



NEC3 Term Service Contract (TSC3)

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

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

for **THE PROVISION OF MPS265 MILL GRINDING
ROLLER REFURBISHMENT SERVICES FOR MEDUPI
POWER STATION FOR A PERIOD OF 60 MONTHS**

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CONTRACT No.

PART C1: AGREEMENTS & CONTRACT DATA

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C1.2b Contract Data provided by the <i>Contractor</i>		
C1.3 Proforma Guarantees		

C1.1 Form of Offer & Acceptance

1.1 Offer

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

THE PROVISION OF MPS265 MILL GRINDING ROLLER REFURBISHMENT SERVICES FOR MEDUPI POWER STATION FOR A PERIOD OF 60 MONTHS

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
	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:

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*.

1.2 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: Service 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 and signed original copy of this document, including the Schedule of Deviations (if any).

Signature(s)

Name(s)

Capacity

**for the
Employer**

(Insert name and address of organisation)

Name &
signature of
witness

Date

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

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

Note:

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

No.	Subject	Details
1		
2		
3		
4		
5		
6		
7		

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

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

For the tenderer:

For the Employer

Signature _____

Name _____

Capacity _____

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

(Insert name and address of organisation)

Name & signature of witness _____

Date _____

C1.2 TSC3 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:	
		A: Priced contract with price list
	dispute resolution Option	W1: Dispute resolution procedure
	and secondary Options	
		X1: Price adjustment for inflation
		X2 Changes in the law
		X13 Performance bond
		X17: Low service damages
		X18: Limitation of liability
		X19: Task Order
		Z: Additional conditions of contract
	of the NEC3 Term Service Contract April 2013 ² (TSC3)	
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>Service Manager</i> is (name):	
	Address	Medupi Power Station, Steenbokpan Road
	Tel	014 762
	e-mail	
11.2(2)	The Affected Property is	Medupi Power Station
11.2(13)	The <i>service</i> is	Refurbishment of MPS265 Mill grinding rollers
11.2(14)	The following matters will be included in the Risk Register	All risks will be proactively identified, registered, and addressed during the risk register meeting that will take place as agreed

² Available from Engineering Contract Strategies Tel 011 803 3008 Fax 086 539 1902 www.ecs.co.za

between the parties		
11.2(15)	The Service Information is in	Part 3: Scope of Work 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	5 working days
2	The Contractor's main responsibilities	
21.1	The <i>Contractor</i> submits a first plan for acceptance within	4 weeks of the Contract Date
3	Time	
30.1	The <i>starting date</i> is.	TBC
30.1	The <i>service period</i> is	60 Months
4	Testing and defects	
40.3	The <i>Contractor</i> notifies the <i>Service Manager</i>	24 hours for a test or inspection to be done
42.2	The <i>Contractor</i> corrects notified Defects within	7 days of receiving the notification
5	Payment	
50.1	The <i>assessment interval</i> is	between the 25th day of each successive month.
51.1	The <i>currency of this contract</i> is the	South African Rand
51.2	The period within which payments are made is	30 calendar days after reception of a valid tax invoice for contracts valued below R50 000 0000.00 (Fifty Million Rands) excluding VAT. 60 calendar days after reception of a valid tax invoice for contracts valued R50 000 0000.00 (Fifty Million Rands) excluding VAT and above
51.4	The <i>interest rate</i> is	the publicly quoted prime rate of interest (calculated on a 365 day year) charged by 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
6	Compensation events	
		As per NEC3 TSC Core clause 6
7	Use of Equipment Plant and Materials	
		As per NEC3 TSC Core clause 7
8	Risks and insurance	
80.1	These are additional <i>Employer's</i> risks	All risks will be proactively identified, registered, and addressed during the risk

		register meeting that will take place as agreed between the parties.
9	Termination	As per NEC3 TSC Core clause 9
10	Data for main Option clause	
A	Priced contract with price list	
20.5	The <i>Contractor</i> prepares forecasts of the final total of the Prices for the whole of the service at intervals no longer than	4 weeks.
11	Data for Option W1	
W1.1	The <i>Adjudicator</i>	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	1st Floor, Maisels Chamber, 4 Protea Place, Sandton
	Tel No.	011 320 0600
	Fax No.	011 320 0533
	e-mail	info@arbitration.co.za
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 Institution of Civil Engineers (London) (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	South Africa
	The person or organisation who will choose an arbitrator	
	- if the Parties cannot agree a choice or	the Chairman for the time being or his nominee
	- if the arbitration procedure does not state who selects an arbitrator, is	of the Association of Arbitrators (Southern Africa) or its successor body.
12	Data for secondary Option clauses	
X1	Price adjustment for inflation	Suggested CPA
X1.1	The <i>base date</i> for indices is	Month prior tender closing date. CPA will apply from months 13

e	The proportions used to calculate the Price Adjustment Factor are:	Proportion	linked to index for	Index prepared by												
		0,40	[Labour]	[SEIFSA TABLE C3 AHPE]												
		0,25	[Material]	[SEIFSA TABLE G1 – [Mechanical Engineering]												
		0.15	[Transport]	[SEIFSA TABLE L2 B]												
		0,05	Plant Machinery	[SEIFSA TABLE P2] – Lifting and Handling equipment												
		[0,15]	non-adjustable													
		1.00														
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.														
X13	Performance bond															
X13.1	The amount of the performance bond is	R [This clause is depended on the outcome of financial analysis viability]														
X17	Low service damages															
X17.1	The <i>service level table</i> is in	<table><tr><th>Description</th><th>Penalty</th></tr><tr><td>Plant rework</td><td>R nil/ overtime</td></tr><tr><td>Poor workmanship(reworks)</td><td>Contractor to carry corrective cost</td></tr><tr><td>Compliance to SOW schedule (late delivery)</td><td>R10 000 per day overdue as per agreed schedule until delivered</td></tr><tr><td>Roller failure under warranty</td><td>Contractor to carry corrective cost</td></tr><tr><td>Roller complies to customer specification</td><td>Contractor to carry corrective cost within defect correct period</td></tr></table>			Description	Penalty	Plant rework	R nil/ overtime	Poor workmanship(reworks)	Contractor to carry corrective cost	Compliance to SOW schedule (late delivery)	R10 000 per day overdue as per agreed schedule until delivered	Roller failure under warranty	Contractor to carry corrective cost	Roller complies to customer specification	Contractor to carry corrective cost within defect correct period
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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 of an item of Equipment is limited to	The greater of the total of the Prices at the 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 the excluded matters, is limited to	<p>and the amounts excluded and unrecoverable from the <i>Employer's</i> insurance) plus the applicable deductibles</p> <p>the total of the Prices other than for the additional excluded matters.</p> <p>The <i>Contractor's</i> total liability for the additional excluded matters is not limited.</p> <p>The additional excluded matters are amounts for which the <i>Contractor</i> is liable under this contract for</p> <p>Defects due to his design, plan and specification, Defects due to manufacture and fabrication outside the Affected Property, loss of or damage to property (other than the <i>Employer's</i> property, Plant and Materials), death of or injury to a person and infringement of an intellectual property right.</p> <p>12 months after the end of the <i>service period</i>.</p>
X18.5	The <i>end of liability date</i> is	
X19	Task Order	
X19.5	The <i>Contractor</i> submits a Task Order programme to the <i>Service Manager</i> within	7 days of receiving the Task Order
Z	The additional conditions of contract are	Z1 to Z14 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 *Service Manager* within two weeks of the Contract Date of the key person who has the authority to bind the *Contractor* on their behalf.
- Z2.3 The *Contractor* does not alter the composition of the joint venture, consortium or other unincorporated grouping of two or more persons without the consent of the *Employer* having been given to the *Contractor* in writing.

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

- Z3.1 Where a change in the *Contractor's* legal status, ownership or any other change to his business composition or business dealings results in a change to the *Contractor's* B-BBEE status, the *Contractor* notifies the *Employer* within seven days of the change.
- Z3.2 The *Contractor* is required to submit an updated verification certificate and necessary supporting documentation confirming the change in his B-BBEE status to the *Service Manager* within thirty days of the notification or as otherwise instructed by the *Service 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 Service.
- 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 P4 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 *Service 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 Affected Property or any portion thereof, in the course of Providing the Service and after the end of the *service period*, requires the prior written consent of the *Service 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 *Service Manager* or the *Adjudicator* does not constitute a waiver of rights, and does not give rise to an estoppel unless the Parties agree otherwise and confirm such agreement in writing.

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

- Z6.1 The *Contractor* undertakes to take all reasonable precautions to maintain the health and safety of persons in and about the execution of the *service*. 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 Affected Property; 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 the *service*; and undertakes, in and about the execution of the *service*, 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 *service*, 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 *Service 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 Service 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 the last paragraph of core clause 61.3 and replace with:

If the *Contractor* does not notify a compensation event within eight weeks of becoming aware of the event, he is not entitled to a change in the Prices.

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 82.1 is provided for in 60.1(12) and the *Employer's* liability under the indemnity is limited to compensation as provided for in core clause 63 and X19.11 if Option X19 Task Order applies to this contract.

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

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

Z11 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 <i>Contractor</i> 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 <i>Contractor</i> , or any member thereof in the case of a joint venture, or its employees, agents, or Subcontractors 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.

Z11.1 A Committing Party may not take any Prohibited Action during the course of the procurement of this contract or in execution thereof.

Z11.2 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.

Z11.3 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.

Z11.4 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.

Z12 Insurance**Z 12 .1 Replace core clause 83 with the following:****Insurance cover 83**

83.1 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.

