the fire to the Electrical Operating Desk using the Emergency Number 5400. The Contractor shall take the necessary action to safeguard the area to prevent injury and spreading of the fire.

Titanium fires are a possibility and are extremely violent if it occurs, water cannot be used to extinguish as water addition will lead to explosions. The Contractor will as part of tender provides a method statement to prevent Titanium fires and possible risk that might occur.

First aid

The Contractor shall provide First Aid services to his employees and sub-Contractors. In the case of severe or serious injury, to his employees and sub-Contractors the Employer's Medical Centre and facilities will be made available and accessible to such persons.

Housekeeping

It is the Contractors responsibility to ensure that the Site is cleaned daily. All electrical cables and hoses are routed so as not to cross unprotected over floors and walkways. All equipment is packed neatly without interference to access. The Contractor is responsible for the removal of any scrap material to the designated scrap area daily. It is the Contractor responsibility to provide own transport for these activities.

Barricading

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Access to danger zones is restricted using handrail type guards at least 1.2 meters high and able to block access to the danger zone. Symbolic safety signs depicting 'Danger' and 'No entry' are attached to the guards. This includes access during the taking of X-rays.

The Contractor must supply their own solid barricading material (SANS approved) and no barricading net will be allowed on site. The Contractor must also barricade the work area and Materials to be used to carry out work. Barricading must not block all access routes for other Contractors and staff. Refer to barricading Tutuka mechanical instruction unique identifier no: 15MNT MMD.1295

Radiographic Examinations

When radiographic tests are carried out in the plant by others, the danger area is evacuated with the exception only of authorized radiographic workers, and thereafter barricaded. To ensure that employees and contract staff working in Eskom premises are not exposed to more radiation than is reasonable level, compliance is with the Tutuka Power Station procedure 'Requirements and Rules for Radiation Protection and Safety of Radiation Sources', reference number 15MNT MSS PC-1267

2.4 Environmental constraints and management

The *Contractor* shall comply with:

- Environmental procedures and work instructions as approved in the Safety File.
- Provisions of NEMA and its SEMAs, and related regulations
- Approved Environmental Management Program (EMPr) for the project.

2.5 Quality assurance requirements

Quality assurance (QA) is any systematic process of determining whether a product or service meets specified requirements. QA establishes and maintains set requirements for developing or manufacturing reliable products, therefore service provider.

- Must conform to Quality Management System-ISO 9001:2015 requirements:
- Service provider will fully conform to the requirement of the Supplier Quality Requirement Specification (QM-58), standards, procedures, Eskom policies and etc
- All activities that need to have Quality control plans (QCP) must be in place which will be developed by the contractor and must be approved by Eskom Engineer prior execution of work.
- The service provider might be subjected to audits. reviews and during the execution of work the client must perform inspections and spot- checks as part of monitoring.
- All documents that will be arising from this project must remain with the client.
- Where applicable the service provider must conform to any statutory requirements
- Where the principal service provider will be sub-contracting, the principal service provider must provide the documented information on how to control and assess the sub-contracted service provider.
- The quality assurance requirements must also be imposed on sub-Contractors and suppliers of material.
- Apart from any statutory data packages required, the Contractor also compiles a data package of the relevant drawings when needed, test certificates, etc., should conform to what is specified in the works information.

The Contractor utilizes their own quality documentation forms for requesting access, erection, checks, etc. These request forms must be submitted to the Employers at least one week prior to the requested activity, or as agreed to by the Project Manager.

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2.6 Programming constraints

The *Contractor* shall submit a single programme that incorporates the programmes of all of his sub-*Contractors* if any. The interface points between his different sub-*Contractors* as well as the interface points between the sub-*Contractors* and the *Contractor* are to be clearly identified in the programme. Project Key Milestones Dates are to be incorporated into the programme.

The baseline must incorporate all Project Activities or efforts necessary to complete the Project, including the *Contractor's* procurement, construction and his sub-*Contractor's* and supplier's work. The *Contractor* shall ensure that all responsible parties not within the *Contractor's* control give the *Contractor* all the necessary cooperation in providing the necessary information needed concerning the details of the work to be scheduled, as well as providing reasonable support to assist the *Contractor* with the integration of all necessary work Activities or *Employer* Milestones into the *Contractor's* Schedule network.

