



## NEC3 Term Service Contract (TSC3)

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

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

**for**

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**No of  
pages**

**Part C1 Agreements & Contract Data**

**Part C2 Pricing Data**

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**Enquiry No. MPMAJ10500GX**

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## PART C1: AGREEMENTS & CONTRACT DATA

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[to be inserted from Returnable Documents at award stage]	
<b>C1.2a Contract Data provided by the <i>Employer</i></b>	
<b>C1.2b Contract Data provided by the <i>Contractor</i></b>	
[to be inserted from Returnable Documents at award stage]	
<b>C1.3 Proforma Guarantees</b>	

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## C1.1 Form of Offer & Acceptance

### Offer

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

### Boiler Tube bending contract

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 or C	The offered total of the Prices exclusive of VAT is	R
	Sub total	R
	Value Added Tax @ 15% is	R
	The offered total of the amount due inclusive of VAT is <sup>1</sup>	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:

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

## Acceptance

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

The terms of the contract, are contained in:

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

## 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	<b>General</b>	
	The <i>conditions of contract</i> are the core clauses and the clauses for main Option:	
		<b>A: Priced contract with price list</b>
	dispute resolution Option	<b>W1: Dispute resolution procedure</b>
	and secondary Options	
		<b>X1: Price adjustment for inflation</b>
		<b>X2: Changes in the law</b>
		<b>X17: Low service damages</b>
		<b>X18: Limitation of liability</b>
		<b>X19: Task Order</b>
		<b>Z: Additional conditions of contract</b>
	of the NEC3 Term Service Contract April 2013 <sup>2</sup> (TSC3)	
10.1	The <i>Employer</i> is (name):	<b>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</b>
	Address	<b>Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg</b>
	Tel No.	
	Fax No.	
10.1	The <i>Service Manager</i> is (name):	<b>Sindisiwe Mdluli</b>
	Address	<b>Majuba Power Station Private Bag x 9001 Volkrust 2470</b>
	Tel	<b>017 799 2345</b>
	Fax	
	e-mail	<b>MdluliSG@eskom.co.za</b>
11.2(2)	The Affected Property is	<b>Majuba Power Station</b>

<sup>2</sup> Available from Engineering Contract Strategies Tel 011 803 3008 Fax 086 539 1902 [www.ecs.co.za](http://www.ecs.co.za)

11.2(13)	The <i>service</i> is	<b>Boiler Tube Bending Contract</b>
11.2(14)	The following matters will be included in the Risk Register	
11.2(15)	The Service Information is in	<b>Part 3: Scope of Work and all documents and drawings to which it makes reference.</b>
12.2	The <i>law of the contract</i> is the law of	<b>the Republic of South Africa</b>
13.1	The <i>language of this contract</i> is	<b>English</b>
13.3	The <i>period for reply</i> is	<b>3 day</b>
<b>2</b>	<b>The Contractor's main responsibilities</b>	<b>As stated in the scope of work</b>
21.1	The <i>Contractor</i> submits a first plan for acceptance within	<b>An agreed time between two parties</b>
<b>3</b>	<b>Time</b>	
30.1	The <i>starting date</i> is.	
30.1	The <i>service period</i> is	
<b>4</b>	<b>Testing and defects</b>	<b>AIA will be used to check the quality</b>
<b>5</b>	<b>Payment</b>	
50.1	The <i>assessment interval</i> is	<b>between the 25th day of each successive month.</b>
51.1	The <i>currency of this contract</i> is the	<b>South African Rand</b>
51.2	The period within which payments are made is	<b>Four weeks.</b>
51.4	The <i>interest rate</i> is	<p>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 and</p> <p>(ii) the LIBOR rate applicable at the time for amounts due in other currencies. LIBOR is the 6 month London Interbank Offered Rate quoted under the caption "Money Rates" in The Wall Street Journal for the applicable currency or if no rate is quoted for the currency in question then the rate for United States Dollars, and if no such rate appears in The Wall Street Journal then the rate as quoted by the Reuters Monitor Money Rates Service (or such service as may replace the Reuters Monitor Money Rates Service) on the due date for the payment in question, adjusted <i>mutatis mutandis</i> every 6 months thereafter (and as certified, in the event of any dispute, by any manager employed in the foreign exchange department of The Standard Bank of South Africa Limited, whose</p>

		appointment it shall not be necessary to prove.
6	<b>Compensation events</b>	As started in the scope
7	<b>Use of Equipment Plant and Materials</b>	Work will be done in the contractor's place of work.
8	<b>Risks and insurance</b>	
80.1	These are additional <i>Employer's</i> risks	1. Unavailability of material to give for bending
9	<b>Termination</b>	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data.
10	<b>Data for main Option clause</b>	
A	<b>Priced contract with price list</b>	
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.
	The <i>exchange rates</i> are those published in	[•] on [•] (date)
11	<b>Data for Option W1</b>	
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 <a href="http://www.ice-sa.org.za">www.ice-sa.org.za</a> ). If the Parties do not agree on an Adjudicator the Adjudicator will be appointed by the Arbitration Foundation of Southern Africa (AFSA).
	Address	[•]
	Tel No.	[•]
	Fax No.	[•]
	e-mail	[•]
W1.2(3)	The <i>Adjudicator nominating body</i> is:	the Chairman of ICE-SA a joint Division of the South African Institution of Civil Engineering and the Institution of Civil Engineers (London) (see <a href="http://www.ice-sa.org.za">www.ice-sa.org.za</a> ) 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 <b>[•] South Africa</b>			
	The person or organisation who will choose an arbitrator			
	<div><div><div>- if the Parties cannot agree a choice or</div><div>- if the arbitration procedure does not state who selects an arbitrator, is</div></div><div><b>the Chairman for the time being or his nominee of the Association of Arbitrators (Southern Africa) or its successor body.</b></div></div>			
12	Data for secondary Option clauses			
X1	Price adjustment for inflation			
X1.1	<div><div><div>The <i>base date</i> for indices is</div><div>The proportions used to calculate the Price Adjustment Factor are:</div></div><div><div><div><div>proportion</div><div>0.70</div><div>0.15</div><div>0.15</div><div>1.00</div></div><div><div>linked to index for</div><div>Labour</div><div>Transport</div><div>non-adjustable</div><div></div></div><div><div>Index prepared by</div><div><b>[•]SEIFSA Table C3(A) - Actual Labour Cost (field force) where subsistence allowance is paid</b></div><div>SEIFSA Table L2</div></div></div></div></div>			
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.	
X17	Low service damages			
X17.1	The <i>service level table</i> is in			
X18	Limitation of liability			
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	
X19	Task Order			
X19.5	The <i>Contractor</i> submits a Task Order programme to the <i>Service Manager</i> within		2 days of receiving the Task Order	
Z	The <b>additional conditions of contract</b> 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.

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**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 *Contractor* or a third party, such party's employees, agents, or Subcontractors or Subcontractor's employees, or any one or more of all of these parties' relatives or friends,

**Coercive Action**        means to harm or threaten to harm, directly or indirectly, an Affected Party or the property of an Affected Party, or to otherwise influence or attempt to influence an Affected Party to act unlawfully or illegally,

**Collusive Action**        means where two or more parties co-operate to achieve an unlawful or illegal purpose, including to influence an Affected Party to act unlawfully or illegally,

**Committing Party**        means, as the context requires, the *Contractor*, or any member thereof in the case of a joint venture, or its employees, agents, or 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><b>Loss of or damage to property</b></u> The replacement cost  <u><b>Bodily injury to or death of a person</b></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	The amount required by the applicable law

in connection with this contract

**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 47 of 1999, save to the extent that any liabilities are incurred due to the unlawful intent of the *Contractor* or any other person or the presence of the *Contractor* or that person or any property of the *Contractor* or such person at or in the KNPS or on the KNPS site, without the permission of the *Employer* or of a person acting on behalf of the *Employer*.

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 47 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:

<b>AAIA</b>	means approved asbestos inspection authority.
<b>ACM</b>	means asbestos containing materials.
<b>AL</b>	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.
<b>Ambient Air</b>	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.
<b>Compliance Monitoring</b>	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.
<b>OEL</b>	means occupational exposure limit.
<b>Parallel Measurements</b>	means measurements performed in parallel, yet separately, to existing measurements to verify validity of results.
<b>Safe Levels</b>	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.
<b>Standard</b>	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.
<b>SANAS</b>	means the South African National Accreditation System.
<b>TWA</b>	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

### Part two - Data provided by the *Contractor*

#### Notes to a tendering contractor:

1. Please read both the both the NEC3 Term Service Contract April 2013 and the relevant parts of its Guidance Notes (TSC3-GN)<sup>3</sup> in order to understand the implications of this Data which the tenderer is required to complete.
2. The number of the clause which requires the data is shown in the left hand column for each statement however other clauses may also use the same data.
3. Where a form field like this [ ] appears, data is required to be inserted relevant to the option selected. Click on the form field **once** and type in the data. Otherwise complete by hand and in ink.

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

Clause	Statement	Data
10.1	The <i>Contractor</i> is (Name):  Address  Tel No.  Fax No.	
11.2(8)	The <i>direct fee percentage</i> is	%
	The <i>subcontracted fee percentage</i> is	%

<sup>3</sup> Available from Engineering Contract Strategies Tel 011 803 3008 Fax 086 5391902 or [www.ecs.co.za](http://www.ecs.co.za)



11.2(14)	The following matters will be included in the Risk Register	
11.2(15)	The Service Information for the Contractor's 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 _____.
<b>A</b>	<b>Priced contract with price list</b>	
11.2(12)	The <i>price list</i> is in _____	
11.2(19)	The tendered total of the Prices is	<b>R</b> _____

**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

### C2.2 the *price list*

Item no.	Boiler Component	Material type	Dimensions	Estimated Minimum Quantities per Boiler	Rates	Total Price
1	<b>Economiser</b>					
1.1	Inlet S-bends 90 deg. (3)	15Mo3	38mm OD x 6.3mm WT: leg 307mm x R 63.5mm x Leg 508mm x R 63.5mm x Leg 226	20		
1.2	U-bends 90 Deg. (2)	15Mo3	51mm OD x 4.5mm WT: R63.5mm x Legs 500mm x Width 381mm	20		
1.3	180 deg. Bends (1)	15Mo3	51mm OD x 4.5mm WT: R63.5mm x Leg 300mm	20		
2	<b>Reheater One</b>					
2.1	180 deg. Bends (1)	ST35.8	60.3mm OD x 3.9mm WT: R 130mm x Width 260mm x legs 360mm	25		
2.2	U-bends 90 Deg. (2)	ST35.8	60.3mm OD x 3.9mm WT: Legs 440mm x R 130mm x Width 480mm	25		
2.3	U-bends 90 Deg. (3)	ST35.8	60.3mm OD x 3.9mm WT: Legs 520mm x R 130mm x Width 700mm	25		
2.4	U-bends 90 Deg. (4)	ST35.8	60.3mm OD x 3.9mm WT: Legs 600 x R130mm x Width 920mm	25		

CONTRACT TITLE – Provision of Boiler Pressure Parts tube bending service on an as and when required basis for Outages and Maintenance