- 83.2 The *Contractor* provides the insurances stated in the Insurance Table A 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 caused by the <i>Contractor</i> to the <i>Employer's</i> property	The replacement cost where not covered by the <i>Employer's</i> insurance. The <i>Employer's</i> policy deductible as at Contract Date, where covered by the <i>Employer's</i> insurance.
Loss of or damage to Plant and Materials	The replacement cost where not covered by the <i>Employer's</i> insurance. The <i>Employer's</i> policy deductible as at Contract Date, where covered by the <i>Employer's</i> insurance.
Loss of or damage to Equipment	The replacement cost where not covered by the <i>Employer's</i> insurance. The <i>Employer's</i> policy deductible as at Contract Date, where covered by the <i>Employer's</i> insurance.
The <i>Contractor's</i> liability for loss of or damage to property (except the <i>Employer's</i> property, Plant and Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the <i>Contractor</i>) arising from or in connection with the <i>Contractor's</i> Providing the Service	<u>Loss of or damage to property</u> The replacement cost <u>Bodily injury to or death of a person</u> The amount required by the 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 12.2 Replace core clause 86 with the following:

**Insurance
by the
*Employer***

86

- 86.1 The *Employer* provides the insurances stated in the Insurance Table B

INSURANCE TABLE B

Insurance against or name of policy	Minimum amount of cover or minimum limit 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

Z13 Nuclear Liability

- Z13.1 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.
- Z13.2 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 44 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*.
- Z13.3 Subject to clause Z13.4 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*.
- Z13.4 The *Employer* does not waive its rights provided for in section 30 (7) of Act 44 of 1999, or any replacement section dealing with the same subject matter.
- Z13.5 The protection afforded by the provisions hereof shall be in effect until the KNPS is decommissioned.

Z14 Asbestos

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

- AAIA** means approved asbestos inspection authority.
- ACM** means asbestos containing materials.
- AL** means action level, i.e. a level of 50% of the OEL, i.e. 0.1 regulated asbestos fibres

per ml of air measured over a 4 hour period. The value at which proactive actions is required in order to control asbestos exposure to prevent exceeding the OEL.

Ambient Air	means breathable air in area of work with specific reference to breathing zone, which is defined to be a virtual area within a radius of approximately 30cm from the nose inlet.
Compliance Monitoring	means compliance sampling used to assess whether or not the personal exposure of workers to regulated asbestos fibres is in compliance with the Standard's requirements for safe processing, handling, storing, disposal and phase-out of asbestos and asbestos containing material, equipment and articles.
OEL	means occupational exposure limit.
Parallel Measurements	means measurements performed in parallel, yet separately, to existing measurements to verify validity of results.
Safe Levels	means airborne asbestos exposure levels conforming to the Standard's requirements for safe processing, handling, storing, disposal and phase-out of asbestos and asbestos containing material, equipment and articles.
Standard	means the <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.

Z14.1 The *Employer* ensures that the Ambient Air in the area where the *Contractor* 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.

Z14.2 Upon written request by the *Contractor*, the *Employer* certifies that these conditions prevail. All measurements and reporting are effected by an independent, competent, and certified occupational hygiene inspection body, i.e. a SANAS accredited and Department of Employment and Labour approved AAIA. The *Contractor* may perform Parallel Measurements and related control measures at the *Contractor's* expense. For the purposes of compliance the results generated from Parallel Measurements are evaluated only against South African statutory limits as detailed in clause Z14.1. Control measures conform to the requirements stipulated in the AAIA-approved asbestos work plan.

Z14.3 The *Employer* manages asbestos and ACM according to the Standard.

Z14.4 In the event that any asbestos is identified while Providing the Services, a risk assessment is conducted and if so required, with reference to possible exposure to an airborne concentration of above the AL for asbestos, immediate control measures are implemented and relevant air monitoring conducted in order to declare the area safe.

Z14.5 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.

Z14.6 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.

- Z14.7 Any removal and disposal of asbestos, asbestos containing materials and waste, is done by a registered asbestos contractor, instructed by the *Employer* at the *Employer's* expense, and conducted in line with South African legislation.

C1.2 Contract Data

2 Part two - Data provided by the *Contractor*

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(14)	The following matters will be included in the Risk Register	
11.2(15)	The Service Information for the <i>Contractor's</i> plan is in:	
21.1	The plan identified in the Contract Data is contained in:	
24.1	The key people are: 1 Name: Job: Responsibilities: Qualifications: Experience: 2 Name: Job: Responsibilities: Qualifications: Experience:	

CV's (and further key person's data including CVs) are in _____.

A	Priced contract with price list
11.2(12)	The <i>price list</i> is in _____
11.2(19)	The tendered total of the Prices is R _____

PART 2: PRICING DATA

TSC3 Option A

Document reference	Title	No of pages
C2.1	Pricing assumptions: Option A	2
C2.2	The <i>price list</i>	[•]

C2.1 Pricing assumptions: Option A

3 How work is priced and assessed for payment

Clause 11 in NEC3 Term Service Contract (TSC3) core clauses and Option A states:

Identified and defined terms	11 11.2	(12) The Price List is the <i>price list</i> unless later changed in accordance with this contract. (17) The Price for Services Provided to Date is the total of <ul style="list-style-type: none">the Price for each lump sum item in the Price List which the <i>Contractor</i> has completed andwhere a quantity is stated for an item in the Price List, an amount calculated by multiplying the quantity which the <i>Contractor</i> has completed by the rate. (19) The Prices are the amounts stated in the Price column of the Price List. Where a quantity is stated for an item in the Price List, the Price is calculated by multiplying the quantity by the rate.
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This confirms that Option A is a priced contract where the Prices are derived from a list of items of service which can be priced as lump sums or as expected quantities of service multiplied by a rate or a mix of both.

4 Function of the Price List

Clause 54.1 in Option A states: "Information in the Price List is not Service Information". This confirms that instructions to do work or how it is to be done are not included in the Price List but in the Service Information. This is further confirmed by Clause 20.1 which states, "The *Contractor* Provides the Service in accordance with the Service Information". Hence the *Contractor* does **not** Provide the Service in accordance with the Price List. The Price List is only a pricing document.

5 Link to the *Contractor's* plan

Clause 21.4 states "The *Contractor* provides information which shows how each item description on the Price List relates to the operations on each plan which he submits for acceptance". Hence when compiling the *price list*, the tendering contractor needs to develop his first clause 21.2 plan in such a way that operations shown on it can be priced in the *price list* and result in a satisfactory cash flow in terms of clause 11.2(17).

6 Preparing the *price list*

Before preparing the *price list*, both the *Employer* and tendering contractors should read the TSC3 Guidance Notes pages 14 and 15. In an Option A contract, either Party may have entered items into the *price list* either as a process of offer and acceptance (tendering) or by negotiation depending on the nature of the *service* to be provided. Alternatively 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 the *price list* to be prepared and priced by him.

It is assumed that in preparing or finalising the *price list* the *Contractor*:

- Has taken account of the guidance given in the TSC3 Guidance Notes relevant to Option A;
- Understands the function of the Price List and how work is priced and paid for;
- Is aware of the need to link operations shown in his plan to items shown in the Price List;
- Has listed and priced items in the *price list* which are inclusive of everything necessary and incidental to Providing the Service in accordance with the Service 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 item within the Prices or rates of other listed items in order to fulfil the obligation to complete the *service* for the tendered total of the Prices.
- Understands there is no adjustment to items priced as lump sums if the amount, or quantity, of work within that item later turns out to be different to that which the *Contractor* estimated at time of tender. The only basis for a change to the (lump sum) Prices is as a result of a compensation event.

6.1 Format of the *price list*

(From the example given in an Appendix within the TSC3 Guidance Notes)

Entries in the first four columns in the *price list* in section C2.2 are made either by the *Employer* or the tendering contractor.

If the *Contractor* is to be paid an amount for the item which is not adjusted if the quantity of work in the item changes, the tendering contractor enters the amount in the Price column only, the Unit, Expected Quantity and Rate columns being left blank.

If the *Contractor* is to be paid an amount for an item of work which is the rate for the work multiplied by the quantity completed, the tendering contractor enters the rate which is then multiplied by the Expected Quantity to produce the Price, which is also entered.

If the *Contractor* is to be paid a Price for an item proportional to the length of time for which a service is provided, a unit of time is stated in the Unit column and the expected length of time (as a quantity of the stated units of time) is stated in the Expected Quantity column.

C2.2 the *price list*

Item Nr	Description		Unit of measurement	Expected Quantity for a period of 5 years	Rate	AMOUNT
	<u>PREAMBLES</u>	SCOPE				
	The Contractor is required to repair and/or fabricate to the best standard and conditions or replace those parts that are damaged.		Note			
	The Contractor is required to arrange all the necessary spares required for the refurbishment activities. See Appendix A.1 of the scope document for a list of applicable spares. List to be used as reference, and not as complete list of spares that should be supplied by the Contractor		Note			
1	PRELIMINARY & GENERAL ITEMS					
1.1	Collection of Roller at Medupi power station	Collection including lifting with appropriate lifting equipment and loading	Each	45	R	
1.2	Delivery of Roller at Medupi power station	Delivery including offloading with appropriate lifting equipment and offloading	Each	45	R	
2	GENERAL REFURBISHMENT					
	<u>Repairs</u>					
2.1	Strip, clean and Inspect	Repair (Skim face)	Each	45	R	
2.2	Outer bearing retainer cover	Repair (Skim face)	Each	45	R	
2.3	Bearing retainer plate	Repair (Skim face)	Each	45	R	