A programme shall be submitted and shall include Milestone dates. The programme shall not reflect any obvious errors related to sequence or timings of the *works*.

For execution, the Project Calendar shall take into consideration the Outage scope of work and contractor shall manage his working hours according to applicable legislation and taking note of the Outage return to service timelines not to be impacted and the calendar must be clearly defined and accepted by the *Project Manager*.

The Schedule will be composed of respective detailed Activities tied together logically. The detailed activity shall comprise of but not limited to the following:

- Sufficient information such as activity duration and description so as to be able to measure accurate progress within the required update period.
- A clearly defined starting point.
- A clearly defined completion points.
- A clear description of the activity to be performed.
- A single source of responsibility or ownership.

2.7 Contractor's management, supervision and key people

The Contractor provides the following key personnel as a minimum:

- *Project Manager*
- *Site manager*
- Site supervisor
- Safety officer
- Authorised supervisors as per Eskom Plant Safety Regulation
- Firewater
- SHE Representative
- Responsible person(s) (RPs) as per Plant Safety Regulations
- Quality Control Officer
- Primavera or Ms Projects Planner/Scheduler.

Interface Management and Coordination with Others

The *Contractor* needs to understand before tendering that:

This is a multi-contractor outage environment.

The *Contractor* acknowledges that the Works will be undertaken during planned outages at Tutuka Power Station and that the Working Areas may be occupied concurrently by the Employer, the Employer's employees, other contractors, subcontractors, service providers and other persons engaged in outage-related activities.

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The *Contractor* shall plan and execute the Works taking full account of the presence and activities of Others and shall cooperate and coordinate its activities with the Employer, Project Manager, Supervisor and Others to ensure the safe and efficient execution of the Works.

The *Contractor* shall not assume exclusive access to any Working Area, equipment, plant, access route, lifting facility or work front unless expressly stated otherwise in the Scope of work.

The *Contractor* shall take note that due to the load of work during outage, the *Contractor* will have to work 2 shifts (24 hours).

2.8 Invoicing and payment

Invoicing and payments of the supplier will be done according to agreed terms and conditions of the NEC - Contract. The project Manager with the Supplier's project manager will assess the proposal for payment based on the scope done and agree on activities to be paid. The Quantity surveyor will check the cost for work done for correctness and verify prior to cost being processed.

The Contractor provides the Employer with a tax invoice showing the amount due for payment equal to that stated in the Project Manager's payment certificate. The Contractor shall address the tax invoice to Eskom Holdings SOC Ltd and include on each invoice the following information:

Name and address of the Contractor and the Project Manager.

The contract number and title;

Contractor's VAT registration number;

The Employer's VAT registration number 4740101508;

Description of service provided for each item invoiced based on the Activity Schedule Option A

Total amount invoiced excluding VAT, the VAT and the invoiced amount including VAT;

Purchase order ...450... number

Issue separate invoices in respect of each Order numbers

Issue separate invoices in respect of each Unit

Rate / Activity to be claimed in accordance with contract

CPA need to refer back to Basic Invoice, together with calculations in accordance with contract

CPA invoices need to be invoiced separately

Local and Foreign invoices to be invoiced separately

Incorrect claim (invoices) should be cancelled with a credit note referring to the incorrect invoice and issue a new invoice.

2.9 Insurance provided by the Employer

Refer to Additional Z clause 13.1 of the contract.

2.10 Contract change management

All changes relating to the contract will be treated accordingly. The following process will be followed: Change will be initiated, followed by negotiation and approval, Implemented, monitored, and closed out accordingly. Reference shall also be made to the latest version of Eskom Procurement & Supply Chain management procedure and policy, Engineering Change Management Procedure as well as Eskom Project Life Cycle Model.

The *Contractor* shall ensure that all approved changes are documented and kept as record.

2.11 Provision of bonds and guarantees

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The form in which a bond or guarantee required by the *conditions of contract* (if any) is to be provided by the *Contractor* is given in Part 1 Agreements and Contract Data, document C1.3, Sureties.