2.5	U-Bends Deg. (5)	90	ST35.8	60.3mm OD x 3.9mm WT: Legs 680mm x R 130mm x Width 1140mm	25		
2.6	U-bends Deg. (6)	90	ST35.8	60.3mm OD x 3.9mm WT: Legs 760mm x R130mm x Width 1360mm	25		
2.7	U-bend Deg. (7)	90	ST35.8	60.3mm OD x 3.9mm WT: Legs 840mm x R 130mm x Width 1580mm	25		
2.8	U-bends Deg. (8)	90	ST35.8	60.3mm OD x 3.9mm WT: Legs 920mm x R 130mm x 1800mm width	25		
2.9	U-bends Deg. (9)	90	ST35.8	60.3mm OD x 3.9mm WT: Legs 1000mm x R 130mm x Width 2020mm	25		
2.10	U-bends Deg. (10)	90	ST35.8	60.3mm OD x 3.9mm WT: Legs 1080mm x R 130mm x Width 2240mm	25		
2.11	RH1 Manipulation (1) A		ST35.8	60.3mm OD x 3.9mm WT: Leg 680mm x R130mm x 144 deg x Leg 684mm x 126 deg x leg 308mm	25		
2.12	RH1 Manipulation (2) B		ST35.8	60.3mm OD x 3.9mm WT: Leg 680mm x 141 deg x R 130mm x Leg 814mm x 129 deg x leg 418mm	25		
2.13	RH1 Manipulation (3) C		ST35.8	60.3mm OD x 3.9mm WT: Leg 680mm x 139 deg x R 130mm x Leg 946mm x 131 deg x Leg 528mm	25		
2.14	RH1 Manipulation (4) D		ST35.8	60.3mm OD x 3.9mm WT: Leg 680mm x 137 deg x R 130mm x Leg 1079mm x 133 deg x Leg 638mm	25		

CONTRACT TITLE – Provision of Boiler Pressure Parts tube bending service on an as and when required basis for Outages and Maintenance

2.15	RH1 Manipulation (5) E	ST35.8	60.3mm OD x 3.9mm WT: Leg 680mm x 136 deg x R 130mm x Leg 1213mm x 134 deg x Leg 748mm	20		
2.16	RH1 Manipulation (6) F	ST35.8	60.3mm OD x 3.9mm WT: Leg 680mm x 135 deg x R 130mm x Leg 1347mm x 135 deg x Leg 858mm	20		
2.17	RH1 Manipulation (7) G	ST35.8	60.3mm OD x 3.9mm WT: Leg 680mm x 134 deg x R 130mm x Leg 1482mm x 135 deg x leg 968mm	20		
2.18	RH1 Manipulation (8) H	ST35.8	60.3mm OD x 3.9mm WT: Leg 680mm x 133 deg x R 130mm x Leg 1616mm x 137 deg x Leg 1078mm	25		
2.19	RH1 Manipulation (9)	ST 35.8	60.3mm OD x 3.9mm WT: Leg 680mm x 133 deg x R 130mm x Leg 1751mm x 137deg x Leg 1188mm	25		
2.20	RH1 Manipulation (10) K	ST35.8	60.3mm OD x 3.9mm WT: Leg 680mm x132 deg x R 130mm x 1886mm x 138 deg x leg 1298mm	25		
2.21	RH1 Manipulation (11) A	15Mo3	57mm OD x 3.7mm WT: Leg 680mm x 144 deg x R 130mm x 684mm x 126 deg x Leg 308mm	50		
2.22	RH1 Manipulation (12) B	15Mo3	57mm OD x 3.7mm WT: Leg 680mm x 141 deg x R 130mm x Leg 814mm x 129 deg x Leg 418mm	50		
2.23	RH1 Manipulation (13) C	15Mo3	57mm OD x 3.7mm WT: Leg 680mm x 139 deg x R 130mm x Leg 946mm x 131 deg x 528mm	50		

CONTRACT TITLE – Provision of Boiler Pressure Parts tube bending service on an as and when required basis for Outages and Maintenance

2.24	RH1 Manipulation (14) D	15Mo3	57mm OD x 3.7mm WT: Leg 680mm x 137 deg x R 130mm x Leg 1079mm x 133 deg x Leg 638mm	50		
2.25	RH1 Manipulation (15) E	15Mo3	57mm OD x 3.7mm WT: Leg 680mm x 136 deg x R 130mm x Leg 1213mm x 134 deg x Leg 748mm	25		
2.26	RH1 Manipulation (16) F	15Mo3	57mm OD x 3.7mm WT; Leg 680mm x 135 deg x R 130mm x Leg 1347mm x 135 deg x Leg 858mm	25		
2.27	RH1 Manipulation (17) G	15Mo3	57mm OD x 3.7mm WT: Leg 680mm x 134 deg x R 130mm x Leg 1482mm x 135 deg x Leg 968mm	25		
2.28	RH1 Manipulation (18) H	15Mo3	57mm OD x 3.7mm WT: Leg 680mm x 133 deg x R 130mm x 1616mm x 137 deg x Leg 1078mm	25		
2.29	RH1 Manipulation (19) J	15Mo3	57mm OD x 3.7mm WT: Leg 680mm x 133 deg x R 130mm x Leg 1751mm x 137 deg x Leg 1188mm	25		
2.30	RH1 Manipulation (20) K	15Mo3	57mm OD x 3.7mm WT: Leg 680mm x 132 deg x R 130mm x Leg 1886mm x 138 deg x Leg 1298mm	25		
2.31	RH1 180 deg Bend (11)	15Mo3	57mm OD x 3.7mm WT: Legs 360mm x R 130mm x Width 260mm	25		
2.32	RH1 90 deg U-bend (12)	15Mo3	57mm OD x 3.7mm WT: Legs 440mm x R130mm x Width 480mm	20		

CONTRACT TITLE – Provision of Boiler Pressure Parts tube bending service on an as and when required basis for Outages and Maintenance

2.33	RH1 90 deg U-bend (13)	15Mo3	57mm OD x 3.7mm WT; Legs 520mm x R130mm x Width 700mm	20		
2.34	RH1 90 deg U-bend (15)	15 Mo3	57mm OD x 3.7mm WT: Legs 680mm x R 130mm x Width 1140mm	20		
2.35	RH1 90 deg U-bend (16)	15Mo3	57mm OD x 3.7mm WT: Legs 760mm x R 130mm x Width 1360mm	20		
2.36	RH1 90 deg U-bend (17)	15Mo3	57mm OD x 3.7mm WT: Legs 840mm x R 130mm x Width 1580mm	20		
2.37	RH1 90 deg U-bend (18)	15mo3	57mm OD x 3.7mm WT: Legs 920mm x R 130mm x Width 1800mm	20		
2.38	RH1 90 deg U-bend (19)	15Mo3	57mm OD x 3.7mm WT: Legs 1000mm x R 130mm x Width 2020mm	20		
2.39	RH1 90 deg U-bend (20)	15mo3	57mm OD x 3.7mm WT: Legs 1080mm x R130mm x Width 2240mm	20		
2.2	RH1 Penetration manipulations		Various sizes on an as and when required basis	25		
3	<u>Superheater</u> <u>One</u>					
	<u>S-bends</u>					
3.1.1	SH1 90 deg S- bends (2)	15Mo3	44.5mm OD x 4.5mm WT: Leg 400mm x R 80mm x Leg 700mm x R 80mm x Leg 400mm	50		

CONTRACT TITLE – Provision of Boiler Pressure Parts tube bending service on an as and when required basis for Outages and Maintenance

3.1.2	SH1 90 deg S-bends (3)	15Mo3	44.5mm OD x 4.5mm WT: Leg 335mm x R 80mm x Leg 700mm x R 80mm x Leg 335mm	50		
3.1.3	SH1 90 deg S-bends (4)	15Mo3	44,5mm OD x 4.5mm WT: Leg 270mm x R 80mm x Leg 700mm x R 80mm x Leg 270mm	50		
3.1.4	SH1 90 deg S-Bends (1)	15Mo3	44.5mm OD x 4.5mm WT: Leg 465mm x R80mm x Leg 700mm x R 80mm x Leg 465mm	50		
3.2	<u>Superheater</u> <u>One</u>					
	<u>U-bends</u>					
3.2.1	SH1 90 deg U-bends A (23)	15Mo3	44.5mm OD x 4.5mm WT: Legs 2093mm x R 80mm x Width700mm	100		
3.2.2	SH1 90 deg U-bends B (22)	15Mo3	44.5mm OD x 4.5mm WT: Legs 2028mm x R 80mm x Width 520mm	100		
3.2.3	SH1 90 deg U-bends C (21)	15Mo3	44.5mm OD x 4.5 WT: Legs 1963mm x R80mm x Width 340mm	100		
3.3	SH1 180 deg Bends D (20)	15Mo3	44.5mm OD x 4.5mm x WT: Legs 1898mm x R 80mm x Width 160mm	100		
3.4	SH1 180 deg Bends (16)	13CrMo44	44.5mm OD c \$.5mm WT: Legs 1898mm x R 80mm x Width 160mm	25		
3.5	<u>Superheater</u> <u>One</u>	13CrMo44				



CONTRACT TITLE – Provision of Boiler Pressure Parts tube bending service on an as and when required basis for Outages and Maintenance

	<b><u>U-bends</u></b>					
3.5.1	SH1 90 deg U-bends (17)	13CrMo44	44.5mm OD x 4.5mm WT: Legs 1963mm x R 80mm x Width 340mm	25		
3.5.2	SH1 90deg U-bends (18)	13CrMo44	44.5mm OD x 4.5mm WT: Legs 2028mm x R 80mm x Width 520mm	25		
3.5.3	SH1 90deg U-bends (19)	13CrMo44	44.5mm OD x 4.5mm WT: Legs 2093 x R 80mm x Width 700mm	25		
3.6	<b><u>Superheater One</u></b> <b><u>S-bends</u></b>	<b>10CrMo910</b>				
3.6.1	SH1 90 deg S-bends (5)	10CrMo910	44.5mm OD x 6.3mm WT: Leg 465mm x R 80mm x Leg 700 x R 80mm x Leg 465mm	50		
3.6.2	SH1 90 deg S-bends (6)	10CrMo910	44.5mm OD x 6.3mm WT: Leg 400mm x R 80mm x Leg 700mm x R 80mm x Leg 400mm	50		
3.6.3	SH1 90 deg S-bends (7)	10CrMo910	44.5mm OD x 6.3 WT: Leg 335mm x R 80mm x Leg 700mm x R 80 mm x Leg 335mm	50		
3.6.4	SH1 90 deg S-bends (8)	10CrMo910	44.5mm OD x 6.3mm WT: Leg 270mm x R 80mm x Leg 700mm x R 80mm x Leg 270mm	50		
<b>4</b>	<b>Reheater Two</b>					
<b>4.1</b>	<b>RH2 90 deg U-bends</b>	<b>10crMo910</b>				
4.1.1	RH2 90 deg U-bends (1)	10CrMo910	57mm OD x 4.5mm WT: Legs 580 x R 130mm x Width 820mm	20		
4.1.2	RH2 90 deg U-bends (2)	10CrMo910	57mm OD x 4.5mm WT: Legs 660mm x R 130mm x Width 1040mm	20		
4.1.3	RH2 90 deg U-bends (3)	10CrMo910	57mm OD x 4.5mm WT: Legs 740mm x R 130mm x Width	20		

CONTRACT TITLE – Provision of Boiler Pressure Parts tube bending service on an as and when required basis for Outages and Maintenance