2.4	Yoke/Axel retainer ring	Repair (Skim face)	Each	45	R	
2.5	Seal Mandrill (Seal wearing bush)	New (New + grind, chrome, grind)	Each	45	R	
2.6	NU / Sleeve Retainer Ring	Repair (Skim face)	Each	45	R	
2.7	NU / Retainer Cover	New	Each	45	R	
2.8	Inner / Air Seal Cover	New	Each	45	R	
2.9	Tyre Retainer Lock Ring	Repair (Linish)	Each	45	R	
2.10	Roller Hub	New (Sleeve dia 830 bore)	Each	45	R	
2.11	Roller Axel	Repair (Grind chrome grind)	Each	45	R	
2.12	Yoke	Repair (bolt holes)	Each	45	R	
2.13	Outer Air Seal Ring	New	Each	45	R	
2.14	Top yoke wear protection 5	New	Each	45	R	
2.15	Stretch Cap Screw	New (For lock wedge)	Each	540	R	
2.16	Fastener Set	New (Set)	Each	45	R	
2.17	O-Rings Viton 850x10	New	Each	45	R	
2.18	O-Rings Viton 530x10	New	Each	45	R	
2.19	O-Rings Viton 430x7	New	Each	45	R	
2.20	Assy Roller & Yoke	New	Each	45	R	
2.21	Sealing ring; A 33 x 39 x 2; Material: CU/ISOPLAN	New	Each	135	R	
2.22	Sealing ring; A 10 x 14 x 1; Material: CU/ISOPLAN	New	Each	180	R	
2.23	Wear protection plate 2, LH; Plate 524 x 957 x25, Material- Hardox	New (Integra 100 6/6 S355 backplate)	Each	45	R	
2.24	Wear protection plate 2, RH; Plate 524 x 957 x25, Material- Hardox	New (Integra 100 6/6)	Each	45	R	
2.25	Wear protection plate 4 (bottom); Plate 861 x 299 x 10, Material: EN 1,0038	New (S355 Back plate & ceramic tiles 12mm)	Each	45	R	
2.26	Tube Protection box; 508 x 11	New	Each	45	R	
2.27	Plate for protection box; Plate 10	New	Each	45	R	
2.28	Clamping ring; 1531 / 1165 x 190	New	Each	45	R	
2.29	Venting filter; ANSELM-F1451 / G 1/8	New	Each	45	R	
2.30	Clamping disk plate; Plate 45	New	Each	45	R	
2.31	SEAL RING Mill Grinding - RADIAL SHAFT SEALING WCL FKM, Material - VITON (WITH	New	Each	90	R	

	REINFORCING CAP & LIP), NORM: DIN 3760					
2.32	Back of bearing plate Clamping ring; plate 533 x 533 x35	New	Each	45	R	
2.33	Feather key; 90 x 45 x 272	New	Each	90	R	
3	BEARINGS REFURBISHMENT					
	The following section covers refurbishment activities to be done to the bearings. Due to the nature of refurbishment work and the uncertainty of the extent of damage to the bearings. Different levels of refurbishment have been allowed for and are represented by percentage (%) to describe the severity and/or extent of the refurbishment/repair work to be done on the bearings.					
	The Engineer, following all due diligence and based on the extent of the damage, will advise on the appropriate category of refurbishment					
	Item 3.4 and 3.8 of the scope will only be applicable if Eskom will not be supplying (free issuing) the bearing component, therefore items should be treated as <u>RATE ONLY</u> for tendering purposes.					
	<u>Bearing Type 1</u>					
3.1	Cylindrical roller bearing - single row - NU31/500 (Damage less than 25%)	Repair	Each	10	R	
3.2	Cylindrical roller bearing - single row - NU31/500 (Damage between 25% - 50%)	Repair	Each	20	R	
3.3	Cylindrical roller bearing - single row - NU31/500 (Damage between 50% - 75%)	Repair	Each	15	R	
3.4	Cylindrical roller bearing - single row - NU31/500 (Damage greater than 75%)	New (Contractor to source new spare)	Each	45	R	
	<u>Bearing Type 2</u>					
3.5	Self-aligning roller bearing - double row - 24164 (Damage less than 25%)	Repair	Each	10	R	
3.6	Self-aligning roller bearing - double row - 24164 (Damage between 25% - 50%)	Repair	Each	20	R	

3.7	Self-aligning roller bearing - double row - 24164 (Damage between 50% - 75%)	Repair	Each	15	R	
3.8	Self-aligning roller bearing - double row - 24164 (Damage greater than 75%)	New (Contractor to source new spare)	Each	45	R	
4	YOKE REFURBISHMENT					
	The following section covers refurbishment activities to be done to the yoke. Due to the nature of refurbishment work and the uncertainty of the extent of damage to the yoke. Different levels of refurbishment have been allowed for and are represented by percentage (%) to describe the severity and/or extent of the refurbishment/repair work to be done on the yoke.					
	The Engineer, following all due diligence and based on the extent of the damage, will advise on the appropriate category of refurbishment					
	Item 4.3 and 4.4 of the scope should be treated as RATE ONLY for tendering purposes.					
4.1	Yoke - Minor (Damage less than 30%)	Repair - weld only	Each	15	R	
4.2	Yoke - Intermediate (Damage between 30% - 70%)	Repair - insert and weld	Each	30	R	
4.3	Yoke - Major (Damage greater than 70%)	New (Contractor to source new spare)	Each	45	R	
4.4	Yoke - Lower pan seat	New (Contractor to source new spare)	Each	45	R	

The quantities are provisional and the contract duration is for 5 years

Allowance for unnamed spares will be paid at Actual Cost using direct fee percentage.

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3 Description of the service

3.1 Executive overview

Medupi Power Station has a requirement for 20 MPS265 Mill Grinding Rollers to be refurbished for all Mills that will be overhauled for a period of 60 months. This will improve the reliability of the milling plant and hence Medupi UCLF. This document describes the details of the scope of work, standards, quality requirements, specifications, terms & conditions as well as the criteria to qualify for the tender.

3.2 Employer's requirements for the service

3.1 Requirements

3.1.1 Contract Roles and Responsibilities

- a) The *Contractor* shall be required to perform major refurbishment of at least 3 grinding rollers at a time within at most a period of 31 calendar days inclusive of collection and delivery to Medupi Power Station site; to a total of 45 rollers by the end of the contract.
- b) The *Contractor* shall be expected to collect and deliver the rollers from/to Medupi Power Station. The transportation costs should be included in the quotation.
- c) The *Contractor* entered into, with the Contractor is non-exclusive and work against this contract can only be performed upon receipt of a Task Order.
- d) The *Contractor* shall ensure that he/she has all the necessary tools, equipment as well as lifting equipment (including a pick and carry crane, 27 ton or above) required to load, transport and off load the grinding rollers.

Note: All lifting equipment utilised by the *Contractor* on Medupi Site and at the *Contractor's* premises; must have the appropriate load test certifications which are valid during the period of use. Copies of such documentation shall be made available for review by the Employer at any time both on Medupi site and at the *Contractor's* workshop.

- e) The *Contractor* is required to repair and/or fabricate to the best standard and conditions or replace those parts that are damaged and for which spares are not readily available, such as protection plates. Such fabrications or repairs must be according to drawings tolerances and quality standards. The client must do quality checks and accept such fabricated or repaired parts before they can be installed on grinding rollers.
- f) It will be advisable for the Contractor to keep minimum spares on shelf, to allow for speedy refurbishment process, especially for long lead items such as bearings, wear bushes, oil seal rings and the yoke, to mention a few.
- g) The *Contractor* may be required to source and supply a specific (minimum) number of yokes at an ad hoc basis, to Eskom; should there be a need for other works on site. This will be done in such a way that the number of yokes contracted in this scope is not exceeded and will be based on assessment between Eskom and the *Contractor*.
- h) The *Contractor* shall make available all the spares listed in Appendix A, and any other spares not listed but relevant; to aid in the refurbishment of the rollers.

3.1.2 Continuous Improvement

- a) The *Contractor* shall implement a program of continuous improvement to optimise component performance and reduce system and equipment failures.
- b) The *Contractor* shall participate in improvement programs as stipulated by the *Employer*.
- c) The *Contractor* shall compile improvement programmes to enhance plant performance and achieve cost reductions and the *Employer* will approve such programmes.

3.1.3 Management and Reporting

- a) Liaison meetings shall be held with the *Employer's* representative or his/her delegate on an ad hoc basis to discuss progress, technical details, or any concerns relating to the contract or scope.
- b) The *Contractor* shall provide full detailed failure reports, tests and analysis reports, and any other report necessary to the *Employer*.

3.1.4 Quality and Documentation Control

- a) The *Contractor* shall ensure that any witness, hold, and inspection points are strictly adhered to.
- b) The *Contractor* to ensure that all measuring and test equipment are calibrated at all times & proof thereof must be readily available.
- c) All Quality References and Standards as stipulated in this document will be adhered to.
- d) Work will only be conducted with an *Employer* approved Quality Management Programme.
- e) The *Contractor* shall submit to Eskom a method statement and detailed quality control plans for the remanufacture, refurbishment or repair of the roller. QCP's should include QCP's for the manufacture or repair of individual components. The supplier should also provide a time base production schedule to Eskom prior to starting work.
- f) QCP's will be submitted to Eskom for review and approval before any refurbishment scope can be commenced.
- g) The following documentation, inspection and tests are required when re-manufacturing, refurbishing, or repairing a Roller.
 - o Roller History and design.
 - o If no Drawing/s exists for the Roller and its components, the supplier shall include the cost of the drawings separately in his quotation. The relevant drawing numbers must be reflected on the quality control plans.
 - o Material certificates for new shafts and keys.
 - o Stamp identification on shaft ends.
 - o Bearing numbers, bearing clearance and brand name for all replaced bearings.
 - o An addition new nameplate fitted indicating the date of manufacture, order number, lubricant specification and other relevant technical details shall be fitted to the hub. All original nameplates shall not be removed.
- h) The *Contractor* shall submit details of corrosion protection measures to protect the roller internals from deterioration during storage. If a roller is to be stored dry for a long period, the use of vapor phase inhibitors (VPI's) or vapour corrosion inhibitors (VCI's) is recommended.