The *Employer* may withhold payment of amounts due to the *Contractor* until the bond or guarantee required in terms of this contract has been received and accepted by the person notified to the *Contractor* by the *Project Manager* to receive and accept such bond or guarantee. Such withholding of payment due to the *Contractor* does not affect the *Employer's* right to termination stated in this contract.

The Contractor shall provide the Employer with a 10% Performance Bond.

2.12 Records of Defined Cost, payments & assessments of compensation events to be kept by the Contractor

In accordance with the NEC ECC3 contract, both parties are obliged to keep contract records for a period of five years. The Project Manager shall have access to these records when needed and shall be provided with copies in hard copy or electronic form.

2.13 Training workshops and technology transfer

Not applicable

3 Engineering and the Contractor's design

3.1 Employer's design

Contractor refers to the *Employer's* scope of work as outlined in the documents with **Unique Identifier: 15ENG GEN-3206** Titled Replacement of Boiler 1 to 5 Air heater Element Packs.

3.2 Parts of the works which the Contractor is to design

Contractor refers to the *Employer's* scope of work as outlined in the documents with **Unique Identifier: 15ENG GEN-3206** Titled Replacement of Boiler 1 to 5 Air heater Element Packs.

3.3 Procedure for submission and acceptance of Contractor's design

Contractor refers to the *Employer's* scope of work as outlined in the documents with **Unique Identifier: 15ENG GEN-3206** Titled Replacement of Boiler 1 to 5 Air heater Element Packs.

3.4 Other requirements of the Contractor's design

Contractor refers to the *Employer's* scope of work as outlined in the documents with **Unique Identifier: 15ENG GEN-3206** Titled Replacement of Boiler 1 to 5 Air heater Element Packs.

3.5 Use of Contractor's design

Contractor refers to the *Employer's* scope of work as outlined in the documents with **Unique Identifier: 15ENG GEN-3206** Titled Replacement of Boiler 1 to 5 Air heater Element Packs.

3.6 Design of Equipment

Contractor refers to the *Employer's* scope of work as outlined in the documents with **Unique Identifier: 15ENG GEN-3206** Titled Replacement of Boiler 1 to 5 Air heater Element Packs.

3.7 Equipment required to be included in the works

Contractor refers to the *Employer's* scope of work as outlined in the documents with **Unique Identifier: 15ENG GEN-3206** Titled Replacement of Boiler 1 to 5 Air heater Element Packs.

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3.8 As-built drawings, operating manuals and maintenance schedules

Contractor refers to the *Employer's* scope of work as outlined in the documents with **Unique Identifier: 15ENG GEN-3206** Titled Replacement of Boiler 1 to 5 Air heater Element Packs.

4 Procurement

4.1 People

Minimum requirements of people employed on the Site

The *Contractor* employs key people as stated in the Section 2.7 of this Contract.

All personnel must possess the relevant skills, knowledge, and qualifications, including professional qualifications where necessary to execute the *works*. Non-skilled labour shall be sourced only locally.

The list of local accommodation shall be provided by the *Employer*.

The *Employer* has the right to submit a list of non-skilled and skilled labour to the *Contractor* for employment.

4.2 BBEE and preferencing scheme

The *Employer* requires the *Contractor* to either maintain or improve the Broad Based Black Economic Empowerment Recognition Level (B-BBEE Recognition Level) as at the Contract Date. The *Contractor* is required to maintain or improve their B-BBEE Recognition Level for the duration of the Contract. Should the Contractor B-BBEE status drops, then clause Z3 will apply.

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

SDL&I Obligation: Eskom will retain 2.5% of every invoice (excluding VAT) as security for the fulfilment of all SDL&I Obligations, Eskom will apply retention of 2.5% of the Contract Value for failure to meet SDL&I obligations. For the duration of the contract. The retained amounts shall only be released to the *Contractor* upon fulfilment of all SDL&I obligations at the end of the contract.

4.4 Subcontracting

4.4.1 Preferred subcontractors

If the *Contractor* subcontract, He is responsible for providing the works as if he had not subcontracted. The contract agreement between the *Contractor* and the *Employer* applies as if a Sub-Contractor's employees and equipment were the *Contractors*. The *Contractor* shall appoint *Subcontractors* as per the Eskom Supplier's Development Localisation and Industrialisation guidance. Advice shall be sought from the SDL&I Advisor.