			1260mm			
4.1.4	RH2 90 deg U- bends (4)	10CrMo910	57mm OD x 4.5mm WT: Legs 820mm x R 130mm x Width 1480mm	20		
4.1.5	RH2 90 deg U- bends (5)	10CrMo910	57mm OD x 4.5mm WT: Legs 900mm x R 130mm x Width 1700mm	20		
4.1.6	RH2 90 deg U- bends (6)	10CrMo910	57mm OD x 4.5mm WT: Legs 980mm x R 130mm x Width 1920mm	20		
4.1.7	RH2 90 deg U- bends (7)	10CrMo910	57mm OD x 4.5mm WT: Legs 1060mm x R 130mm x Width 2140mm	20		
4.1.8	RH2 90 deg U- bends (8)	10CrMo910	57mm OD x 4.5mm WT: Legs 1140mm x R 130mm x Width 2360mm	20		
4.1.9	RH2 90 deg U- bends (9)	10CrMo910	57mm OD x 4.5mm WT: Legs 1220mm x R 130mm x Width 2580mm	20		
<b>5</b>	<b>Superheater Three</b>					
5.1.1	SH3 90 deg U- bends P (2)	X20CrMoV121	44.5mm OD x 5mm WT: Legs 1053mm x R 120mm x Width 740mm	25		
5.1.2	SH3 90 deg U- bends Q (1)	X20CrMoV121	44.5mm OD x 5mm WT: Legs 983mm x R 120mm x Width 600mm	25		
5.1.3	SH3 90 deg U- bends C (13)	X20CrMoV121	44.5mm OD x 5mm WT: Legs 1823mm x R120mm x Width 2280mm	25		

CONTRACT TITLE – Provision of Boiler Pressure Parts tube bending service on an as and when required basis for Outages and Maintenance

5.1.4	SH3 90 deg U-bends N (3)	X20CrMoV121	44.5mm OD x 5mm WT: Legs 1123mm x R120mm x Width 880mm	25		
5.1.5	SH3 90 deg U-bends B (14)	X20CrMoV121	44.5mm OD x 5mm WT: Legs 1893mm x R120mm x Width 2420mm	25		
5.1.6	SH3 90 deg U-bends A (15)	X20CrMoV121	44.5mm OD x 5mm WT: Legs 1963mm x R120mm x Width 2560mm	25		
5.1.7	SH3 90 deg U-bends (11)	X20CrMoV121	44.5mm OD x 5mm WT: Legs 1683mm x R120mm x Width 2000mm	25		
5.1.8	SH3 90 deg U-bends (9)	X20CrMoV121	44.5mm OD x 5mm WT: Legs 1543mm x R120mm x Width 1720mm	25		
5.1.9	SH3 90 deg U-bends (10)	X20CrMoV121	44.5mm OD x 5mm WT: Legs 1613mm x R120mm x Width 1860mm	25		
5.1.10	SH3 90 deg U-bends (12)	X20CrMoV121	44.5mm OD x 5mm WT: Legs 1753mm x R120mm x Width 2140mm	25		
5.1.11	SH3 90 deg U-bends (8)	X20CrMoV121	44.5mm OD x 5mm WT: Legs 1473mm x R120mm x Width 1580mm	25		
5.1.12	SH3 90 deg U-bends (7)	X20CrMoV121	44.5mm OD x 5mm WT: Legs 1403mm x R120mm x Width 1440mm	25		
5.1.13	SH3 90 deg U-bends (6)	X20CrMoV121	44.5mm OD x 5mm WT: Legs 1333mm x R120mm x Width 1300mm	25		
5.1.14	SH3 90 deg U-bends (5)	X20CrMoV121	44.5mm OD x 5mm WT: Legs 1263mm x R120mm x Width 1160mm	25		
5.1.15	SH3 90 deg U-bends (4)	X20CrMoV121	44.5mm OD x 5mm WT: Legs 1193mm x R120mm x Width 1020mm	25		
6	<b>Superheater 2</b>					

CONTRACT TITLE – Provision of Boiler Pressure Parts tube bending service on an as and when required basis for Outages and Maintenance

6.1	SH3 90 deg U-bends (4)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 710mm x R120mm x Width 1020mm	15		
6.2	SH3 90 deg U-bends (3) N	10CrMo910	44.5mm OD x 6.3mm WT: Legs 640mm x R 120mm x Width 880mm	15		
6.3	SH3 90 deg U-bends (2) P	10CrMo910	44.5mm OD x 6.3mm WT: Legs 570mm x R 120mm x Width 740mm	15		
6.4	SH3 90 deg U-bends (1) Q	10CrMo910	44.5mm OD x 6.3mm WT: Legs 500mm x R120mm x Width 600mm	15		
6.5	SH3 90 deg U-bends (5)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 780mm x R120mm x Width 1160mm	15		
6.6	SH3 90 deg U-bends (6)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 850mm x R120mm x Width 1300mm	15		
6.7	SH3 90 deg U-bends (7)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 920mm x R120mm x Width 1440mm	15		
6.8	SH3 90 deg U-bends (8)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 990mm x R120mm x Width 1580mm	15		
6.9	SH3 90 deg U-bends (9)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 1060mm x R120mm x Width 1720mm	15		
6.10	SH3 90 deg U-bends (10)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 1130mm x R120mm x Width 1860mm	15		
6.11	SH3 90 deg U-bends (11)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 1200mm x R120mm x Width 2000mm	15		
6.12	SH3 90 deg U-bends (12)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 1270mm x R120mm x Width 2140mm	15		
6.13	SH3 90 deg U-bends (13)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 1340mm x R120mm x Width 2280mm	15		

CONTRACT TITLE – Provision of Boiler Pressure Parts tube bending service on an as and when required basis for Outages and Maintenance

6.14	SH3 90 deg U-bends (14)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 1410mm x R120mm x Width 2420mm	15		
6.15	SH3 90 deg U-bends (15)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 1480mm x R120mm x Width 2560mm	15		
6.16	SH3 90 deg U-bends (16)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 1550mm x R120mm x Width 2700mm	15		
6.17	SH3 90 deg U-bends (17)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 1620mm x R120mm x Width 2840mm	15		
6.18	SH3 90 deg U-bends (18)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 1690mm x R120mm x Width 2980mm	15		
6.19	SH3 90 deg U-bends (19)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 1760mm x R120mm x Width 3120mm	15		
6.20	SH3 90 deg U-bends (20)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 1830mm x R120mm x Width 3260mm	15		
6.21	SH3 90 deg U-bends (21)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 1900mm x R120mm x Width 3400mm	15		
6.22	SH3 90 deg U-bends (22)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 1970mm x R120mm x Width 3540mm	15		
6.23	SH3 90 deg U-bends (23)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 2040mm x R120mm x Width 3680mm	15		
6.24	SH3 90 deg U-bends (24)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 2110mm x R120mm x Width 3820mm	15		
<b>7</b>	<b>Evaporator</b>					
7.1	Evaporator Spiral wall corner bends 2D/3D bends		48.3mm OD x 6.3mm WT (bend as per sample)	25		
7.2	Hopper nose tube bends		38mm OD x 6.3mm WT (bend as per sample)	25		

CONTRACT TITLE – Provision of Boiler Pressure Parts tube bending service on an as and when required basis for Outages and Maintenance

7.3	Hopper Front and Rear Wall manipulations		38mm OD x 4.5mm (bend as per sample)	25		
7.4	Manhole manipulation		48.3mm OD x 4.5mm WT (bend as per sample)	15		
7.5						
7.5.1	Wallblower offset tubes (1)	15Mo3	44.5mm OD x 5.6mm (as per attached sketch)	20		
7.5.2	Wallblower offset tubes (2)	15Mo3	48.3mm OD x 6.3mm (as per attached sketch)	20		
8	Sling tubes 90 deg. bends		38mm OD x 4.5mm WT (bend as per sample)	40		
9	Shields					
9.1	Shields 90 deg		60.3mm Intrados	20		
9.2	Shields 90 deg		60.3mm Extrados	20		
9.3	Shields 90 deg		57mm Intrados	20		
9.4	Shields 90 deg		57mm Extrados	20		
9.5	Shields 90 deg		44.5mm Intrados	20		
9.6	Shields 90 deg		44.5mm Extrados	20		
9.7	Shields 90 deg		51mm Intrados	20		
9.8	Shields 90 deg		51mm Extrados	20		
10						
10.1	PWHT of any bend as per the material requirement		X20CrMoV121 and Large diameter pipes that require normalizing	450		
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10.3	AIA Site visits			15		
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The total of the Prices

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C3.1	<i>Employer's Service Information</i>	
C3.2	<i>Contractor's Service Information</i>	
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# 1 Description of the service

## 1.1 Executive overview

### Works Information

The works information in this scope includes the following activities:

- Boiler Tubing manipulation/Bending of Boiler Tubing (Outage Management will be fully responsible for planning, maintaining stock levels and execution as per the table 1 below – for Outage purposes only).
- Supply the detailed Bending Drawing (s) - once of per Bend type within the final bending package.
- Bending and manipulation of finned tubing (mostly 38mm OD).
- Cater for Heat treatment (PWHT – where required) during bending process for higher grade material.
- The complete bend component will have to be signed off by the AIA on site (AIA site visit).
- Prospective supplier must take note that the bending of the evaporator spiral wall corner slopes is also required and is included in this scope.
- Shielding bends will be requested to be done as per the specific scope and outage work requirements.

The preparation (Pre-Outage) work for Planned Outages which entails the activities stipulated above is to cater for both small and large boiler sections. This will in turn reduce the Outage/Boiler Tube failure repair durations, thus fulfilling the intent of the approved Boiler Tube Failure Reduction Strategy.

On the table below, the Boiler Tubing which will require bending and/or manipulation are listed. The wall thickness mentioned in the table is the installed Wall Thickness.

Please take note that, for the most if not all bends, the service supplier will have to take a sample as there are no manufacturing drawings available. Then the supplier must also give us the detailed bending drawing **once-off** per bend type.

Sketches will be provided as a reference to dimensions and are not official technical drawings.

Table 1

Item	Boiler Component	Material type	Dimensions (refer to attached sketch)	Estimated Minimum Quantities per Boiler
1	<b>Economiser</b>			
1.1	Inlet S-bends 90 deg. (3)	15Mo3	38mm OD x 6.3mm WT: leg 307mm x R 63.5mm x Leg 508mm x R 63.5mm x Leg 226	20
1.2	U-bends 90 Deg. (2)	15Mo3	51mm OD x 4.5mm WT: R63.5mm x Legs 500mm x Width 381mm	20
1.3	180 deg. Bends (1)	15Mo3	51mm OD x 4.5mm WT: R63.5mm x Leg 300mm	20
2	<b>Reheater One</b>			
2.1.1	180 deg. Bends (1)	ST35.8	60.3mm OD x 3.9mm WT: R 130mm x Width 260mm x legs 360mm	25

2.1.2	U-bends 90 Deg. (2)	ST35.8	60.3mm OD x 3.9mm WT: Legs 440mm x R 130mm x Width 480mm	25
2.1.3	U-bends 90 Deg. (3)	ST35.8	60.3mm OD x 3.9mm WT: Legs 520mm x R 130mm x Width 700mm	25
2.1.4	U-bends 90 Deg. (4)	ST35.8	60.3mm OD x 3.9mm WT: Legs 600 x R130mm x Width 920mm	25

2.1.5	U-Bends 90 Deg. (5)	ST35.8	60.3mm OD x 3.9mm WT: Legs 680mm x R 130mm x Width 1140mm	25
2.1.6	U-bends 90 Deg. (6)	ST35.8	60.3mm OD x 3.9mm WT: Legs 760mm x R130mm x Width 1360mm	25
2.1.7	U-bend 90 Deg. (7)	ST35.8	60.3mm OD x 3.9mm WT: Legs 840mm x R 130mm x Width 1580mm	25
2.1.8	U-bends 90 Deg. (8)	ST35.8	60.3mm OD x 3.9mm WT: Legs 920mm x R 130mm x 1800mm width	25
2.1.9	U-bends 90 Deg. (9)	ST35.8	60.3mm OD x 3.9mm WT: Legs 1000mm x R 130mm xWidth 2020mm	25
2.1.10	U-bends 90 Deg. (10)	ST35.8	60.3mm OD x 3.9mm WT: Legs 1080mm x R 130mm x Width 2240mm	25
2.1.11	RH1 Manipulation (1) A	ST35.8	60.3mm OD x 3.9mm WT: Leg 680mm x R130mm x 144 deg x Leg 684mm x 126 deg x leg 308mm	25
2.1.12	RH1 Manipulation (2) B	ST35.8	60.3mm OD x 3.9mm WT: Leg 680mm x 141 deg x R 130mm x Leg 814mm x 129 deg x leg 418mm	25
2.1.13	RH1 Manipulation (3) C	ST35.8	60.3mm OD x 3.9mm WT: Leg 680mm x 139 deg x R 130mm x Leg 946mm x 131 deg x Leg 528mm	25
2.1.14	RH1 Manipulation (4) D	ST35.8	60.3mm OD x 3.9mm WT: Leg 680mm x 137 deg x R 130mm x Leg 1079mm x 133 deg x Leg 638mm	25
2.1.15	RH1 Manipulation (5) E	ST35.8	60.3mm OD x 3.9mm WT: Leg 680mm x 136 deg x R 130mm x Leg 1213mm x 134 deg x Leg 748mm	20
2.1.16	RH1 Manipulation (6) F	ST35.8	60.3mm OD x 3.9mm WT: Leg 680mm x 135 deg x R 130mm x Leg 1347mm x 135 deg x Leg 858mm	20