3.1.5 Re-commissioning

- a) The *Contractor* shall deliver the refurbished yoke assembly to Medupi site once the final quality checks has been concluded between the *Contractor* and Eskom.
- b) The roller yoke assembly should be transported in such a manner as to prevent damage in the bearings or other components and to prevent the ingress of dirt or moisture during transportation. It is preferable that a suitable cradle with "G sensor" be installed for transportation and handling purposes to record any unsuitable handling conditions of the Roller that can lead to secondary damage or warranty claims.
- c) The *Contractor* to ensure that they have their own baseline vibration analysis upon running of the grinding roller assembly.
- d) The *Contractor* shall be responsible or held liable for any defects arising from maintenance/operational faults two thousand (2000) hours after refurbishment of grinding roller the *Contractor* worked on.

3.2 Applicable Scope of work

3.2.1 Mill grinding roller

The *Contractor* shall be expected to execute the scope of work on mill grinding roller as outlined below.

Components	Boundaries of Plant Area
MPS265 Mill Grinding Roller	<p>This scope of work is applicable to the following component, within the Vertical Spindle MPS265 Mill.</p> <p>Grinding Roller</p> <p>This implies the following parts:</p> <ul style="list-style-type: none"> - Axle - Yoke - Clamping Ring - Cover Ring - Protection Plates (Left, Bottom and Right) - Bearing Bush - Bearing System - Outer ring/tyre

The roller assembly will likely be collected without the outer ring/tyre; however, the *Contractor* is expected to assemble the grinding roller assembly complete with a new tyre after refurbishment. The tyre will be a free issue to the *Contractor* by Eskom and may be collected with the assembly on collection. Arrangements may be made for the *Contractor* to collect the tyre from the tyre supplier as an alternative.

3.2.2 Applicable SOW

Upon stripping and assessing the roller the contractor shall notify the client to be present to witness the damage. During the inspection and after the assessment is done on all components making up the roller assembly inclusive of the bearing bush, a decision to repair, refurbish or re-manufacture will be made based on those findings.

3.2.3 Inspections

The following information gathered by Eskom and the *Contractor*, and any specific Eskom requirement will determine the scope of work to repair, refurbish or re-manufacture the roller or specific components thereof:

3.2.3.1 Contractor receiving inspection

The following checks should form part of a *Contractor* receiving inspection and may be carried out by Eskom prior to shipping to the manufacturer's works:

- a) Clean and record the nameplate details and/or shaft end stampings.
- b) Check the delivery documents and Eskom's initial work requirements.
- c) Remove the top and bottom covers, and record.
 - o The run out on shaft to hub (bearing bush).
 - o Shaft End Floats.
 - o Any visual signs of damage wear.
 - o The manufacturer will remove the shafts, bearings from the bearing bush, by means of a 200 tons horizontal press using required fixtures: To avoid secondary damage to components.

3.2.3.2 Roller Inspection

The following check will be performed on the roller:

- a) A 100% MPI of all shaft journals. All indications must be recorded.
- b) The shaft and bore of the bearing bush should be checked for signs of fretting and corrosion.
- c) For dismantled shaft assemblies, MPI all keyways and measure and record the dimensions of all keys and keyways.
- d) Measure the dimensions of the rollers and the shaft diameters to check and confirm fits and tolerances.

3.2.3.3 Bearing Inspection

Bearings should be removed, if possible, without damaging them. For refurbished and remanufactured bearing bush (hub), it is good practice to replace all bearings. In the case of repaired hub, if a bearing has completed less than 50% of its L_{10} design running hours and the bearings are in good condition, as inspected and verified as suitable by the original bearing manufacturer's technical department, or a suitably qualified person, they may be re-installed for further service. If bearings, which have completed a significant portion of their L_{10} design life, are re-used, the manufacturer may waive any guarantees on the repairs. Generally, the use of the old bearings is not recommended.

- a) Visually inspect the rolling elements and raceway for signs of wear and damage.
- b) Check the outer races for signs of movement in the bearing bores of the case and for signs of fretting and corrosion.
- c) Check the wear patterns of the bearing races for indications of misalignment.

3.2.3.4 Shaft Inspection

The following checks will be performed on the shafts:

- a) MPI the shaft with attention to keyways, fillet radii and changes in section of the shaft.
- b) Check all bearing seats for signs of wear.
- c) Measure the bearing seats to check fits and tolerances and compare with the selected or specified bearing.
- d) Check oil seal tracks for signs of damage or wear.

3.2.3.5 Bearing Bush (Hub) Inspection

The following checks will be performed on the hub (bearing bush).

- a) Inspect hub joints for the presence of paper or other gasket materials.
- b) Check condition of all machined faces and bores for damage.
- c) MPI all bearing bores.
- d) Dye penetrant sets entire hub after cleaning if required.
- e) Visually inspect all bores for signs of wear.
- f) Re-assemble case (with gasket if required) and tighten all bolts to the manufacturers specified torque.
- g) Measure all bearing bore diameters (3 x positions), top and bottom.

3.2.3.6 Yoke Inspection

The following checks will be performed on the yoke.

- a) Inspect yoke for overall wear and erosion.
- b) Check condition of all machined faces and bores for damage.
- c) Discuss the extent of wear with Eskom to determine if the yoke can be refurbished or needs to be replaced.
- d) The Contractor shall source a new yoke from a reputable foundry. Eskom to be involved in all steps of production and decision making.

3.2.3.7 Lubrication System Inspection

Check oil ways and supply ports cast into hub for signs of blockage and sludge build up.

3.2.3.8 Inspections on Other Items

The following checks will be performed on all other items:

- a) Record the details of all fastenings (nuts and bolts), dowels, washers, locking screws, seals and gaskets.
- b) Visually inspect all covers, oil catchers, loose bearing housings etc.
- c) Replace all seals (O-rings and radial seals), bolts, washers, plugs, and breathers.
- d) The yoke and bearing sealing rings should always be replaced with new, to maintain a reliable sealing gap of 0.5 mm.
- e) The bearing cover open should be replaced with new or refurbished one accepted and approved by Eskom.
- f) Pendulum joint part pans should be replaced with new.
- g) All protection covers and tiles shall be replaced with new, including new bolts protection caps/covers.

3.2.4 Repairs

If the decision is made to repair the roller, the supplier shall provide the quote to the client and the repairs shall be carried out after the agreement between the two parties. For a roller requiring repairs, the items requiring repair of replacement will depend on the nature of the failure and the extend or the resultant damage.

The following is just a basic guideline of the repair process:

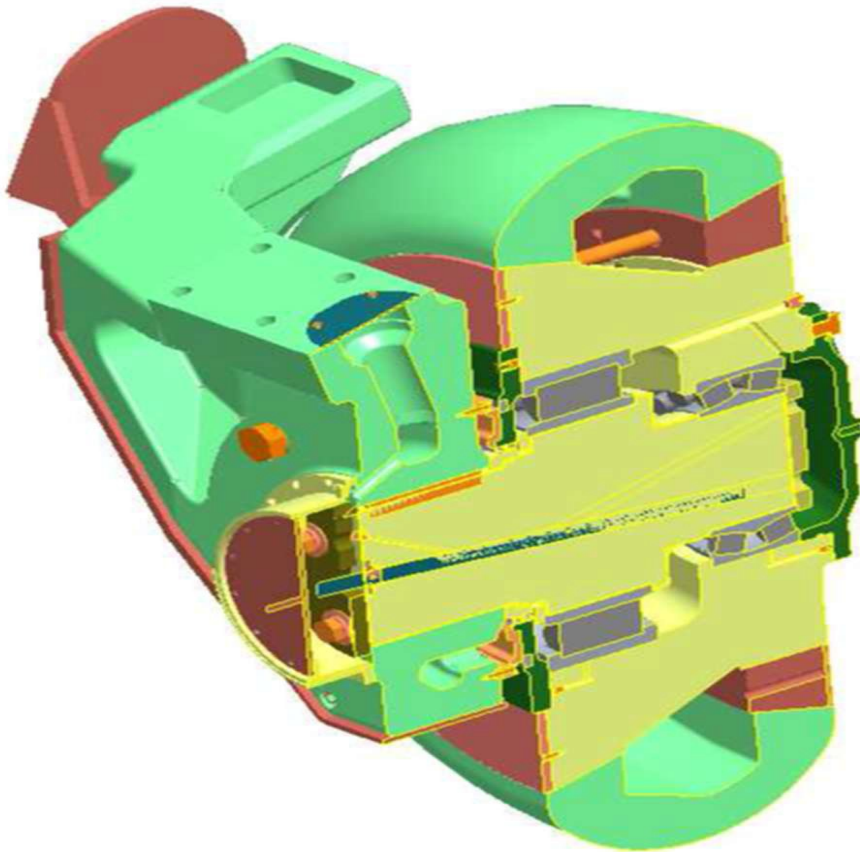
- a) Prepare and position the roller yoke assembly for refurbishment in the workshop using the crane.
Note: Handle with extreme care to avoid injuries to personnel and roller assembly damages relating to falling to the ground due to improper rigging.
Note: Total weight of one roller assembly is 16.5 tons.
- b) Place the assembly on the wear ring (yoke side) on suitable supports or wooden blocks and or rubber mat.
- c) Ensure effective collection and containment of oil from yoke during refurbishment by strategically placing oil drip trays and saw dust before work commences.
- d) NB: The grinding roller ring should have been supplied with the roller.
- e) Clean the grinding roller assembly with an effective degreaser
 - Clean clamping ring
 - Clean bearing shaft
 - Skim face of outer bearing/retainer cover
 - Skim yoke/axle retainer plate
- f) Dismantle all parts for and assess the roller parts for damages; notify the client to be present to witness the damage
- g) Arrange all the necessary spares including but not limited to:
 - Bolts and nuts
 - Protective plates
 - Tiles
 - Etc.**Note:** See Appendix A.1 for a list of applicable spares. List to be used as reference, and not as complete list of spares and should be supplied by the Contractor. The outer ring/tyre will be supplied by Eskom.
- h) Repair all items that are repairable and clean/repair all bolt bore holes and threads.
- i) Inspect the bearing on the inner ring/outer ring of the rolling elements and their cage for:
 - Wear
 - Scoring
 - Pitting
 - Cracking
 - Plastic deformation
 - Dimensional stability
 - Corrosion
- j) The wear bush for radial sealing should be refurbished or replaced with new one:
 - Check surface quality of the running surfaces
 - Check dimensional stability within the permitted tolerances, (see chapter 10.3. of B114103-

- 35-99-GM03-00001-AB)

Note: Replace the bearing in the event of out-of-roundness, damage or scoring.