4.4.2 Subcontract documentation, and assessment of subcontract tenders

The *Contractor* shall submit the proposed condition of contract for each *Subcontractor* to the project manager for acceptance unless otherwise the *Project Manager* agrees that there is no submission required.

4.4.3 Limitations on subcontracting

The limitation in terms of percentage that the *Contractor* subcontract shall be agreed upon by both parties unless otherwise stated on the tender returnable as per the Procurement and Supply Chain management policies and procedures. Specialised work shall be subcontracted accordingly. Sub-contracting to align with skills and competency aligning with *Employer's* scope of work as outlined in the documents with *Contractor* refers to the *Employer's* scope of work as outlined in the documents with **Unique Identifier: 15ENG GEN-3206** Titled Replacement of Boiler 1 to 5 Air heater Element Packs.

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4.5 Plant and Materials

4.5.1 Quality

The Contractor's Quality Control (QC) Manager is responsible for overseeing the overall implementation of the Quality Control Plan and coordinates all project testing, inspections, and reporting matters directly to the Project Manager. The QC Manager has the authority to intercede directly and stop unsatisfactory work and control further processing, delivery, or installation of non-conforming material.

4.5.2 Plant & Materials provided "free issue" by the Employer

All Plant and Material shall be provided by the *Contractor* as per the Scope of work to ensure smooth execution of the works. The *Employer* shall issue scaffolding material as and when required by the *Contractor* during project execution. The *Contractor* shall also make sure that the lifting and rigging equipment within the plant areas are tested and certified. It shall be the *Contractor's* responsibility to produce the certificates of any rigging and lifting equipment.

Contractor refers to the *Employer's* scope of work as outlined in the documents with **Unique Identifier: 15ENG GEN-3206** Titled Replacement of Boiler 1 to 5 Air heater Element Packs.

Contractor's procurement of Plant and Materials

Contractor refers to the *Employer's* scope of work as outlined in the documents with **Unique Identifier: 15ENG GEN-3206** Titled Replacement of Boiler 1 to 5 Air heater Element Packs.

4.5.3 Spares and consumables

The *Contractor* is liable to supply and provide himself or herself with all the necessary consumables required for providing or executing the scope of work. *Contractor* refers to the *Employer's* scope of work as outlined in the documents with **Unique Identifier: 15ENG GEN-3206** Titled Replacement of Boiler 1 to 5 Air heater Element Packs.

4.6 Tests and inspections before delivery

Contractor refers to the *Employer's* scope of work as outlined in the documents with **Unique Identifier: 15ENG GEN-3206** Titled Replacement of Boiler 1 to 5 Air heater Element Packs.

4.7 Marking Plant and Materials outside the Working Areas

The *Contractor* shall book all the equipment's and materials at the security gate, so that they can be identifiable on completion of the work for removal from site. Marking plant and materials outside the working areas intended for this contract to be as per clause 71.1 of the NEC ECC in a case whereby payment must be affected by the *Employer*.

Contractor refers to the *Employer's* scope of work as outlined in the documents with **Unique Identifier: 15ENG GEN-3206** Titled Replacement of Boiler 1 to 5 Air heater Element Packs.

4.8 Contractor's Equipment (including temporary works).

Contractor refers to the *Employer's* scope of work as outlined in the documents with **Unique Identifier: 15ENG GEN-3206** Titled Replacement of Boiler 1 to 5 Air heater Element Packs.

Equipment must conform to the Employer's Safety Standards. Contractor shall provide own compressors and air receivers' which are tested and approved by the third-party inspection authority. DB boards will not be connected unless a valid Certificate of Compliance is issued by competent persons. Lifting equipment to be registered and inspected by an authorised person. The *Contractor* is liable for safe storage of his own tools and equipment to be used during execution.

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4.9 Cataloguing requirements by the Contractor

Not applicable

5 Construction

5.1 Temporary works, Site services & construction constraints

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

All the *Contractor's* employees shall be required to attend a safety induction course/training before they can be allowed to work on the Site. It is the responsibility of the *Contractor* to ensure that all employees have attended the safety induction. The *Contractor* shall compile his/her safety file for approval by the safety officer. The safety officer shall first approve this file, before the *Contractor* can attend the safety induction course. A list of employees requiring safety induction shall be submitted at least 2 days in advance of arrival on site with the date and time of arrival so that safety induction can be arranged. Site access control to Tutuka Power Station will be arranged with the *Project Manager* after successfully completing the safety induction course. Alcohol testing will be conducted at any time on all employees entering the Tutuka Power Station premises. All staff that tested positive for alcohol abuse will not be allowed on site.