2.1.17	RH1 Manipulation (7) G	ST35.8	60.3mm OD x 3.9mm WT: Leg 680mm x 134 deg x R 130mm x Leg 1482mm x 135 deg x leg 968mm	20
2.1.18	RH1 Manipulation (8) H	ST35.8	60.3mm OD x 3.9mm WT: Leg 680mm x 133 deg x R 130mm x Leg 1616mm x 137 deg x Leg 1078mm	25
2.1.19	RH1 Manipulation (9)	ST 35.8	60.3mm OD x 3.9mm WT: Leg 680mm x 133 deg x R 130mm x Leg 1751mm x 137deg x Leg 1188mm	25
2.1.20	RH1 Manipulation (10) K	ST35.8	60.3mm OD x 3.9mm WT: Leg 680mm x 132 deg x R 130mm x 1886mm x 138 deg x leg 1298mm	25
2.1.21	RH1 Manipulation (11) A	15Mo3	57mm OD x 3.7mm WT: Leg 680mm x 144 deg x R 130mm x 684mm x 126 deg x Leg 308mm	50
2.1.22	RH1 Manipulation (12) B	15Mo3	57mm OD x 3.7mm WT: Leg 680mm x 141 deg x R 130mm x Leg 814mm x 129 deg x Leg 418mm	50
2.1.23	RH1 Manipulation (13) C	15Mo3	57mm OD x 3.7mm WT: Leg 680mm x 139 deg x R 130mm x Leg 946mm x 131 deg x 528mm	50
2.1.24	RH1 Manipulation (14) D	15Mo3	57mm OD x 3.7mm WT: Leg 680mm x 137 deg x R 130mm x Leg 1079mm x 133 deg x Leg 638mm	50
2.1.25	RH1 Manipulation (15)	15Mo3	57mm OD x 3.7mm WT: Leg	25

	E		680mm x 136 deg x R 130mm x Leg 1213mm x 134 deg x Leg 748mm	
2.1.26	RH1 Manipulation (16) F	15Mo3	57mm OD x 3.7mm WT; Leg 680mm x 135 deg x R 130mm x Leg 1347mm x 135 deg x Leg 858mm	25
2.1.27	RH1 Manipulation (17) G	15Mo3	57mm OD x 3.7mm WT: Leg 680mm x 134 deg x R 130mm x Leg 1482mm x 135 deg x Leg 968mm	25
2.1.28	RH1 Manipulation (18) H	15Mo3	57mm OD x 3.7mm WT: Leg 680mm x 133 deg x R 130mm x 1616mm x 137 deg x Leg 1078mm	25

2.1.29	RH1 Manipulation (19) J	15Mo3	57mm OD x 3.7mm WT: Leg 680mm x 133 deg x R 130mm x Leg 1751mm x 137 deg x Leg 1188mm	25
2.1.30	RH1 Manipulation (20) K	15Mo3	57mm OD x 3.7mm WT: Leg 680mm x 132 deg x R 130mm x Leg 1886mm x 138 deg x Leg 1298mm	25
2.1.31	RH1 180 deg Bend (11)	15Mo3	57mm OD x 3.7mm WT: Legs 360mm x R 130mm x Width 260mm	25
2.1.32	RH1 90 deg U-bend (12)	15Mo3	57mm OD x 3.7mm WT: Legs 440mm x R130mm x Width 480mm	20
2.1.33	RH1 90 deg U-bend (13)	15Mo3	57mm OD x 3.7mm WT; Legs 520mm x R130mm x Width 700mm	20
2.1.34	RH1 90 deg U-bend (15)	15 Mo3	57mm OD x 3.7mm WT: Legs 680mm x R 130mm x Width 1140mm	20
2.1.35	RH1 90 deg U-bend (16)	15Mo3	57mm OD x 3.7mm WT: Legs 760mm x R 130mm x Width 1360mm	20
2.1.36	RH1 90 deg U-bend (17)	15Mo3	57mm OD x 3.7mm WT: Legs 840mm x R 130mm x Width 1580mm	20
2.1.37	RH1 90 deg U-bend (18)	15mo3	57mm OD x 3.7mm WT: Legs 920mm x R 130mm x Width 1800mm	20
2.1.38	RH1 90 deg U-bend (19)	15Mo3	57mm OD x 3.7mm WT: Legs 1000mm x R 130mm x Width 2020mm	20
2.1.39	RH1 90 deg U-bend (20)	15mo3	57mm OD x 3.7mm WT: Legs 1080mm x R130mm x Width 2240mm	20
2.2	RH1 Penetration manipulations		Various sizes on an as and when required basis	25
3	<b>Superheater One S-bends</b>			
3.1.1	SH1 90 deg S-bends (2)	15Mo3	44.5mm OD x 4.5mm WT: Leg 400mm x R 80mm x Leg 700mm x R 80mm x Leg 400mm	50
3.1.2	SH1 90 deg S-bends (3)	15Mo3	44.5mm OD x 4.5mm WT: Leg 335mm x R 80mm x Leg 700mm x R 80mm x Leg 335mm	50

3.1.3	SH1 90 deg S-bends (4)	15Mo3	44,5mm OD x 4.5mm WT: Leg 270mm x R 80mm x Leg 700mm x R 80mm x Leg 270mm	50
3.1.4	SH1 90 deg S-Bends (1)	15Mo3	44.5mm OD x 4.5mm WT: Leg 465mm x R80mm x Leg 700mm x R 80mm x Leg 465mm	50

3.2	<b>Superheater One U-bends</b>			
3.2.1	SH1 90 deg U-bends A (23)	15Mo3	44.5mm OD x 4.5mm WT: Legs 2093mm x R 80mm x Width700mm	100
3.2.2	SH1 90 deg U-bends B (22)	15Mo3	44.5mm OD x 4.5mm WT: Legs 2028mm x R 80mm x Width 520mm	100
3.2.3	SH1 90 deg U-bends C (21)	15Mo3	44.5mm OD x 4.5 WT: Legs 1963mm x R80mm x Width 340mm	100
3.3	SH1 180 deg Bends D (20)	15Mo3	44.5mm OD x 4.5mm x WT: Legs 1898mm x R 80mm x Width 160mm	100
3.4	SH1 180 deg Bends (16)	13CrMo44	44.5mm OD c \$.5mm WT: Legs 1898mm x R 80mm x Width 160mm	25
3.5	<b>Superheater One U-bends</b>	<b>13CrMo44</b>		
3.5.1	SH1 90 deg U-bends (17)	13CrMo44	44.5mm OD x 4.5mm WT: Legs 1963mm x R 80mm x Width 340mm	25
3.5.2	SH1 90deg U-bends (18)	13CrMo44	44.5mm OD x 4.5mm WT: Legs 2028mm x R 80mm x Width 520mm	25
3.5.3	SH1 90deg U-bends (19)	13CrMo44	44.5mm OD x 4.5mm WT: Legs 2093 x R 80mm x Width 700mm	25
3.6	<b>Superheater One S-bends</b>	<b>10CrMo910</b>		
3.6.1	SH1 90 deg S-bends (5)	10CrMo910	44.5mm OD x 6.3mm WT: Leg 465mm x R 80mm x Leg 700 x R 80mm x Leg 465mm	50
3.6.2	SH1 90 deg S-bends (6)	10CrMo910	44.5mm OD x 6.3mm WT: Leg 400mm x R 80mm x Leg 700mm x R 80mm x Leg 400mm	50

3.6.3	SH1 90 deg S-bends (7)	10CrMo910	44.5mm OD x 6.3 WT: Leg 335mm x R 80mm x Leg 700mm x R 80 mm x Leg 335mm	50
3.6.4	SH1 90 deg S-bends (8)	10CrMo910	44.5mm OD x 6.3mm WT: Leg 270mm x R 80mm x Leg 700mm x R 80mm x Leg 270mm	50
4	<b>Reheater Two</b>			
4.1	<b>RH2 90 deg U- bends</b>	<b>10crMo910</b>		
4.1.1	RH2 90 deg U-bends (1)	10CrMo910	57mm OD x 4.5mm WT: Legs 580 x R 130mm x Width 820mm	20
4.1.2	RH2 90 deg U-bends (2)	10CrMo910	57mm OD x 4.5mm WT: Legs 660mm x R 130mm x Width 1040mm	20
4.1.3	RH2 90 deg U- bends (3)	10CrMo910	57mm OD x 4.5mm WT: Legs 740mm x R 130mm x Width 1260mm	20
4.1.4	RH2 90 deg U- bends (4)	10CrMo910	57mm OD x 4.5mm WT: Legs 820mm x R 130mm x Width 1480mm	20
4.1.5	RH2 90 deg U- bends (5)	10CrMo910	57mm OD x 4.5mm WT: Legs 900mm x R 130mm x Width 1700mm	20
4.1.6	RH2 90 deg U- bends (6)	10CrMo910	57mm OD x 4.5mm WT: Legs 980mm x R 130mm x Width 1920mm	20
4.1.7	RH2 90 deg U- bends (7)	10CrMo910	57mm OD x 4.5mm WT: Legs 1060mm x R 130mm x Width 2140mm	20
4.1.8	RH2 90 deg U- bends (8)	10CrMo910	57mm OD x 4.5mm WT: Legs 1140mm x R 130mm x Width 2360mm	20
4.1.9	RH2 90 deg U- bends	10CrMo910	57mm OD x 4.5mm WT: Legs	20

	(9)		1220mm x R 130mm x Width 2580mm	
5	<b>Superheater Three</b>			
5.1.1	SH3 90 deg U-bends P (2)	X20CrMoV121	44.5mm OD x 5mm WT: Legs 1053mm x R 120mm x Width 740mm	25
5.1.2	SH3 90 deg U-bends Q (1)	X20CrMoV121	44.5mm OD x 5mm WT: Legs 983mm x R 120mm x Width 600mm	25