- k) Perform pressure test on grinding roller bearing chamber
- l) Ensure there are no foreign matter in the cavities before reassembling the roller. No grinding work will be done in the same workshop. Should that be necessary, complete cover the roller to ensure that no debris enter any cavities or holes of the roller assembly.
- m) Do Quality check and Inspection on the roller yoke assembly

Note: Should there be a need to dismantle the grinding roller bearing system, please refer to B114103-35-99-GM03-00001-AB (Medupi Power Station Technical Documentation Pulverizer Plant MPS Mill). Please also refer this document for any technical data such as torque settings, component(s) weights, tolerances, etc.



3.3 Communication and Correspondence

- a) All correspondence includes
 - i. Medupi Power Station
 - ii. Employer's Contract number
 - iii. Contract description
 - iv. Correspondence subject matter
 - v. Employer's name and contact details
 - vi. *Contractor* contact details
 - vii. Date

b) Where appropriate the correspondence includes the *Employer's* reference and is delivered as a single package.

c) All communications from the *Contractor* are numbered sequentially with a prefix as advised by the *Employer*. The *Employer* responds in like manner. The prefix and numbering system are decided upon at the Inaugural meeting.

3.4 Tender Requirements

A proposal is to be submitted by the tenderers for the above-mentioned scope of work.

- Hereafter a contract shall be negotiated with the successful *Contractor*.
- The appointment of successful *Contractor* is at Eskom's (The *Employer*) sole discretion considering the factors which Eskom considers relevant.

3.5 Interpretation and terminology

The following abbreviations are used in this Service Information:

Contractor:	Service Provider contracted for providing specific service to Eskom, Medupi Power Station
Employer:	Eskom, or Eskom Medupi Power Station

The following abbreviations are used in this Service Information:

Abbreviation	Explanation
BOM	Bill of Material
ISO	International Standards Organisation
KKS	Kraftwerk Kennzeichen System
NEC	New Engineering Contract
OEM	Original Equipment Manufacturer
PCLF	Planned Capability Loss Factor
SAP	Systems, Applications, Products (Plant Maintenance, Procurement, Finance and Materials Management) integrated maintenance management system.
SOW	Scope of Work
UCF	Unit Capability Factor
UCLF	Unplanned Capability Loss Factor

4 Management strategy and start up.

4.1 The *Contractor's* plan for the *service*

The *Contractor* shall comply with the requirements stated in TSC 3 clause 21. The *Contractor* shall provide refurbishment schedule for every Task Order received.

4.2 Management meetings

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

Title and purpose	Approximate time & interval	Location	Attendance by:
Monthly Contractual meeting, Overall Contract progress, assessments, Contract risk discussion and feedback	Monthly	Medupi Power Station	Contract Managers, Site Manager, Contract Site Manager, Gx Contract Supervisors, Secretary

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

All meetings shall be recorded using minutes 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.

4.3 *Contractor's* management, supervision and key people

The *Contractor* shall submit the organogram within four weeks of contract date.

4.4 Provision of bonds and guarantees

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 *Service 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.

4.5 Documentation control

All contractual communications will be in the form of properly compiled letters or a message in the email itself. The *Contractor* must comply with the requirements of Eskom document Management system. All documents provided to the *Contractor* shall remain part of the *Employer* asset at the end of the contract. All QCP, failure report and any other documents required for this service must be submitted to the *Service Manager* electronically or hard copy.

4.6 Invoicing and payment

Within one week of receiving a payment certificate from the Service Manager in terms of core clause 51.1, the Contractor provides the Employer with a tax invoice showing the amount due for payment equal to that stated in the Service Manager's payment certificate.

Invoices can be submitted using emails to invoiceseskomlocal@eskom.co.za

- Ensure that the Eskom order number is clearly indicated on your invoice together with the line number on the order you are billing for.
- All Electronic invoices must be sent in PDF format only.
- Each PDF file should contain one invoice; or one debit note; or one credit note only as Eskom's SAP system does not support more than one PDF being linked into workflow at a time.
- Your E-mail may contain more than one PDF file (e.g. 2 invoices on 2 separate PDF files in one e-mail)
- For Foreign invoices, suppliers will still be required to physically deliver hard copies of original documents to the respective documentation management centers even though you have e-mailed those invoices
- A PDF file that was created directly from a system meets the definition of original document and is allowed (including saving documents from excel to PDF, word to PDF etc.)
- An Invoice that was printed and then scanned to PDF by the Vendor is not acceptable as this is not an original tax invoice by SARS definition but a copy.
- The following wording needs to appear on the invoice: "Your invoice is encrypted in order to comply with SARS requirements that invoices and statements sent electronically are tamperproof."
- If there is Cost Price Adjustment (CPA) on your invoice we recommend that you issue a separate invoice for CPA so that if there are any issues on the CPA the rest of the invoice can be paid while resolving the CPA issues.
- You do require a goods receipt (GR) number to submit your invoices. When the GR number is received you can then send the GR number to the FSS contact center at FSS@eskom.co.za or 011 800 5060.
- All queries and follow up on invoice payments should be made by contacting the FSS Contact Centre:
Tel: 011 800 5060

Name and address of the Contractor and the Service 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 Price List;

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

4.7 Contract change management

Refer to NEC TSC Core clause 6, in the event any change to the Contract needs to be managed.

Employer will use the forms with Eskom header for instruction to the *Contractor*.

4.8 Records of Defined Cost to be kept by the Contractor

The *Contractor* is required to keep record and submit proof of all the actuals, in order to be verified at the completion of the Payment Certificate and assessment, should the *Service Manager* request to do so.

4.9 Things provided at the end of the service period for the Employer's use

4.9.1 Equipment

Any equipment (assets) bought during the service period will be transferred to the *Employer* at the end of the service period.

4.9.2 Information and other things

In the event that the information and other things are required, it will be discussed by the two Parties, and the provision of information and other things will be mutually agreed upon

4.10 Management of work done by Task Order

- A Task Order starting with 45* series number will be issued to the Contractor at the beginning of every month for the service.
- In the case of emergency repairs outside the SOW, a different Task Order will be sent to the *Contractor* for the works. Respond to the issued Task Order must be dealt with as per secondary option X19 of the agreement.

5 Health and safety, the environment and quality assurance

5.1 Health and safety risk management

5.1.1 Introduction

Medupi Power Station responsibility and commitment is to ensure a safe working environment is in line with its Safety, Health, Environmental, and Quality (SHEQ) Policy and applicable legislative obligations. This OHS specification is Medupi power station minimum requirements which are required to be met for the duration of the contract period by appointed *Contractor* and, where required, the delivery organisation. Appointed *Contractor* is expected to develop an OHS plan that meets these requirements as well as all the relevant applicable legislation that they conform to. Medupi Power Station in no way assumes the *Contractor's* legal responsibilities and liabilities. Appointed *Contractor* is and remains accountable for the quality and execution of their health and safety programme for their employees and appointed *Contractor* employees. This OHS specification reflects minimum requirements and should not be construed as all-encompassing.

5.1.2 Section 37(2) (Legal) Agreement

A section 37(2) agreement must be signed between Eskom and the main *Contractor* at the time of submitting the safety file. The main *Contractor* must ensure that a section 37(2) agreement is compiled between the main *Contractor* and all their appointed *Contractors* for the contract. The original copy of the section 37(2) agreement must be retained by the *Contractor*, and a copy must be retained by the *Service Manager*. A copy of all the agreements must form part of the respective *Contractor's* OHS file.

5.1.3 COID

The Appointed *Contractor* and all his/her appointed *Contractors* shall be registered with an appropriate employment compensation commissioner and have available a valid letter of good standing (LoG) from such commissioner. The obligation lies with the *Contractors* to ensure that the LoG remain valid throughout the contract period. A copy of the LoG must be filed in the *Contractor* OHS files.

5.1.4 Legislative Compliance

The Appointed *Contractor* will comply with all the legislation pertaining to this contract being:
The Main *Contractor* and all appointed *Contractors* will comply with all the legislation pertaining to this project being:

- The Constitution of the Republic of South Africa (particularly Section 24 of the Bill of Rights).
- Occupational Health and Safety Act 1993 (Act 85 of 1993) and its Regulations.
- National Environmental Management Act 1998 (Act 107 of 1998).
- Environment Conservation Act 1989 (Act 73 of 1989).
- National Water Act 1998 (Act 36 of 1998).
- Civil and Building Work Act.
- National Road Traffic Act 93 of 1996.
- Compensation for Occupational Injuries and Diseases Act.
- SANS Standards –*Contractor* shall use the relative standards applicable to the project.

5.1.5 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 Medupi Power Station 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 Medupi Power Station 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/OR INSULATE 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.

Eskom Medupi Power station will take a zero-tolerance approach to these rules.

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 Eskom Medupi Power Station facility returns home to their families safely.