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

All vehicles shall comply with the Road Traffic act. Vehicle inspections will be conducted daily and check sheets shall be kept at the Contractor's offices. The *Contractor* and its employees inclusive of visitors and *subcontractors* are not allowed to access any site except the ones referred hereto. Barricaded areas must be respected by the *Contractor* and its employees inclusive of visitors and subcontractors. Access for the *Contractors* visitors and *subcontractors* shall be upon approval of the *Project Manager* and shall be done in advance not on the day of arrival

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

Persons employed by the *Contractor*, and *Contractor's* visitors, may not enter areas not related to the works without the Employer's permission. The *Contractor* shall keep daily records of his employee's working timesheets. Records of employee's conduct and any disciplinary hearings will be in accordance with statutory procedures. *Contractor* shall comply to Labour Relations Act 66 of 1995 as amended, and Basic Conditions of Employment Act as amended.

The working hours for Tutuka Power Station are from 07H00 -16H15. The *Contractor* and its employees shall however be requested to work according to the schedule that may arise from site at any given situation/time during Unit shutdown. The Employer may from time-to-time request all Contractors on site to attend Compulsory Work stoppage which then the *Contractors* will be requested to attend including his sub-contractors.

5.1.4 Health and safety facilities on Site

The medical centre is used by all people on site for injuries and first aid related issues. The Fire Department is also available for fire and other related emergencies. Their respective contact details to be provided during induction. Eskom procedures and policy inclusive of relevant government protocols shall be always adhered to.

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

Refer to section 2.4 of the Contract

5.1.6 Title to materials from demolition and excavation

All demolition/ scrap material to be discarded in a designated location to be decided when the contract has been awarded or dedicated scrap bin within the power station as be their respective classification. The Contractor has no claim to any material from any demolition/Stripping of the old plant material.

5.1.7 Cooperating with and obtaining acceptance of Others

MANUFACTURE, SUPPLY, DELIVERY, REMOVAL AND INSTALLATION OF AIR HEATER ELEMENT PACKS FOR THREE UNITS AT TUTUKA POWER STATION

The *Contractor* co-operates with Others in obtaining and providing information which they need in connection with the works. The *Contractor shall* co-operate to make the stakeholders or other Contractor working space bearable during construction or unit shutdown.

5.1.8 Publicity and progress photographs

The use of the Camera for the enrichment of the *Contractor* is not allowed/prohibited. No photographic material in relation to this contract and in relation to the organisation shall be disclosed to media platform. The *Contractor* is not allowed to take photos that are in relation to works of this contract for progress purposes and permission needs to be sought in advance.

5.1.9 Contractor's Equipment

The *Contractor* has an obligation to keep records of all *his/her* equipment that will be brought to site to provide the works whether hired or owned by the *Contractor*. All necessary certificates certifying the equipment safe for use shall be kept and the *Employer* has the right to request such certificates. All rigging equipment to be tested before putting to work and the *Contractor* is expected to keep records of all the rigging equipment certificates as proof. Scaffolding will be issued by the *Employer*.

5.1.10 Equipment provided by the Employer

The Employer will make available the scaffolding material through the third-party contractor as and when required by the Contractor.

The *Contractor* refers to the *Employer's* scope of work as outlined in the documents with **Unique Identifier: 15ENG GEN-3206** Titled Replacement of Boiler 1 to 5 Air heater Element Packs.