5.1.3	SH3 90 deg U-bends C (13)	X20CrMoV121	44.5mm OD x 5mm WT: Legs 1823mm x R120mm x Width 2280mm	25
5.1.4	SH3 90 deg U-bends N (3)	X20CrMoV121	44.5mm OD x 5mm WT: Legs 1123mm x R120mm x Width 880mm	25
5.1.5	SH3 90 deg U-bends B (14)	X20CrMoV121	44.5mm OD x 5mm WT: Legs 1893mm x R120mm x Width 2420mm	25
5.1.6	SH3 90 deg U-bends A (15)	X20CrMoV121	44.5mm OD x 5mm WT: Legs 1963mm x R120mm x Width 2560mm	25
5.1.7	SH3 90 deg U-bends (11)	X20CrMoV121	44.5mm OD x 5mm WT: Legs 1683mm x R120mm x Width 2000mm	25
5.1.8	SH3 90 deg U-bends (9)	X20CrMoV121	44.5mm OD x 5mm WT: Legs 1543mm x R120mm x Width 1720mm	25
5.1.9	SH3 90 deg U-bends (10)	X20CrMoV121	44.5mm OD x 5mm WT: Legs 1613mm x R120mm x Width 1860mm	25
5.1.10	SH3 90 deg U-bends (12)	X20CrMoV121	44.5mm OD x 5mm WT: Legs 1753mm x R120mm x Width 2140mm	25
5.1.11	SH3 90 deg U-bends (8)	X20CrMoV121	44.5mm OD x 5mm WT: Legs 1473mm x R120mm x Width 1580mm	25
5.1.12	SH3 90 deg U-bends (7)	X20CrMoV121	44.5mm OD x 5mm WT: Legs 1403mm x R120mm x Width 1440mm	25
5.1.13	SH3 90 deg U-bends (6)	X20CrMoV121	44.5mm OD x 5mm WT: Legs 1333mm x R120mm x Width 1300mm	25
5.1.14	SH3 90 deg U-bends (5)	X20CrMoV121	44.5mm OD x 5mm WT: Legs 1263mm x R120mm x Width 1160mm	25
5.1.15	SH3 90 deg U-bends (4)	X20CrMoV121	44.5mm OD x 5mm WT: Legs 1193mm x R120mm x Width 1020mm	25
6	<b>Superheater 2</b>			
6.1	SH3 90 deg U-bends (4)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 710mm x R120mm x Width 1020mm	15
6.2	SH3 90 deg U-bends (3) N	10CrMo910	44.5mm OD x 6.3mm WT: Legs 640mm x R 120mm x Width 880mm	15
6.3	SH3 90 deg U-bends (2) P	10CrMo910	44.5mm OD x 6.3mm WT: Legs 570mm x R 120mm x Width 740mm	15

6.4	SH3 90 deg U-bends (1) Q	10CrMo910	44.5mm OD x 6.3mm WT: Legs 500mm x R120mm x Width 600mm	15
6.5	SH3 90 deg U-bends (5)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 780mm x R120mm x Width 1160mm	15

6.6	SH3 90 deg U-bends (6)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 850mm x R120mm x Width 1300mm	15
6.7	SH3 90 deg U-bends (7)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 920mm x R120mm x Width 1440mm	15
6.8	SH3 90 deg U-bends (8)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 990mm x R120mm x Width 1580mm	15
6.9	SH3 90 deg U-bends (9)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 1060mm x R120mm x Width 1720mm	15
6.10	SH3 90 deg U-bends (10)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 1130mm x R120mm x Width 1860mm	15
6.11	SH3 90 deg U-bends (11)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 1200mm x R120mm x Width 2000mm	15
6.12	SH3 90 deg U-bends (12)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 1270mm x R120mm x Width 2140mm	15
6.13	SH3 90 deg U-bends (13)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 1340mm x R120mm x Width 2280mm	15
6.14	SH3 90 deg U-bends (14)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 1410mm x R120mm x Width 2420mm	15
6.15	SH3 90 deg U-bends (15)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 1480mm x R120mm x Width 2560mm	15
6.16	SH3 90 deg U-bends (16)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 1550mm x R120mm x Width 2700mm	15
6.17	SH3 90 deg U-bends (17)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 1620mm x R120mm x Width	15

			2840mm	
6.18	SH3 90 deg U-bends (18)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 1690mm x R120mm x Width 2980mm	15
6.19	SH3 90 deg U-bends (19)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 1760mm x R120mm x Width 3120mm	15
6.20	SH3 90 deg U-bends (20)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 1830mm x R120mm x Width 3260mm	15
6.21	SH3 90 deg U-bends (21)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 1900mm x R120mm x Width 3400mm	15
6.22	SH3 90 deg U-bends (22)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 1970mm x R120mm x Width 3540mm	15
6.23	SH3 90 deg U-bends (23)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 2040mm x R120mm x Width 3680mm	15
6.24	SH3 90 deg U-bends (24)	10CrMo910	44.5mm OD x 6.3mm WT: Legs 2110mm x R120mm x Width 3820mm	15
7	<b>Evaporator</b>			
7.1	Evaporator Spiral wall corner bends 2D/3D bends		48.3mm OD x 6.3mm WT (bend as per sample)	25
7.2	Hopper nose tube bends		38mm OD x 6.3mm WT (bend as per sample)	25
7.3	Hopper Front and Rear Wall manipulations		38mm OD x 4.5mm (bend as per sample)	25
7.4	Manhole manipulation		48.3mm OD x 4.5mm WT (bend as per sample)	15
7.5				
7.5.1	Wallblower offset tubes (1)	15Mo3	44.5mm OD x 5.6mm (as per attached sketch)	20
7.5.2	Wallblower offset tubes (2)	15Mo3	48.3mm OD x 6.3mm (as per attached sketch)	20

8	Sling tubes 90 deg. bends		38mm OD x 4.5mm WT (bend as per sample)	40
9	Shields			
9.1	Shields 90 deg		60.3mm Intrados	20
9.2	Shields 90 deg		60.3mm Extrados	20
9.3	Shields 90 deg		57mm Intrados	20
9.4	Shields 90 deg		57mm Extrados	20
9.5	Shields 90 deg		44.5mm Intrados	20
9.6	Shields 90 deg		44.5mm Extrados	20
9.7	Shields 90 deg		51mm Intrados	20
9.8	Shields 90 deg		51mm Extrados	20
10				
10.1	PWHT of any bend as per the material requirement		X20CrMoV121 and Large diameter pipes that require normalizing	450
10,2	Supply of an approved manufacturing including calculations- finned tubing			109
10.3	AIA Site visits			15

## 1.2 Employer's requirements for the service

Task orders will be issued by the Service Manager on an "as and when" required basis. The liability of the *Employer* is limited to the total of the Prices stated in the specific Task Order and not the total Price stated in the Service Information. The *Employer* is not obliged to issue any Task Order to the *Contractor* despite the *Contractor* being awarded the contract.

The *Contractor* will be notified by the Service Manager a minimum a month in advance if he becomes aware of any Outage dates that is delayed with 2months or brought forward.

Emergency Task Orders may be given at any time by the Service Manager and different conditions needs to be adhered to as per 2.13 Management of work done by Task Order

*Contractor* to adhere to the following latest documentation within the Service Information:

- ORHVS – Regulations – EPC – 32-846
- Plant Safety Regulations - 36-681 Rev01
- Management and control of the Declared Outage Permit RLR0037
- Project Controls Requirements – 240-85065548
- Majuba Power Station Waste Management ENV/GEN/WI/12
- Environmental Requirements for Contractors ENV/GEN/SPEC/01
- Supplier Quality Specification 240-105658000

Electrical Installation Regulations to be adhered to, all electrical boards must be inspected and tested before connecting to a power supply and then a CoC must be issued.

## 1.3 Interpretation and terminology

The following abbreviations are used in this Service Information:

Abbreviation	Meaning given to the abbreviation
OBL	Outside battery limits
NEC	New Engineering Contract
SOW	Scope of Work
KPI	Key Performance Indicator
PSR	Plant Safety Regulator

## 2 Management strategy and start up.

### 2.1 The *Contractor's* plan for the *service*

The *Contractor* will submit a plan to the *Service Manager* for acceptance within the period stated in the service agreement.

Requirements which are to be incorporated into the *Contractor's* plan:

- Document 240-85065548 requirements (project controls for contractors)
- Level 4 programme when Task Order is provided to the *Contractor*

### 2.2 Management meetings

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

Title and purpose	Approximate time interval	Location	Attendance by:
Risk register and compensation events	Discussions to take place as soon as a risk is notified	<i>Service Manager's</i> office	<i>Contractor, Service Manager, Co-ordinator and Contracts Supervisor</i>
Overall contract progress and feedback	As and when required.	<i>Service Manager's</i> office	<i>Service Manager, Contractor, Co-ordinator and Contracts supervisor</i>
Daily Outage Progress	Daily 10:30am during outages	MS teams	Outage Execution Manager, Planner, <i>Service Manager</i> , Coordinator and Contract Supervisors

Daily Safety Toolbox Talks	Daily before work starts on site with signed attendance registers by <i>Contractor's</i> employees and signed off minutes by the <i>Contractor's</i> Site Manager	<i>Contractors</i> Yard	<i>Contractor</i> and his employees
<i>Contractor</i> Weekly Safety Meeting	Wednesdays 13h00 during outages	MS teams	Safety Officers, Supervisors, Outage planners and Co-ordinators
Plant Safety Walk down	Wednesdays, 09h00, during outages	Unit on Outage	Safety Officers, Supervisors, Outage planners and Co-ordinators

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

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.

If the Contractor can't attend any meeting his feedback should be formally communicated through to the Service Manager.

The Contractor will provide a detailed feedback report on a daily basis during Outages providing accurate feedback on the status of service carried out by the Contractor. This report should indicate accurate progress of service and if any constraints are experienced, the Contractor to communicate with the Service Manager and mitigate the risks with action plans.

## 2.3 Contractor's management, supervision and key people

The *Contractor* to provide a key list of personnel who will carry out the work on site with their qualifications attached. A company organogram will be needed by the Service Manager to communicate accordingly to comply with the NEC3 Term Services Contract communication structures. Contractor to refer to Majuba Power Station Contractor SHE Requirements RSR0001

## 2.4 Provision of bonds and guarantees

N/A

## 2.5 Documentation control

Documentation requirements covers the life cycle of the project from the initial engineering stages through to installation and commissioning including operating, maintenance and the training stages of the project. Not only must these documents be comprehensive and complete but comply with strict document control and revision procedures.

The Contractor is responsible to plan the supply of the documentation during the various project stages and to provide the documentation in accordance with the Contractor Document Submission Schedule (CDSS). A document is thus any written or pictorial information describing, defining, specifying or certifying activities, requirements, procedures or results.

All the drawings issued by the Employer for this contract is copyright protected and are not to be copied by the Contractor.

It is the responsibility of the Contractor to update any drawings that may have changed due to modifications on the plant. These drawings should be submitted and registered correctly by the Contractor to the drawing office at Majuba Power Station.

The Contractor submits all documentation on a formal transmittal form to the Service Manager.

All manuals, documents, drawings and engineering documentation shall be presented in British English in both software and hardware.

All Communications will be always filed and kept on site as it is crucial to have the correct communication structures. These communication documents should at all times adhere to the NEC 3 Term Service Contract communication requirements.

### **Contractor Document Submission Schedule (CDSS)**

<b>Document Name/Description</b>	<b>Date/Time documents to be submitted</b>
A programme in Primavera format as referred to document number (240-85065548)	One week after receipt of task order
Baseline risk assessment	A month before start of the work
QCP's	A month before start of the work
<i>Contractor's</i> Safety file	Two week before start of work
Inspection report	24 hours after stripping activity
Daily progress report	After Every Shift
Technical report and data pack	Within 14 days of completion of the services

## 2.6 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.

The *Contractor* shall address the tax invoice to  
Eskom Holdings SOC Ltd  
Reg. No. 2002/015527/30  
Accounts Payable

Email to: [Invoiceseskomlocal@eskom.co.za](mailto:Invoiceseskomlocal@eskom.co.za)

The *Contractor* keeps records of all invoices submitted and paid up to the end of the project, as well as details of Actual Costs.