5.1.6 Induction training

1. The Appointed *Contractor* shall ensure that all his / her employees, appointed *Contractors* and their employees have undergone the Eskom OHS induction training prior to commencing work on site.
2. Attendance registers must be completed of any induction training given, which must indicate that they have received and understood the induction training.
3. Prior to attending the induction training, all employees must undergo a pre-employment medical examination and found fit for duty. A copy of the certificate of fitness must be kept in the OHS file on site for the duration of the contract.
4. All employees and visitors on site shall carry the proof of induction training in the form of access cards.
5. It is the *Contractor's* responsibility to keep records of induction training.

5.1.7 Risk Assessments

It is a legal requirement in terms of Section 8 (2)(d) of the OHS Act for an employer to carry out risk assessments, to establish which risks and hazards are attached to the health and safety of persons due to any work which is performed, any article or substance which is, handled, stored, transported. A risk assessment is defined as an identification of the hazards associated with the scope of work and an estimate of the extent of the risks involved, considering whatever precautions are already being taken. It is essentially a three-stage process:

- identification of all hazards;
- evaluation of the risks;
- Measures to control the risks.

Risk assessments are required to be maintained. This means that significant changes to a process or activity, or any new process or activity should be subjected to a risk assessment and that if new hazards come to light during the work process, then these should also be subjected to risk assessments. Risk assessments for long term processes should be periodically reviewed and updated. Method statements or written safe work procedures are an effective method as information and record of the way jobs / tasks must be performed. Daily or issue based or task specific or on the job risk assessments must be conducted at the place where work is to be performed/ conducted to allow managers and employees to assess any inherent risks that could have been overlooked during the initial risk assessment or any changes that might have occurred in a period of absence. For example, if a job / task is extended over a day or halted due to inclement weather.

5.1.8 Vehicle Management

1. It is the responsibility of the driver to ensure:
 - a. Their passengers wear seat belts whilst the vehicle is in motion.
 - b. Comply with all traffic road rules, safety, direction and speed signs.
 - c. Ensure that vehicle loads are properly secured prior to moving off.
 - d. Ensure that vehicles are not overloaded.
2. No persons maybe transported at the back of the bakkie.
3. Drivers are required to conduct the route risk assessment prior to travelling/driving.
4. No drivers or operators may text, talk on cell phones or two-way radios whilst driving.
5. All drivers shall have a valid medical fitness certificate.
6. The First aid box with valid contents and fire extinguishers must be included in the vehicle, be services annually and inspected monthly. Drivers must be trained on how to use the First aid box and fire extinguishers.
7. Two triangles must be included in the vehicle and the emergency number be displayed at the back of the vehicle.
8. Each Project site that is enclosed by demarcation will have system/ process to manage vehicle access to site.
9. *Contractor* must maintain their vehicles in a roadworthy condition and a vehicle license must be valid at all times and this is applicable to yellow plant.
10. Drivers of light vehicles must avoid stopping or parking in the vicinity of machines. At least 30 (thirty) meters must be left clear between such a vehicle and such a machine.
11. *Contractor* vehicles can be subject to inspections by the Client/Agent's representative. Vehicles which are not roadworthy will not be permitted to be used on site.
12. Drivers/operators shall be responsible for the travel-worthiness of all loads conveyed by them. Precautions shall be taken to secure all loads properly. Loads projecting from vehicles shall be securely loaded and in daytime a red flag and during darkness a red light or red reflective material shall be attached to the extreme end of such projecting materials.

5.1.9 Personal Protective Equipment Requirements

1. The Main *Contractor* must provide a detailed programme that includes the issuing, maintenance and replacement of PPE for all his employees and appointed *Contractors* on site.
2. All *Contractors* shall comply with the requirements of GSR 2 of the OHS Act and PPE Specification Standard 240-44175132.
3. The risk based PPE matrix must be compiled detailing the types of PPE that is required to be issued to employees performing the respective tasks.
4. If there are exceptional circumstances in which certain activities necessitate the use of additional PPE, a risk assessment must be done, in which such PPE requirements will be determined and issued.
5. All *Contractors* shall ensure that their visitors wear and use the correct PPE whilst on worksites.
6. Where PPE is required and visitors are not in possession of, then it is the individual *Contractor's* responsibility to provide the PPE.
7. All PPE purchased and used by all *Contractor* employees including visitors must comply with the relevant SANS standards.
8. Where deemed as a requirement (as per risk assessment), then high visibility vests shall be worn.
9. Monthly inspection records of PPE must be kept in the Safety file
10. The *Contractor* shall provide training to his/her employees on the correct use, care and maintenance of PPE and keep the record.

5.1.10 Incident Management

All incidents shall be investigated in terms of OHS Act General Administrative Regulations 8 and 9, using Medupi Power Station Procedure 32-95 OHS incident management as a reference, and where injuries as contemplated in sections 24 and 25 have been sustained, be reported to the Department of Employment and Labour.

Contractors shall use the Medupi Power Station Flash report to report incidents immediately or before end of shift. The standard General Administrative Regulation Annexure 1 "Recording of an Incident form" for all incident investigation reports. The objective of incident investigation should not only be a legal requirement but should establish why and how the incident occurred and find out the real root cause of the incident and to decide on precautionary measures that are required to address the root cause to prevent any further

recurrences of the same or similar incidents. The following must be taken into consideration to ensure compliance to Eskom Incident Management Procedure:

- All incident to be reported before end of the shift
- Ensure compliance to Medupi Power Station Incident Management Process
- Ensure compliance to Eskom Incident Management Procedure (32-95)
- All incidents must be investigated within seven (7) working days
- Appointed incident investigation chairperson must have the necessary competency to fulfil that function

5.1.11 Emergency Management

The art of emergency preparedness and response is to minimise the effects of any emergency and to restore normal activities as soon as possible. The *Contractor* must develop and align their own Emergency response plan with Medupi Power Station's to address any emergency which might arise at any given point in time. The *Contractor* to familiarise themselves with the Medupi Power Station emergency response plan and procedure. Periodic emergency drills must be undertaken to test the effectiveness of their plan. This must be recorded and provided on request.

5.1.12 Non-Conformance and Compliance

1. Any non-compliance to any health and safety requirement in this OHS specification is subject to discipline in terms of the Medupi Power Station Procurement and Supply Chain Management Procedure.
2. Main *Contractors* are required to implement a non-conformance procedure (if not already in place) for issuing to *Contractors* for transgressions. The procedure can include "quality" related non-conformance issues. Similarly, appointed *Contractors* must implement a non-conformance procedure.
3. The procedure for the issuing and closing off of non-conformance reports shall be strictly adhered to.
4. *Contractor* project management must monitor the close out of non-conformances issued, in not doing so; any recommendations made may not be implemented.
5. Where non-conformances are issued by Medupi Power Station then one of the close-out steps of the procedure will be for the offender to be called by the responsible project manager to explain the non-conformance issued and what plan is in place to prevent a recurrence of the non-conformance.
6. Should the *Contractor* fail to provide adequate PPE (as per PPE standards) to their employees for the tasks being performed and/or to visitors; failure to enforce the wearing of such PPE will be viewed as a transgression of the legislative and Medupi Power Station requirements.

5.1.13 OHS FILES

1. OHS file means documents or records in permanent form, containing the information about the safety and health management system from inception, execution to completion of works.
2. All *Contractors* are required to keep the OHS file on every project site. If there is more than one site per project, a file per site shall be kept at that site. *Contractors* may keep additional files at their head office as additional records. The OHS file shall be maintained by all the *Contractors* on their project sites and shall be available on request for audit and inspection purposes.
3. The OHS file shall consist of the OHS documentation/information in line with the OHS requirements/specification, legal and other requirements.
4. The sequence of filing the documentation must be kept in the same sequence as listed in this OHS requirements /specification and the OHS plan.
5. Each record shall be separated by partitions to afford easy identification and access. Each partition must be labelled.
6. On completion of the work/project, the main *Contractor* must hand over a consolidated health and safety file to the project manager.
7. In case where the project is extended, should the documentation in the OHS files become cumbersome, the older documentation must be archived in boxes which shall be correctly labelled and be available for auditing purposes. The archived documentation must be handed over at the completion of the project.

5.1.14 Work Stoppage

1. Any person may stop any activity where an unsafe act or unsafe condition that poses or may pose an imminent threat to the safety and health of an individual or create a risk of degradation of the environment. This includes any unauthorised work or service performed by, or legally or contractually non-compliant acts or omissions by, any contractor contracted to work at that site.
2. Work stoppages that are initiated due to OHS concerns, non-compliance, or poor performance related to the contractor's works or services shall not warrant any financial compensation claim lodged against Medupi Power Station where the contractor has not met the requirements defined legally or contractually.
3. Where stoppages are carried out, the required non-conformance report shall be raised.
4. All work stoppages ideally should be investigated and documented by contract custodians.

5.1.15 Eskom's Right to Terminate the Contract

The *Contractor* shall at all times comply with Medupi Power Station's occupational health and safety (OHS), legal and other requirements as amended for the duration of the contract. In addition, the *Contractor* shall comply with the requirements contained in the SHE Specification. Medupi Power Station reserves the right to terminate the contract in the event that the *Contractor* has built up a history of poor performance or non-conformance in relation to matters of Medupi Power Station OHS and legal compliance. No work may commence until the health and safety file has been approved by Medupi Power Station OHS personnel.