5.1.11 Site services and facilities provided by the Contractor and the Employer

Site Facilities, Utilities and Services		Provided by	
Item	Contractor	Employer	Details
Field Office			
Field office structure	X		
Field office furniture	X		
Field office equipment	X		
Field office supplies	X		
Artisan Staff change facilities	X		
Area for site establishment		X	
Fabrication shops	X		
Resources (Including site contacts)			
Dedicated PSR responsible Person	X		Contractor takes priority to provided
Safety Watch/Officer	X		Form part of Contractor's Crew to provide the Scope of work
Fire Watch	X		
Qualified crane operators	X		
Riggers	X		
Signalmen	X		
Tools			
Erection tools	X		
Special erection tools	X		
Equipment			
Construction equipment	X		
Contractor equipment operator testing	X		
Communication			

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Site Facilities, Utilities and Services		Provided by	
Item	Contractor	Employer	Details
Internet connection	X		
Radio & cell phone communication	X		
Telephone			
Supply telephone main service line			Not applicable
Construction telephone line connection to Contractor field office	X		
Contractor's telephone equipment and system wiring	X		
Electrical Power			
Connection to main power source and maintenance		X	
Construction power primary distribution system and maintenance		X	
Construction power Contractor's distribution system	X		
Construction power Contractor's distribution system maintenance	X		
Structures interior temporary lighting and maintenance	X		
Contractor specific work area temporary lighting and maintenance	X		
General areas site lighting and maintenance	X	X	
Contractor areas site temporary lighting and maintenance	X		
Water - potable and non-potable			
Portable water source supply		X	Contractor to provide all the necessary containers to collect water to the nearest point/source. Alternatively, Contractor to provide his own drinking water.
Sanitary Facilities			
Contractor's structures construction sanitary facilities and maintenance	X		
Access Roads			
Primary access roads and maintenance		X	
Contractor specific access roads and maintenance	X		
Primary access road dust control		X	
General Work-related dust control	X		
Storage Facilities			
Onsite lay-down space		X	During Construction stage
Contractor storage area maintenance	X		
Tool storage facilities	X		

MANUFACTURE, SUPPLY, DELIVERY, REMOVAL AND INSTALLATION OF AIR HEATER ELEMENT PACKS FOR THREE UNITS AT TUTUKA POWER STATION

Site Facilities, Utilities and Services		Provided by		
Item	Contractor	Employer	Details	
Equipment Storage Facilities	X			
Security				
Overall site security		X		
Contractor specific areas security				
Overall site security access card		X		
Medical Facilities				
Onsite first aid/medical services		X		
Medical Centre emergency ambulance		X		
Fire Protection				
Provide own site fire extinguishers	X			
Provision of fire equipment & vehicles		X		
Clean-up				
General refuse offsite disposal		X		
Contractor general refuse collection and onsite disposal	X	x	Contractor to clean his/her area and Employer collect for disposal	
Contractor field office cleaning service	X			
Hazardous waste disposal and clean up	X			
Scaffolding				
Scaffolding supply/erection		X		
Food Services				
Allowed onsite - Yes/No	X		Contractor to provide meals for his teams. Allowed to bring to site	
Tuck-shop		X	Temporarily closed	

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

Not applicable

5.1.13 Survey control and setting out of the works

Not applicable

5.1.14 Excavations and associated water control

Not applicable

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

The *Contractor's* method statement must include how he will deal with known services and any unknown services which become known to the *Contractor* during the execution of the Works. The *Contractor* accepts responsibility for the protection of all pipes, gauges and the plant area. The *Contractor* immediately, and in any event no later than 1 hour, notifies the *Project Manager* if he damages any services.

MANUFACTURE, SUPPLY, DELIVERY, REMOVAL AND INSTALLATION OF AIR HEATER ELEMENT PACKS FOR THREE UNITS AT TUTUKA POWER STATION

The *Contractor* remedies any damage caused or procures the services of a third party to remedy such damage. The *Contractor* is liable for all damages, including damages suffered by Others and third parties, arising from or in connection with all services including the protection of all pipes, gauges, and the plant area.

5.1.16 Control of noise, dust, water and waste

The Contractor shall implement and maintain effective measures to control and minimise noise, dust, water pollution, and waste generation arising from the execution of the Works. The Contractor shall ensure that all activities are carried out in accordance with applicable environmental legislation, the Employer's environmental requirements, and approved SHEQ procedures.