All invoices are to be submitted to the Finance Department (Account payables) contact centre at [FSS@eskom.co.za](mailto:FSS@eskom.co.za) or 011 800 5060 and include on each invoice the following information:

- 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.
- (Add other as required)

Add procedures for invoice submission and payment (e. g. electronic payment instructions)

### 2.6.1 Service-related invoices

- a) Once the *service* has been delivered/completed both parties have to agree that the *service* has been delivered/completed successfully prior to invoicing
- b) An assessment payment certificate must be completed between the *Contractor* and *Service Manager* according to the *service* performed. Both parties have to sign the assessment/certificate
- c) A copy of assessment/payment certificate must be obtained by the *Contractor* to enable the creation of an invoice and to prevent any discrepancies. A copy of the assessment/payment certificate must be attached to the original invoice
- d) *Service Manager* performs a service entry and Goods Receipt on the SAP system.  
(Assessment/Payment Certificate issued as a source document for Service Entry Goods Receipt)
- e) *Service Manager* will forward the Service entry and Goods Receipt Note number to the *Contractor* within 3 working days after the service has been rendered and the Assessment/Payment certificate signed
- f) *Contractor* must forward the original invoices together with a copy of the Assessment/Payment certificate to the Eskom Documentation Centre.

### 2.6.2 Goods Delivered Invoices

- a) All goods must be delivered at stores and stores will perform a goods receipt on the SAP system. (The delivery note is used as source document for Goods Receipt. The invoice should not be used as a delivery note)
- b) *Service Manager* will then forward the Goods Receipt note to the Vendor immediately or within 3 working days after the Goods are delivered.
- c) Vendors must then forward the Invoices together with a copy of the Assessment/Payment certificate to the Eskom Documentation Centre

### 2.6.3 Invoices linked to commodity prices

- a) The requirements are the same as for Goods Delivered Invoices.
- b) Invoices which are linked to commodity prices will result in CPA (Contract Price Adjustment).
- c) Attach a copy of the material invoice that has been previously paid to the CPA invoice, as well as the calculation sheet and all indices attached other than SEIFSA.
- d) The relevant Eskom Department will then complete the CPA calculation sheet and forwards it to the Eskom Documentation Centre.

### 2.6.4 Retention Invoices

- a) The requirements are the same as for Goods Delivered and service-related Invoices.



- b) Where Retention is applicable on the contract, the Eskom SAP system will automatically create the Retention, and the amount deducted from the invoiced amount.
- c) Invoices related to retentions release require a defect or completion certificate and a retention release certificate from the *Service Manager* and must be attached to the original invoice. The original invoice for the retention to be released must be accompanied by the approved and signed completion/defect certificate and retention release certificate and forwarded by the *Service Manager* to the Documentation Centre to effect payment.

### 2.6.5 General Information related to Eskom Invoices

- a) *Contractor* must ensure that the Service Entry and Goods Receipt Note number appears on the invoice. (It can be printed or handwritten on the invoice).
- b) Eskom Purchase Order number must appear on invoice.
- c) Invoices must be VAT compliant in line with the VAT Act requirements.
- d) Invoices submitted must reflect the bank account details. A once off copy of the banking details may be forwarded to the Documentation Centre and it will be attached to each scanned invoice.
- e) Invoices must be original or certified as an original in line with the VAT Act. No electronic invoices will be accepted.
- f) Eskom's correct name "**Eskom Holdings SOC Limited**" must appear on the invoice.
- g) The Eskom VAT registration number: **4740 101 508** must appear on the invoice.
- h) No pro-forma invoices will be accepted.
- i) *Contractor* cannot be utilized by Eskom for more than 3 times without a contract being established.

Note:

- 1. Invoices must be delivered to the Eskom Documentation Centre, as this will speed up the payment process and ensure that invoices are not lost, and payments delayed. There is no need for *Service Manager* to sign invoices as they perform Goods Receipt in the system. The assessment certificate and Goods Receipt serves as the approval of payment.
- 2. Eskom Documentation Centre will review invoices according to a checklist and on completion scan the documentation into Accounts Payable processing system (Documentation can only be scanned where the Purchase order no. and Goods Receipt Note no. is reflected on the invoice, and the invoice complies with the VAT Act).
- 3. Invoices are processed and released for payment by Accounts Payable Section only where the source documentation is 100% correct)

### 2.7 Contract change management

Any change of the *Contractor's* company ownership should be communicated through to the *Service Manager*. Failing to do this may lead to contract termination with legal consequences.

The correct processes and procedures will be communicated through to the *Contractor* by the *Service Manager*.

If the *Employer's Service Manager* change the *Contractor* will be notified by the *Employer* as soon as possible to ensure that the *Contractor* follow the correct communication channels.

### 2.8 Records of Defined Cost to be kept by the *Contractor*

In order to substantiate the Defined Cost of Compensation Events, the *Employer* may require the *Contractor* to keep records of amounts paid by him for people employed by the *Contractor*, Plant and Materials, work subcontracted by the *Contractor* and Equipment.

The *Contractor's* Site Manager will complete the site daily log and this will be submitted to the *Service Manager* for his signature before 12 am of the following morning barring weekends. The Friday and weekend logs will be submitted before 12 am Mondays. The log will include but not be limited to the following:

- Date and day.
- Weather.
- Site Conditions.
- Work Done.
- People who are employed by the *Contractor* • Work sub-contracted by the *Contractor*
- Any incidents during that period.

Any communication and documentation during this service agreement to be filed in the contract file. This file is in the possession of the *Service Manager* at all times.

## **2.9 Insurance provided by the *Employer***

As stated in Contract Data and as per Annexure A within this Service Agreement.

## **2.10 Design and supply of Equipment**

Details of the design of Equipment is shared with the *Service Manager*, not necessarily for his acceptance but, as an assurance that the Equipment will be able to allow the *Contractor* to Provide the Service efficiently and without delay.

Also, the *Employer* may wish to exercise constraints or include witness and hold points during manufacture, assembly, or delivery of such Equipment.

The *Contractor* submits particulars of the design of an item of equipment to the *Service Manager* for acceptance when the *Service Manager* instructs him to. A reason for not accepting is that the design of the item will not allow the *Contractor* to provide the service in accordance with the Service Information, accepted plan or the applicable law.

## **2.11 Things provided at the end of the *service period* for the *Employer's* use**

### **2.11.1 Equipment**

The *Contractor* is to hand over a clean plant to the *Employer* by the end of this contract.

### **2.11.2 Information and other things**

The *Contractor* has the right to use Equipment, Plant, and Materials as stated in this Service Information provided by the *Employer* to provide the *service*.

At the end of the *service* period the *Contractor* returns all Equipment and surplus materials to the *Employer*. Provides items of equipment for the *Employer's* use as stated in the Service Information and provides information and other things as stated in the Service Information.

## **2.12 Management of work done by Task Order**

A Task is work within the *service* which the *Service Manager* may instruct the *Contractor* to carry out within a stated period of time.

A signed Task Order is the *Service Manager's* instruction to carry out a Task.

Task Completion is when the *Contractor* has done all the work in the Task and corrected Defects which would have prevented the *Employer* or Others from using the Affected Property and Others from doing their work.

Task Completion Date is the date for completion stated in the Task Order unless later changed in accordance with this contract.

A Task Order includes:

- A detailed description of the work in the Task
- A priced list of items of work in the Task in which items taken from the Price List are identified.
- The starting and completion dates for the Task
- Conditions of the *service agreement* is in accordance with the Task Order issued

The *Service Manager* consults the *Contractor* about the contents of a Task Order before he issues it.

The Prices for items in the Task price list which are not taken from the Price List are assessed in the same way as compensation events.

No Task Order is issued after the end of the service period.

Work will not commence on site without the *Contractor* receiving a signed detailed task order that has been agreed upon by the *Service Manager* and the *Contractor*.

It is the *Contractors* responsibility to provide the *Service Manager* a detailed Task Order programme for acceptance within the period stated in the Contract Data.

Only when the Task Order programme is accepted and agreed upon by the *Service Manager* and the *Contractor* will any work commence on site.

**When any emergencies do arise, it is required from the *Contractor* to adhere to the following terms:**

- The *Contractor* will be informed of emergencies when the *Service Manager* first becomes aware of it.
- Response time within 2 hours for any communication when the *Contractor* acknowledges the emergency.
- Provide a programme within 8 hours after Task Order provided to the *Contractor* - Mobilise within 5 hours after Task Order have been accepted by both parties.

### 3 Health and safety, the environment and quality assurance

#### 3.1 Health and safety risk management

The *Contractor* undertakes to take all reasonable precautions to maintain the health and safety of persons during the execution of the *service*.

Without limitation the *Contractor* accepts that the *Employer* may appoint him as the "Principal *Contractor*" as per the Construction Regulations 2014.

The Contractor shall ensure that a total of the Prices as at the Contract Date includes a sufficient amount for proper compliance with the Construction Regulations.

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.

#### 3.2 OHS Requirements Explanation

Requirements	Explanation
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<b>1. Acknowledgement of Eskom's OHS rules and requirements (Annexure B)</b>	Ensure that all applicable rules and requirements are referenced in this form in order for the supplier to acknowledge and comply with them. Ensure that this completed form is included in the enquiry procurement package. To be signed and submitted by the tenderer.
<b>2. Baseline OHS Risk Assessment</b>	Refers to the OHS hazards/aspect and risks/impact that are identified and assessed before the inception of a new project and commencement of operations. The baseline risk assessment shall include both routine and non-routine tasks.
<b>3. Competency</b>	<p>A person who, in respect to the work that has to be done, has the required training, knowledge and experience, and, where applicable, qualifications relevant to that work or task. Provided that where appropriate qualifications and training are registered in terms of the provisions of the National Qualifications Framework Act, No 67 of 2008, those qualifications and training must be regarded as the required qualifications and training, and is familiar with the Act and applicable regulations made under the Act.</p> <ul style="list-style-type: none"> <li>- First aider (If or when applicable)</li> <li>- OHS professional (If or when applicable)</li> <li>- Incident investigator (If or when applicable)</li> </ul>
<b>4. Health and Safety plan</b>	Means a site, activity or project documented plan in accordance with the clients OHS requirements. The plan must be scope or project based. The plan must reflect an organised system (method statements, processes, resources etc) which the supplier will comply with and enforce to manage the OHS risk during the lifecycle of the project. This can also be in the form of an OHS manual.
<b>5. Valid letter of good standing</b>	Registration with the Compensation Commissioner (Coid) or a licenced mutual company or an equivalent of it (for international bidders). If a company has only one employee (CEO, owner), the supplier shall submit an insurance letter that covers accidental death and disability to the value of R500 000 as a minimum.
<b>6. OHS policy</b>	A statement of intention by the employer which provides a framework for setting OHS objectives to improve OHS performance and also emphasises management commitment to employees' wellbeing and duty of care to the environment.
<b>7. Costing for Health and Safety,</b>	<p>Has the tenderer submitted costing for OHS management activities?</p> <p>OHS costing must reflect the amount of funds that will be allocated for OHS when the project commences (This is a breakdown of the bulk OHS costing in the bill of quantities) and it should be based on the scope of work and the associated risk. The items to be included are not limited to the following:</p> <p>PPE, OHS training, OHS professionals, First aid equipment, Ablution facilities, Safety signs, safety campaigns or interventions, OHS equipment/instruments, Medical examinations etc</p>

*All work shall be performed in compliance of the Occupational Health and Safety Act, Act Number 85 of 1993, as amended and the ESKOM SAFETY, HEALTH & ENVIRONMENTAL SPECIFICATION – BIA/RM/STD/01 and 32-136.*

The *Contractor* is fully responsible for the safety of all workmen and other persons entering the general area of operations.

The *Contractor* adheres to the relevant safety clauses and to the safety regulations of the respective plants.

The *Contractor* appoints a responsible person for the site activities applicable to civil works.

The *Contractor* holds a safety meeting before commencement of any work. The *Contractor* does a Risk Assessment (RA) prior to each activity.