5.2 Environmental constraints and management

3.3.1 Environmental Management

- The *Contractor* shall have a documented and implemented environmental management system e.g., environmental policy, operational procedures relating to their activities, aspects/impacts register etc.
- The *Contractor* shall prepare an environmental management plan relating to their activities that will be carried out. The environmental management plan shall be based on, amongst others, Eskom Medupi Power Station's OEMP and any other applicable environmental legislation.
- The environmental management plan must include all the aspects and impacts relating to the activity and address the principle of continual improvement.
- The *Contractor* employees shall be inducted on the environmental requirements as per these documents.
- The *Contractor* shall comply with all Eskom Medupi Power Station environmental requirements such as policies, standards, and procedures.
- Non-conformance and incident reporting and investigations shall be done by the *Contractor*, such reports must include but not limited to the following information:
 - ✓ The cause of the non-conformance/incident
 - ✓ The proposed actions to correct and prevent recurrence.
- Eskom Medupi Power Station shall issue non-conformances where there are deviations from Eskom Medupi Power Station Procedures and any other environmental requirements.
- The *Contractor* shall allocate funds for the implementation of environmental requirements.
- The *Contractor* shall provide waste receptacles for their Laydown area and ensure that once the waste receptacles are full are taken to the designated waste area

5.3 Quality assurance requirements

5.3.1 Contract execution

The *Contractor* shall submit the following documents within 30 days or as per stated timeline after the contract date, prior to the commencement of work, for acceptance by Eskom:

- The *Contractor* shall complete a QCP before contract award. This shall be reviewed and signed off by Eskom within 30 days or as per stated timeline after contract award.
- The *Contractor* shall complete a quality control plan and ITP(s) for review and acceptance by Eskom prior to the commencement of any work, inclusive of subcontracted work, within 30 days or as per stated timeline after contract award.

- The subcontractor QCP/ ITP shall be submitted for review and comment by the *Contractor* supplier and by Eskom within 30 days or as per stated timeline after the award of the tender. All *Contractor* and Eskom comments shall be resolved prior to commencing work.
- The equipment lists and an indication of pressurised components and systems.

Note: These plans are to be compiled in line with Eskom's requirements and will have to be discussed with, and approved by, Eskom prior to any work commencing.

- Correspondence shall be directed to the *Service Manager*, and periodic quality review meetings shall be convened by Eskom with the *Contractor*.
- The mandatory quality review meetings are to be convened by the nominated project quality manager or his/her representative for the contract.
- Monthly quality performance and management reports are to be prepared by the supplier during contract execution. The content of these reports shall be agreed by Eskom when submitted to Eskom on a monthly basis.

5.3.2 *Contractor* Quality Performance Monitoring Phase

During the contract execution phase, suppliers shall be monitored by Eskom for performance on quality-related aspects.

The outcomes of such monitoring will enable Eskom to take any appropriate actions pertaining to the *Contractor*.

The monitoring shall be carried out periodically by Eskom or at predetermined intervals during the execution of a contract using agreed key performance indicators. The monitored key performance areas include the following:

- CQP and QCP /ITP
- Delivery
- Design
- Cost
- Management system

Subsequent key performance indicators associated with these areas will include the following:

- Nonconformity monitoring
- Audit and assessment evaluation scoring
- Management system compliance and accreditation
- Achievement of delivery targets as per contractual agreements
- Process improvements
- Correction and corrective action response and closure

5.3.3 *Contractor* Quality Audit

1. Quality audits and related quality performance reviews are intended to provide an objective evaluation of compliance with performance expectations defined in this specification, in the *Contractor* contract quality plan (CQP), and in any other project Service Information specification.
2. Quality audits and related quality performance reviews include, but are not limited to, any quality or other project functional area audits, assessments, verification of compliance reviews, surveillance, inspections, or other interim or final assessments of scope of work deliverables provided by the *Contractor* or Subcontractor.
3. Quality audits and related quality performance reviews shall be carried out by trained, accredited, and experienced personnel in accordance with procedures documented in the CQP.
4. The *Contractor* shall submit, for Eskom review, documented processes for conducting project scope of work quality audits and related quality performance reviews. *Contractor* quality audits and related quality performance review processes shall be designed to address evaluation of progress towards completion of project functional area deliverables as well as final deliverable quality.

The *Contractor* shall provide a schedule of anticipated quality audits covering all functional areas and related quality performance reviews at the time of first post-contract award CQP submission

6 Procurement

7 Procurement

7.1 People

7.1.1 Minimum requirements of people employed

The *Contractor* to submit organogram

7.1.2 BBBEE and preferencing scheme

The company shall maintain or improve upon their current B-BBEE Contribution level for the duration of the contract. The supplier will be required to submit a new B-BBEE certificate within 3 months, should ownership of the company change during the life of the contract.

7.1.3 Supplier Development and Localisation (SD&L)

1. Skills Development Requirement

The SD&L Matrix is not an evaluation criterion; however, tenderer are encouraged to make proposals before they are eligible for award in accordance with develop the skills in line with the SOW as illustrated on a below table. Skills development candidates should be from the Lephalale Municipality area.

Category	Qty	Entry Level	Output	Tenders' Proposal
Mechanical Fitter	5	N3/Matric or Equivalent	Trade Test	

2. SDL&I Bond

- Eskom shall be permitted to retain 2.5% (two and half percent) of the invoices (excluding VAT) as security for the fulfilment by the tenderers of their SD&L obligations.
- Once Eskom has verified that tenderers have fulfilled their SD & L obligations, the 2.5% retained shall be approved for reimbursement by Eskom to suppliers within 90 (ninety) days of verification by Eskom.

3. Reporting and Monitoring

- The suppliers shall on a monthly/quarterly basis submit a report to Eskom in accordance with Data Collection Template on their compliance with the SDL&I obligations described above.
- Eskom shall review the SDL&I reports submitted by the suppliers within 60 (sixty) days of receipt of the reports and notify the suppliers in writing if their SDL&I obligations have not been met.
- Upon notification by Eskom that the suppliers have not met their SDL&I obligations, the suppliers shall be required to implement corrective measures to meet those SDL&I obligations before the commencement of the following report, failing which Retention clauses shall be invoked.
- Every contract shall be accompanied by the SDL&I Implementation Schedule which must be completed by the suppliers and returned to SDL&I representative for acceptance 28 days

after contract award. This will be used as a reference document for monitoring, measuring and reporting on the supplier's progress in delivering on their stated SDL&I commitments

7.2 Subcontracting

7.2.1 Preferred subcontractors

The *Contractor* may not use a Subcontractor unless a written request is made to the *Employer* and approval is given. All terms and conditions applicable to the *Contractor*, will also apply to the approved Subcontractors e.g. legal requirements, appointments, authorisations, safety, quality and therefore all relevant documentation must be submitted in order for the *Employer* to consider the Subcontractor for approval.

Additionally, the prices listed in the price list will remain unchanged if any Subcontractors are used.

7.2.2 Subcontract documentation, and assessment of subcontract tenders

NOTE 1: Tenders shall submit the following Mandatory Returnables for Subcontracting:

1. Subcontracting agreement (signed by both parties) with subcontractor company registration documents (CK, CSD, B-BBEE certificate or sworn affidavit).
2. Copies of sub-contracting contracts (agreements) or copies of letters from the tenderer to the sub-contractors, stating the intent to sub-contract. Both documents should be signed by the Tenderer and the Sub-contractor(s) earmarked.
3. B-BBEE certificate from SANAS accredited rating agency or Sworn Affidavit from National Treasury / DTI certified by commissioner of oath will be used to verify supplier's status
4. Sub-contracting agreements can only be concluded with one of the following entities;
 - an EME or QSE which is 51% owned by black people living in rural or underdeveloped area or townships;

7.2.3 Limitations on subcontracting

Activities, as a proportion of the local procurement content, which may be subcontracted to designated black owned enterprises must be submitted in a table below.

Procurement from Designated Group	Eskom Target	Tenderer Proposal
Black Owned	15%	

7.3 Plant and Materials

7.3.1 Specifications

Plant and materials provided by the Contractor and the preventative maintenance thereof will be the responsibility of the Contractor.

7.3.2 Correction of defects

This will be governed by as per core clause 4, testing and defects.

7.3.3 Tests and inspections before delivery

This will be governed by as per core clause 4, testing and defects.

7.3.4 Plant & Materials provided "free issue" by the *Employer*

Both parties shall agree if there is any Plant and Material that the *Contractor* require to execute work. All other Plant and Materials are to be provided by the *Contractor*.

8 Working on the Affected Property

8.1 Employer's site entry and security control, permits, and site regulations

Medupi Power Station is declared a Nation Key Point (NKP), all regulations, Laws and procedures related to NKP must be strictly adhered to.

The Entry to site is only approved once the following is adhered to:

1. The *Contractor's* Safety file is to be approved by the *Employer's* Safety department.
2. Site-specific induction is to be done by all personnel.
3. All contract employees must have access permits to the site
4. 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. Should the awarded *Contractor* fail to comply with the criminal record check process requirements and/or critical staff identified as part of the contract, failing the screening requirements, the *Employer* may terminate the contract

8.2 People restrictions, hours of work, conduct and records

8.2.1 Restriction

The *Contractor* is restricted to the area of loading and offloading of the roller as guided by the *Employer*

8.2.2 Hours of Work

1. Normal working hours is Eskom working hours:
 - a. Monday to Thursday **07:00 - 16:15**
 - b. Fridays **07:00 - 12:00 (No lunch break)**
2. The *Contractor* is advised to collect and deliver rollers at the time hereinabove, unless special arrangement is made with the *Employer*

8.3 Health and safety facilities on the Affected Property

There is a medical station on site and a fire and rescue service for assistance with serious incidents and treatment of all serious injuries during normal working hours. Emergency services are available during normal working hours by dialling 6911 from any site phone or else 014 762 2555 Fire and Emergency Preparedness also available after hours by dialling 6911 from any site phone or else contacting the Electrical Operating Desk (EOD) at 014 762 6911 (all hours). However, the Contractor is expected to handle all minor incidents in-house by providing a first aider and a first aid kit.