The Contractor shall:

- a) take all reasonable measures to prevent excessive noise emissions and ensure that noise generated from the Works does not adversely affect personnel, operations, the public, or the surrounding environment
- b) implement suitable dust suppression and control measures to prevent nuisance, contamination, and potential health impacts resulting from the Works
- c) prevent the uncontrolled discharge, leakage, or contamination of water resources, drainage systems, and surrounding areas
- d) collect, handle, store, transport, and dispose of all waste generated from the Works in accordance with applicable legal requirements and the Employer's waste management procedures
- e) segregate waste streams where required and ensure that hazardous and non-hazardous waste are managed separately
- f) maintain housekeeping standards within the work areas and remove waste, debris, and unused materials promptly
- g) provide all necessary resources, equipment, and personnel required to comply with the requirements of this clause; and
- h) immediately report any environmental incident, spill, or non-compliance to the Employer and implement corrective actions as instructed.

Failure by the Contractor to comply with the requirements of this clause shall constitute a non-conformance and shall be subject to corrective action in accordance with the Contract.

5.1.17 Sequences of construction or installation

The sequence must be such that minimal disturbance to normal operations and logistics is experienced. The *Contractor* must submit a construction method statement, program, QCP, and EMP to the *Employer* for the *Employers* approval before commencement of any works. The *Contractor* shall give access of the working areas to Others where technical reasons are concerned.

5.1.18 Giving notice of work to be covered up

The *Contractor* is responsible for giving notice of work to the department of labour. The *Contractor* will give notice to the *Project Supervisor(s)* well in advance at least 24 hours for any works that needs to be covered in this contract for the purpose of proper planning. Additionally, taking into account the communication clause on the NEC ECC.

5.1.19 Hook ups to existing works

The *Contractor* shall not hook up to any existing structure/works unless permission sought and is granted by the Employer. In cases whereby the *Employer/ Project Manager* are not reachable the *Contractor* shall use his/her discretion on the basis that safety has been observed and there are hazard conditions observed.

6 Completion, testing, commissioning and correction of Defects**6.1 Work to be done by the Completion Date**

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On or before the Completion Date the *Contractor* shall have done everything required to Provide the Works except for the work listed below which may be done after the Completion Date but in any case before the dates stated. The *Project Manager* cannot certify Completion until all the work except that listed below has been done and is also free of Defects which would have, in his opinion, prevented the *Employer* from using the *works* and Others from doing their work.

	Item of work	To be completed by
	As built drawings of	Within days after Completion
	Performance testing of the <i>works</i> in use as specified in paragraph of this Works Information.	See performance testing requirements.

6.2 Use of the works before Completion has been certified

Contractor refers to the *Employer's* scope of work as outlined in the documents with **Unique Identifier: 15ENG GEN-3206** Titled Replacement of Boiler 1 to 5 Air heater Element Packs.

6.3 Materials facilities and samples for tests and inspections

Contractor refers to the *Employer's* scope of work as outlined in the documents with **Unique Identifier: 15ENG GEN-3206** Titled Replacement of Boiler 1 to 5 Air heater Element Packs.

6.4 Commissioning

The purpose of the construction commissioning plan is to provide quality direction for the commissioning process during construction, particularly providing resolution for issues and providing details not anticipated.

For control and monitoring purposes, the appointed *Contractor* will document in detail all relevant and necessary check lists as part of the commissioning outputs that will validate the planned and executed activities. The check sheets will be developed in detail that will monitor and reports be submitted to the Employer. All reports will be signed off by all parties involved. A project sequential construction checklists and Start-up and Initial Systems Checkout Plan will be developed in more details.

The Contractor shall be fully responsible for installation of all equipment related to the scope of the project, they shall also be responsible for the execution of all construction checklists, electrical inspection checklists, leading all electrically required test as per the SOW, mechanically commissioning, and C&I commissioning, and when required all start-up and checkout forms. The *Contractor* refers to the *Employer's* scope of work as outlined in the documents with **Unique Identifier: 15ENG GEN-3206** Titled Replacement of Boiler 1 to 5 Air heater Element Packs.

6.5 Start-up procedures required to put the works into operation

A start up procedure will be compiled by the *Contractor* and reviewed by the *Employer's engineers* in advance before starting up can be done. The Contractor will work in conjunction with the appointed Operator and relevant team of the plant to put the works into operation after it has been cleared to be safe for use.