### **3.3 Health and safety risk management**

#### **3.3.1 Eskom Life saving rules (Directive 32-421)**

Five Life saving rules have been developed that will apply to all Eskom employees, agents, consultants and *Contractors*.

Rule 1: Open, Isolate, Test, Earth, Bond, And/or Insulate before touch - that is any plant operating above 1000 V.

Rule 2: Hook up at heights - no person may work at height where there is a risk of falling. 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. ○ Eskom takes a "ZERO TOLERANCE" attitude to drivers and passengers who do not wear safety belts when driving in any vehicle on Eskom Business and/or on Eskom premises. The violation of this very important safety rule as well as any safety rule while performing work for or on behalf of Eskom may result in Eskom terminating your obligation to perform work in terms of your contract with Eskom.

- All occupants must wear their safety belts properly, and must never put the shoulder belt under their arm or behind their backs. Drivers and all passengers must buckleup at all times for the sake of themselves and their families.

Rule 4: Be sober - no person is allowed to work under the influence of drugs and alcohol.

Rule 5: Use a permit to work – where an authorization limitation exists, no person shall work without the required permit to work.

Consequences of violating a Life saving rules

It must be highlighted that Eskom takes a ZERO TOLERANCE stance to violation of these rules and will therefore, push for a sanction of dismissal during a disciplinary hearing.

#### **3.3.2 Reporting of incidents**

- a) The *Employer* follows an incident prevention policy which includes the investigation of all incidents involving personnel and property. This is done with the intention of introducing control measures to prevent a recurrence of the same incident. The *Contractor* is expected to co-operate fully to achieve this objective and have his own incident reporting system which is compatible to the site system. The *Service Manager* must be informed immediately of all safety incidents including fatalities, medicals, first aids and near misses. Any damage to property or equipment must also be reported as soon as reasonably practicable but not later than the end of the shift or **within 8 (eight) hours**.
- b) NOTE: The above-mentioned reporting does not relieve the *Contractor* of his legal obligation to report incidents to the Department of Labour, or to keep records in terms of the Occupational Health and Safety Act, and Compensation for Occupational Injuries and Diseases Act and to perform investigations of all incidents.
- c) The *Contractor* must provide the Safety Risk Officer with a monthly safety statistics report by the first working day of every month; even if no incidents have occurred (document format will be supplied by the *Employer*).

### 3.3.3 Vehicle Safety

- a) Drivers, passengers and pedestrians must obey safety requirements in terms of the **National Road Traffic Act, No 93 of 1996**, as amended, including other relevant provincial or local requirements.
- b) All drivers must possess a valid, national driver's licence of the correct category/class, must not be under the influence of alcohol or other drugs which will impair the senses and must be authorised by the *Contractor* to drive the company vehicle.
- c) All vehicles must be roadworthy and passenger vehicle specifications must include **at least a front airbags for the driver and front passenger and an anti-lock braking system (ABS)**.
- d) All vehicles must be driven with due consideration for personnel and property. A maximum speed limit of **40 km/hour** will be adhered to on the premises at all times.
- e) Transportation of passengers on the back of open or closed light delivery vehicles (LDVs), trailers, trucks or any other form of transportation is prohibited. It is a legal requirement for all employers to provide safe transportation of all employees both on and off site.
- f) Drivers and passengers entering Majuba Power Station are subjected to compulsory breathalyser testing.
- g) The vehicle driver/s must ensure that their passengers are seated and wear seatbelts at all times.

### 3.3.4 Barricading / Screens and Scaffolding

- a) The *Contractor* is responsible to ensure that working areas are adequately barricaded off and warning signs displayed to ensure that people and plant are not exposed to danger and access to work areas is prevented.
- b) The *Employer* is responsible for supplying scaffolding and barricading with at least 24 hour notice required for planned work or promptly for emergency work. Tampering, adjustment, moving or dismantling of any approved scaffold is not allowed – this may only be done by the scaffolding service provider.
- c) The *Contractor* contacts the scaffolding service provider (Kaefer Thermal) directly on extension 3658 or to page this number by dialling 017 799 3473 from any site phone, for barricading or scaffolding requirements. The *Contractor* must however ensure that such barricading or scaffolding will not hamper or impair any other person or activity.

### 3.3.5 General Health and Safety

- a) The *Contractor* complies with the Construction Regulations, Occupational Health & Safety Act 85 of 1993 and the guidelines set out in the Majuba Standard **BIA/RM/STD/01** titled "**Safety, Health and Environmental specification to be met by Contractors**".
- b) The *Contractor* firstly prepares and submits a safety plan to the Eskom Safety Risk Officer, with all requested documents, as soon as possible after the contract is awarded or **within one week** of the contract start date, at the latest. The Safety Risk Officer shall request corrections, if necessary, for the safety plan to be approved and the *Contractor* shall need to make the necessary corrections and get approval. The safety plan must always be available on site and produced upon request.

See **BIA/RM/STD/01** for all relevant details or contact the Safety Risk Officers at Majuba Power Station:

Johan Botha - 017 799 3445  
Sichaba Molefe - 017 799 3196  
Amanda Thwala - 017 799 2810  
Mzwakhe Mondli - 017 799 2213  
Kaizer Ndlovu – 017 799 3388

- c) The *Contractor* ensures that all his personnel attend a Health and Safety Induction Course prior to starting the *service*. This course is provided free of charge by the *Employer* and is valid for the duration of one year. It is the *Contractor's* responsibility to make an appointment for the induction and ensure that re-induction is done timeously.

- d) Safety Risk Management has the right and authority to visit and inspect the *Contractor's* workplace or site establishment to ensure that tools, machinery and equipment comply with the minimum safety requirements.
- e) The *Employer's* representatives are entitled to instruct the *Contractor* to stop work, without penalty to the *Employer*, where the *Contractor's* personnel fail to conform to safety standards or contravene health and safety regulations. The *Service Manager* is entitled to instruct the *Contractor* to perform disciplinary investigations, to enforce disciplinary actions and to submit a report to the *Service Manager*. The *Contractor* shall implement additional health and safety precautions, over and above those specified by the *Employer*, wherever necessary or possible.
- f) The following Health & Safety requirements are to be complied with:
  - o Medical certificate of fitness can only be issued by a Registered Occupational Health Medical Practitioner.
  - o The *Contractor* supplies a Certificate of Competency and relevant medical reports for his/her employees if any work will be done under the following conditions:
    - ✦ **Confined Spaces**
    - ✦ **Heights**
    - ✦ **Heat stresses**
    - ✦ **Cold stresses**
  - o Sub-*contractors* - Proof must be given to Eskom that the sub-contractor/s comply with all the *Contractor's conditions of contract* and that Sub-contractors have the necessary competence and resources to carry out the work safely and ensure that due care of the environment will be exercised.
- g) The *Contractor* appoints a person, qualified in accordance with the SHE Requirements, as the liaison with the Eskom Safety Officer for all matters related to health and safety and this person shall be contactable telephonically 24 hours a day.
- h) The *Contractor* trains and appoints adequate first aiders and keeps first aid equipment.
- i) The *Contractor* confirms that the *Employer* has provided with sufficient written information regarding the health and safety arrangements and procedures applicable to the *service* to ensure compliance with it and all employees, agents, Subcontractors or mandataries with the SHE Requirements while providing the *service*, in terms of this contract.
- j) Contracts include, in terms of Section 37(2) of the OHS Act, an agreement to ensure compliance by the mandatory with the provisions of the Act.

### 3.4 Environmental constraints and management

All service providers appointed to render any services within Eskom Majuba Power Station are required to comply with the station's Environmental Management System requirements.

NB: Before commencing with any work, the service providers are required to visit the station's environmental section for evaluation. The station's environmental practitioner will evaluate the services to be rendered by the service provider and therefore allocate relevant legal and other requirements documents which the *Contractor* shall comply with during the works.

The service provider shall then commence with the works but paying inordinate attention towards implementing the relevant legal and other requirements measures as agreed in the register. Failure to comply with this agreement may ultimately lead to the termination of this contract. This requirement shall also be clearly stipulated in the NEC contracts between Eskom Majuba Power Station and any service providers.

It should always be noted that Majuba Power Station is ISO14001 certified and therefore promotes Integrated Environmental Management (IEM) philosophy which aims to achieve a desirable balance between conservation and development. All activities taking place within Majuba Power Station must consider section 28 of the National Environmental Management Act (107 of 1998) which makes provision for the duty of care approach. The *Contractor's* team must commit to review and to continually improve environmental management, with the objective of improving overall environmental performance. The *Contractor* must consult with Majuba Environmental section on a regular basis for on-going assistance and advice.

The EMS shall clearly cover the following areas as per ISO 14001.

- Environmental policy

- Environmental legal and other requirements
- Risk Assessments/Aspects & Impacts Register
- Improved management of monitoring and measurement documentation (e.g. devices calibration certificates)
- Provision of necessary resources (e.g., computers, adequate human resource) and allocation of roles and responsibility (through clear appointments) to achieve effective implementation of the EMS.
- Continuous commitment towards complying with operational controls such as work instructions, operational procedures, etc. (either provided by the *Contractor* or by *Service Manager*) as well as emergency preparedness and response procedures/plans.
- The contractor shall continually evaluate the compliance to legal requirements (e.g., sewage treatment plant permits and other applicable legislation); this should also be documented within the monthly environmental site inspections reports.
- Majuba Power Station's procedure for non-conformity, corrective action and preventive actions shall be followed in case of the environmental incidents.
- Contingency plans.

#### Environmental Management Programmes

- Environmental Management Programmes shall be established and maintained to ensure that objectives and targets are achieved.

#### Audits

Audits covering various Environmental aspects, Safety, Operational, IBI and Maintenance Management at the plant shall be carried out within an acceptable interval to ensure compliance with statutory requirements and Eskom's policies, Directives, procedures etc.

### 3.5 Quality assurance requirements

The *Contractor* shall be required to demonstrate by means of a Contract Quality Plan (CQP) that this organisation is so structured that all the requirements of the specification will be properly monitored and controlled. The Contract Quality Plan (CQP), which must include the Quality Control Plan (QCP), is to be drafted in accordance with the Supplier Quality Management Specification (previously QM58). The Quality documents are to be submitted for approval to *the Project Manager* within thirty (30) days after a contract has been awarded to the *Contractor*.

No work may commence unless the Contract Quality Plan and Quality Control Plan documents have been approved in writing and a copy submitted to *the Project Manager*. The *Contractor*, in conjunction with *the Project Manager* must sign off all Quality Control documents after completing all work as per the agreed scope. The *Contractor* to submit a copy of the final signed off documents/data packages to *the Project Manager* within one (1) week after completion of work.

The *Contractor* shall be required to read and fully understand the contents of the Supplier Quality Management Specification (previously QM58) and a copy is to be kept in possession or on premises.

The *Contractor* shall comply with all *Employer's* requirements as set out in Supplier Quality Management Specification.

The *Contractor* further ensures that the subcontractor's programmes comply with the requirements of the Service Information.

The *Contractor* notifies the *Service Manager* of any changes to the Quality System and obtains agreement prior to implementation on existing orders and contracts, or sub orders and subcontracts.

The Supplier Quality Management Specification (previously QM58) shall remain applicable in the event of the contract being extended or modified for reasons permitted.



By signature and acceptance of this contract the *Contractor* acknowledges and agrees to comply with and adhere to Eskom's policies and procedures (current and/or latest revisions) including the Supplier Quality Management Specification (previously QM58).