8.4 Health and safety facilities on the Affected Property

There is a medical station on site and a fire and rescue service for assistance with serious incidents and treatment of all serious injuries during normal working hours. Emergency services are available during normal working hours by dialling 6911 from any site phone or else 014 762 2555 Fire and Emergency Preparedness also available after hours by dialling 6911 from any site phone or else contacting the Electrical Operating Desk (EOD) at 014 762 6911 (all hours). However, the Contractor is expected to handle all minor incidents in-house by providing a first aider and a first aid kit.

8.5 Cooperating with and obtaining acceptance of Others

Proper co-ordination and work planning must be done when working in any area where others are performing work or activities. Interfacing may be required with the site maintenance personnel and others.

8.6 Records of *Contractor's* Equipment

- The *Contractor* to declare all equipment and tools via a pre-set-up list at the main entrance, where removal permit will be issued by Security personnel.
- *Contractor* needs to have a list of inventory of their equipment on site.
- Proof of site entrance needs to be provided before equipment can be removed from

8.7 Equipment provided by the *Employer*

Employer will provide overhead cranes and forklift as and when required.

8.8 Site services and facilities

8.8.1 Provided by the *Employer*

Sanitary services, water, compressed air and electricity shall be provided by Eskom at fixed points on the plant. There is also a tuck-shop on site, but both only operate on weekdays and are for the *Contractor's* own cost.

8.8.2 Provided by the *Contractor*

The *Contractor* is to supply all the personal protective equipment, transport, accommodation, tools, equipment and consumables to perform all the required tasks on site.

8.9 Control of noise, dust, water and waste

The *Contractor* will always be required to use appropriate PPE to mitigate and minimise exposure to noise and dust. Ear protection shall be worn whenever *Contractor* enters a plant with a noise level of 85 decibels(db) and above or working with machines that produce noise level of 85 db. The *Contractor* must always wear dust mask whenever they work in the dust environment. The *Contractor* must treat water as scarce resource and recycle where possible. The *Employer* advocates the appropriate disposal of waste to enhance recycling.

8.10 Hook ups to existing works

Hooking up on heights is a non-negotiable lifesaving rule of Eskom, Medupi Power Station applies Zero Tolerance to non-compliance of the rule or any other lifesaving rule. The same disciplinary process and procedure will be followed when any of the lifesaving rules have been breached.

8.11 Tests and inspections

8.11.1 Description of tests and inspections

The test and inspection to be carried out by the *Contractor*, the *Employer* and others will be determined and communicated by the *Employer* when contract commenced.

8.11.2 Materials facilities and samples for tests and inspections

The materials facilities and samples for test and inspection to be carried out by the *Contractor*, the *Employer* and others will be determined and communicated by the *Employer* when the contract commences.

9 List of drawings

9.1 Drawings issued by the *Employer*

[illegible]

QTY per Mill roller	DESCRIPTION OF SPARES REQUIRED	Total QTY (per set of 3 Rollers)
GRINDING ROLLER YOKE ASSEMBLY		
1	Grinding roller yoke; 2234 x 1379 x 912, Material: EN-GJS-400-15U(GGG-40) *	3
1	Wear protection plate 2, LH; Plate 524 x 957 x25, Material- Hardox	3
1	Wear protection plate 2, RH; Plate 524 x 957 x25, Material- Hardox	3
12	Hexagon socket head cap screw; M20 x 45, Material: 10,9 galvanized	36
12	Locking edge washer; VSKZ 20, Material: Spring steel galvanized	36
12	Bolt protection cap/cover, 60 x 10, Material – Hardox,	36
1	Wear protection plate 4 (bottom); Plate 861 x 299 x 10, Material: EN 1,0038	3
1	Wear protection bottom ceramic liner; Ceramic liner 1/2", Material: 92% AL203	3
2	Hexagon socket head cap screw; M30 x 120, Material: 10,9 galvanized	6
1	Wear protection 5; 624 x 266 x25, Material: EN 1,0038	3
4	Hexagon socket head cap screw; M20 x 45, Material: 10,9 galvanized	12
4	Locking edge washer; VSKZ 20, Material: Spring steel galvanized	12
4	Bolt protection cap/cover 60 x 10, Material – Hardox,	12
4	Hexagon head screw; M56 x 50, Material: 5,6 galvanized	12
4	spring lock washer; A 56, Material: Spring steel galvanized	12
6	Hexagon head screw; M24 x 45, Material: 5,6 galvanized	18
6	spring lock washer; VSK 24, Material: Spring steel galvanized	18
1	Tube Protection box; 508 x 11, Material: EN 1,0305	3
12	Hexagon socket head cap screw; M12 x 35, Material: 10,9 galvanized	36
12	Locking edge washer; VSKZ 12, Material: Spring steel galvanized	36
1	Plate for protection box; Plate 10, Material: EN 1,0038	3
1	Round 16; Round 16, Material: EN 1,0038	3
1	Roller tyre; 2070 / 1440 x 700, Material: EN-GJN-HV600 (XCr23) **	3
1	Clamping ring; 1531 / 1165 x 190, Material: EN 1,0038 *	3
12	Hexagon socket head cap screw; M42 x 535, Material: EN 1,7709	36
12	Washer; 43 x 6, Material: EN 1,0159	36
1	Wear protecting ring; 1531 x 1167 x10, Material: EN 1,0038 **	3
12	Hexagon socket head cap screw; M12 x 30, Material: 10,9 galvanized	36
12	Locking edge washer; VSKZ 12, Material: Spring steel galvanized	36
3	Wear protecting ring back; 1319 x 506 x20, Material: EN 1,0038	9

12	Hexagon socket head cap screw; M12 x 35, Material: 10,9 galvanized	36
12	Locking edge washer; VSKZ 12, Material: Spring steel galvanized	36
1	Grinding Roller Yoke sealing ring ***	3
12	M16 x 30 bolt, Grade 8.8, thread length 80%, Galvanized	36
2	Pendulum Joint Lower part pan, 226 x 207 x 97 mm, Lower Pan complete with Side part pan, 197 x 93 x 29 mm, Mat: EN 1.0553	6
QTY per Mill roller	DESCRIPTION OF SPARES REQUIRED	Total QTY (per set of 3 Rollers)
GRINDING ROLLER BEARING		
1	Axle; 1034 x 539; Material: EN 1,221 *	3
1	Hexagon head screw plug; G1 / 1/2A x16; Material: 5.8	3
1	Sealing ring; A48 x 55 x 2; Material: CU/ISOPLAN	3
1	Clamping disk plate; Plate 45; Material: EN 1,0038	3
3	Hexagon head screw; M 36 x 113; Material: EN 1,7709	9
3	Disk / Washer; 37; Material: EN 1,0401	9
1	Back of bearing plate Clamping ring; plate 533 x 533 x35; Material: EN 1,0038	3
12	Hexagon socket head cap screw; M12 x 45; Material: EN 10,9	36
12	Locking edge washer; VSKZ 12; Material: spring steel	36
1	Feather key; 90 x 45 x 272; Material: EN 1,0503	3
1	Venting filter; ANSELM-F1451 / G 1/8"; Material: EN 1,0401	3
1	Locking disk Axle; 441 x 41; Material: EN 1,0038	3
3	Hexagon head screw; M36 x 127; Material: EN 1,7709	9
3	Spring disk; 90 x 45 x 5; Material: EN 1,8159	9
3	Spring plate; 15; Material: EN 1,5415	9
1	Cylindrical roller bearing single row NU31/500; EMA / VE900; Material: Special steel *	3
1	Self-aligning roller bearing double row 24164; CC; Material: Special steel *	3
1	Bearing Bush; 1527 / 486 x 719; Material: EN-GJS-400-15(GGG-40) *	3
3	Safety plate plug; 42 x 145; Material: EN 1,0330	9
3	Safety bolt plug; 63; Material: EN 1,0037	9
3	Hexagon head screw; G1A x16; Material: 5.8	9
3	Sealing ring; A 33 x 39 x 2; Material: CU/ISOPLAN	9
4	Sealing plug; M18 x 24 x1,5; Material: EN 1,0038	12
4	Sealing ring; A 10 x 14 x 1; Material: CU/ISOPLAN	1
1	O Rings 850x10, Material - Viton	1
1	O Rings 530x10, Material - Viton	3
1	O Rings 430x7, Material - Viton	3
1	SPACER Mill Grinding Roller - RNG; OD 500 X ID 461 X T 3.5 MM	3
2	SEAL RING Mill Grinding - RADIAL SHAFT SEALING WCL FKM, Material - VITON (WITH REINFORCING CAP & LIP), NORM: DIN 3760	6
1	Grinding roller Wearing Bush ID: 432 MM; ODR: 460 MM; LENGTH: 63.5 MM; MATERIAL: 1.7225 (42CRMO4) (AISI 4142); SPECIFICATION: NORM: DIN EN 10060, INSPECT: EN10204 3.1B; DRAWING NUMBER: B114116-35-23-IG04-00081, HARDNESS PENETRATION DEPTH - 1MM, HARDNESS MIN - 45 - 60 HRC, PART NUMBER 242/1. (719245)	3
1	Grinding Roller Bearing Cover sealing ring ***	3
12	M16 x 30 bolt, Grade 8.8, thread length 80%, Galvanized	36
24	M16 spring washer, Galvanized	72
1	Grinding roller bearing cover open	3
12	M36 x 90 bolt, Grade 8.8, Full thread, Galvanized	36
12	M36 spring washer, Galvanized	36
12	Grinding roller outer cover bolt washer - flat with lip, 75 x 37 x 2 mm	36

(*) – Assess wear and present report to Eskom. Only replace upon mutual agreement between service provider and Eskom.

(**) – Assembly will likely be collected without the tyre. Replace with new one provided by Eskom.

(***) – Sealing rings to maintain a precise gap of 0.5 mm. Replace with new.