The Contractor refers to the *Employer's* scope of work as outlined in the documents with **Unique Identifier: 15ENG GEN-3206** Titled Replacement of Boiler 1 to 5 Air heater Element Packs.

6.6 Take over procedures

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The *Employer* will take over the plant on Completion. The *Contractor* will need to be on standby for the first early days which will be agreed upon by both parties after hand over and must provide further assistance when required to do so by the *Employer*.

The *Contractor* refers to the *Employer's* scope of work as outlined in the documents with **Unique Identifier: 15ENG GEN-3206** Titled Replacement of Boiler 1 to 5 Air heater Element Packs.

6.7 Access given by the Employer for correction of Defects

The *Project Manager* arranges with the *Employer* to allow the *Contractor* access to and use part of the works which has been taken over if needed to correct a Defect after the works have been put into operation. Plant safety regulation rule will apply at all instances.

6.8 Performance tests after Completion

Not Applicable

6.9 Training and technology transfer

Not applicable

6.10 Operational maintenance after Completion

Not applicable

7 Plant and Materials standards and workmanship

7.1 Investigation, survey and Site clearance

Not applicable

7.2 Building works

Not applicable

7.3 Civil engineering and structural works

Not applicable

7.4 Electrical & mechanical engineering works

The *Contractor* refers to the *Employer's* scope of work as outlined in the documents with **Unique Identifier: 15ENG GEN-3206** Titled Replacement of Boiler 1 to 5 Air heater Element Packs.

7.5 Process control and IT works

Not applicable

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8 List of drawings

8.1 Drawings issued by the Employer

This is the list of drawings issued by the *Employer* at or before the Contract Date and which apply to this contract.

Note: Some drawings may contain both Works Information and Site Information.

Drawing number	Revision	Title

C3.2 *CONTRACTOR'S* WORKS INFORMATION

This section of the Works Information will always be contract specific depending on the nature of the *works*. It is most likely to be required for design and construct contracts where the tendering contractor will have proposed specifications and schedules for items of Plant and Materials and workmanship, which once accepted by the *Employer* prior to award of contract now become obligations of the *Contractor* per core clause 20.1.

Typical sub headings could be

- a) *Contractor's* design
- b) Plant and Materials specifications and schedules
- c) Other

This section could also be compiled as a separate file.

PART 4: SITE INFORMATION

Document reference	Title	
C4	This cover page	
	Site Information	
	Total number of pages	

MANUFACTURE, SUPPLY, DELIVERY, REMOVAL AND INSTALLATION OF AIR HEATER ELEMENT PACKS FOR THREE UNITS AT TUTUKA POWER STATION

PART 4: SITE INFORMATION

General description

Tutuka Power station is in Mpumalanga province just 26 km outside Standerton town. The town approximately 200 km southeast of Johannesburg. It is surrounded by farms and a coal mine next to it. It is about 60 km from Secunda, 140 from Emalahleni and 150 km from Middleburg.



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

Subsoil information

Not applicable

Hidden services

None known of at the time of tender

Other reports and publicly available information

Nothing noted and available at issuing of tender that the Employer is aware of.

MANUFACTURE, SUPPLY, DELIVERY, REMOVAL AND INSTALLATION OF AIR HEATER ELEMENT PACKS FOR THREE UNITS
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Annexure B

KPI Category	Key Performance Indicator	Weight (%)	Performance Rating (1–5)
Safety Performance	Compliance with all Eskom SHEQ	40	5 Excellent 4 Very Good 3 Satisfactory 2 Needs Improvement 1 Unsatisfactory
Programme Performance	Completion of manufacture, delivery, removal and installation activities in accordance with the approved outage Programme and contractual milestones.	25	5 Excellent 4 Very Good 3 Satisfactory 2 Needs Improvement 1 Unsatisfactory
De livery & Logistics	Timely manufacture, packaging, transportation and delivery of all materials and equipment to support the planned outage schedule.	25	5 Excellent 4 Very Good 3 Satisfactory 2 Needs Improvement 1 Unsatisfactory
Documentation & Contract Administration	Submission of programmes, quality documentation, inspection records, material certificates, early warnings and contractual notices.	10	5 Excellent 4 Very Good 3 Satisfactory 2 Needs Improvement 1 Unsatisfactory
TOTAL		100	