### 3.3.1 Contract Quality Management Plan Requirement

The *Contractor* prepares a contract quality management plan that, where appropriate, indicates the following:

- Indicates the interface with the *Contractors* quality system and applicable documents such as procedures and work instructions
- Establishes communication channels between the *Contractor* and the *Service Manager* in respect of quality and the integration of such with the prescribed contract communication channels
- Indicates how specific subcontractors will be monitored
- Identifies items or activities for which quality control plans will be prepared
- Identifies the specifications, drawings and acceptance criteria for material for which quality control plans are not required
- Identifies the areas or processes requiring special controls
- Identifies the *Contractor's* Management Representative and personnel responsible for the control of quality activities and their relationship to the *Contractor's* management structure
- Identifies the documents which are to be submitted to the *Service Manager*
- Indicates the *Contractor's* quality monitoring programme

The *Contractor* periodically updates the contract quality management plan to reflect changes in any of the above details. The frequency of such updates is determined by the *Service Manager* but will not be greater than one year.

### 3.3.2 Quality Control Plan

The *Contractor's* or Subcontractor's quality control plans cover inspection and test proposals for items or activities to be supplied as part of the *service*.

The quality control plan indicates the following as appropriate:

- The identification of the item.
- A list of the sequence of operations including inspections and tests.
- The identification of the specification, drawings or procedures for each operation.
- The acceptance criteria with reference to the appropriate technical specification, in-house, national or international standard and relevant clause number.
- The inspections and tests the *Contractor* has nominated for hold and witness points.
- Provision for inspections and tests nominated by the *Service Manager*.
- Provision for inspection status indication.
- Inspection and test records which are generated by the *Contractor*.
- Competence of the people-Level II welding inspector, Coded welders, N3 Fitters /Boiler makers
- Personnel qualifications from approved training and accredited institute
- ITPs and welding procedures
- Material certificates
- Organogram indicating the quality person and his/her duties
- Adhere to the QM58
- Follow the Eskom welding rule book

The quality control plans are reviewed by the *Service Manager* to allow for insertion of his specific requirements, including hold and witness points, prior to commencement of work. The *Contractor* does not commence work until the *Service Manager* accepts.

The *Contractor* shall comply with:

- a) The Occupational Health and Safety Act, 1993, and all Regulations made there under.
- b) All *Employer* Safety and Operating Procedures, which are attached hereto.

The *Contractor* acknowledges that he is fully aware of the requirements of all the above and undertakes to employ only people who have been duly authorised in terms thereof and who have received sufficient safety training to ensure that they can comply therewith.

The *Contractor* undertakes not to do, or not to allow anything to be done which will contravene any of the provisions of the Act, Regulations or Safety and Operating Procedures.

The *Contractor* shall appoint a person who will liaise with the *Employer* Safety Officer responsible for the premises relevant to this contract. The person so appointed shall on request:

- a) Supply the *Employer* Safety Officer with copies of minutes of all Health and Safety Committee meetings, whenever he is required to do so.
- b) Supply the *Employer* Safety Officer with copies of all appointments in respect of employees employed on this contract, in terms of the Act and Regulations and shall advise the *Employer* Safety Officer of any changes thereto.

*Employer* may, at any stage during the currency of this agreement be entitled to:

- a) Do safety audits at the *Contractor's* premises, its workplaces and on its employees.
- b) Refuse any employees, sub-*Contractor* or agent of the *Contractor* access to its premises if such person has been found to commit any unlawful act or any unsafe working practice or is found to be not authorised or qualified in terms of the Act.
- c) Issue the *Contractor* with a work stoppage order or a compliance order should *Employer* become aware of any unsafe working procedures or conditions or any non-compliance with the Act, Regulations and Procedures by the *Contractor* or any of its Employees, sub-*Contractors* or agents. Stoppages of this nature will not constitute a compensation event.

List of minimum statutory appointments required (where applicable), as required by the OHS Act:

- OHS Act, Section 16(2) - *Employer*
- OHS Act, GMR 2(1) - Supervision of Machinery
- OHS Act, GMR 2(7) - Assist the designated person
- OHS Act, CR 6(1) – Construction Supervisor (Authorised Supervisors and Responsible Persons must be appointed as Construction Supervisor)
- OHS Act, CR 6(2) – Assistant Construction Supervisor
- OHS Act, Section 17 - Health and Safety Rep
- OHS Act, GAR 9 – Incident investigation
- OHS Act, CR 12 – Demolition work
- OHS Act, CR 19 – Explosive Powered Tools
- OHS Act, CR 22 – Electrical installations and machinery
- OHS Act, GSR 3 – First Aiders

## 4 Procurement

### 4.1 People

#### 4.1.1 Minimum requirements of people employed

It is the *Contractor's* sole responsibility to ensure all its employees have permits to perform work in the Republic of South Africa.

#### 4.1.2 BBBEE and preferencing scheme

- 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.
- The *Contractor* is required to submit an updated verification certificate and necessary supporting documentation confirming the change in his B-BBEE status to the *Employer* within thirty days of the notification or as otherwise instructed by the *Employer*.
- Where, as a result, the *Contractor's* B-BBEE status has decreased since the *starting date* the *Employer* may either re-negotiate this contract or alternatively, terminate the *Contractor's* obligation to provide the *service*.
- Failure by the *Contractor* to notify the *Employer* of a change in its B-BBEE status may constitute a reason for termination will be dealt with according to the NEC3 TSC penalty/termination clauses

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

N/A

The *Contractor* complies with and fulfils the *Contractor's* obligations in respect of the Accelerated and Shared Growth Initiative - South Africa in accordance with and as provided for in the *Contractor's* ASGI-SA Compliance Schedule stated below

[Insert the agreed ASGI-SA Compliance Schedule here]

The *Contractor* shall keep accurate records and provide the *Service Manager* with reports on the *Contractor's* actual delivery against the above stated ASGI-SA criteria. [Elaborate on access to and format of records and frequency of submission etc.]

The *Contractor's* failure to comply with his ASGI-SA obligations constitutes substantial failure on the part of the *Contractor* to comply with his obligations under this contract.

#### 4.1.4 Supplier Development and Localisation

Skill development targets	5 x N1-N3 bursaries including training from local to Pixley Municipality
Job creation	All Semi- skill, Non semi-skilled and safety officers to be sourced locally. Skilled individuals from locals to be checked if they are available local and be given an opportunity.
Corporate Social Investment (CSI)	Supplier to commit on supporting CSI projects

## 4.2 Subcontracting

### 4.2.1 Preferred subcontractors

The *Employer* may list which subcontractors or suppliers the *Contractor* is required to enter into subcontracts with.

If the *Contractor* subcontracts work, he is responsible for providing the Service as if he had not subcontracted. This contract applies as if a Subcontractor's employees and equipment were the *Contractor's*.

#### **4.2.2 Subcontract documentation, and assessment of subcontract tenders**

When the *Contractor* uses a Subcontractor, he needs to engage with him on a NEC basis. The Subcontractor needs adhere to all processes, policies and procedures of Eskom as service should be provided as if not subcontracted to Eskom.

All reporting will happen based on the NEC standard forms or as agreed upon in the Kick-off meeting.

#### **4.2.3 Limitations on subcontracting**

The *Contractor* submits the name of each proposed Subcontractor to the *Service Manager* for acceptance. A reason for not accepting the Subcontractor is that the appointment will not allow the *Contractor* to Provide the Service.

The *Contractor* does not appoint a Subcontractor until the *Service Manager* accepted them.

#### **4.2.4 Attendance on subcontractors**

The Subcontractor should attend all morning feedback Outage meetings to provide accurate feedback on the progress of *service*. Assessment meetings between *Service Manager* and the *Contractor* should be avoided by the Subcontractor.

### **4.3 Plant and Materials**

#### **4.3.1 Specifications**

Plant and Materials are defined as items intended to be included in the Affected Property. This will refer to replacement of worn or defective parts, routine replacement as part of regular preventative maintenance and supply of spare parts.

#### **4.3.2 Correction of defects**

The *Service Manager* arranges for the *Employer* to allow the *Contractor* access if it is needed for correcting a Defect.

The *Contractor* needs to correct a Defect within one day or when the first available opportunity arises.

#### **4.3.3 Contractor's procurement of Plant and Materials**

The *Contractor* will do all procurement of materials according to own procurement processes. All materials purchased by the *Contractor* to be installed to Affected Property will be kept and preserved according to the storage relevant specification. The *Contractor* may at any point be requested by the *Service Manager* to submit the storage and preserving specification for any material or plant. All plant and material to be stored at an area demarcated by the *Service Manager* and it is the responsibility of the *Contractor* to prepare the area and make it comply with the storage and preserving specification.

#### **4.3.4 Tests and inspections before delivery**

The *Contractor* does not deliver those Plant and Materials which the Service Information states are to be tested or inspected before delivery until the *Service Manager* has notified the *Contractor* that they have passes the test or inspection.

All holding points on QCP should have been adhered to and signed off by both parties before accepting any material or goods on site.

#### **4.3.5 Plant & Materials provided "free issue" by the Employer**

The *Employer* has service air operating at 600 kPa that the Contractor is allowed to use. Other facilities provided by the *Employer* can be seen in Section 5.8 of this contract.

#### 4.3.6 Cataloguing requirements by the Contractor

N/A

## 5 Working on the Affected Property

### 5.1 *Employer's* site entry and security control, permits, and site regulations

- The *Contractor* applies for temporary access permits (*Contractor's* Permit) at the Security gate, prior to the Possession Date.
- The *Contractor* personnel are required to be in possession of a *Contractor's* Permit at all times.
- All *Contractor* personnel are issued with a temporary access permit (*Contractor's* Permit) which contains the following information:
  - Name
  - ID Number
  - Company
  - Validity date
- All *Contractors'* permits are submitted to Protective Services when the workers leave the site after completion of the works.
- In order to assist Protective Services with the issuing of permits and the identification of personnel on site, the *Contractor* supplies a list of all personnel that he intends using on site, at least 24 hours prior to entry of the Security Area.
- This list is delivered to Protective Services, or is faxed to (017) 799 3126 - The list, identified with the *Contractor's* name, contains the following information:
  - Employee Name
  - Employee ID Number
  - Eskom Safety Co-ordinator signature
  - *Service Manager* signature
- Copy of the first page of the ID book of every employee of the *Contractor*, photocopied to reduce the size to 65%.
- To speed up the process of gaining access to the site, the *Contractor* compiles detailed lists of all tools and equipment to be taken on site before arriving at the Power Station Security gate.
- A special Tool List form is available at Protective Services.
- An authorised copy of this list is retained to be used again when the tools and equipment is removed from site after the completion of the works.
- The *Contractor's* visitors and all personnel conform at all times to the security arrangements in force at the site.
- Application forms for visitors are filled in by the *Contractor's* Site Manager and approved by the *Employers* Representative, one day before the visit and submitted to the *Employer's* Protective Services office.
- Visitors are not allowed on site if the necessary forms are not in the possession of security staff.
- The Chief of Protective Services may, with valid cause, remove any of the *Contractor's* personnel from the site, either temporarily or permanently, without any prejudice. He may deny access to the site to any person whom, in the opinion of the said Chief of Protective Services, constitutes a security risk.
- No unauthorised vehicles are allowed on site.
- Only *Contractor's* vehicles with displayed Contract Vehicle Permits disks are allowed on site. - Contract Vehicle Applications are directed to the *Employers* Representative.
- The *Contractor* is restricted to the working areas associated with his place of work.
- The *Contractor* is forbidden to enter any other areas, and must ensure that his employees abide by these regulations.
- Parking inside the power station is strictly forbidden, except for loading purposes.

No recruiting of casual labour is done on Eskom premises, including the area outside the Power Station Security Gate

### 5.1.2 Eskom Life Saving Rules:

Five Life Saving Rules have been developed that will apply to all Eskom employees, agents, consultants and contractors.

Rule 1: Open, Isolate, Test, Earth, Bond, And / Or Insulate before touch - that is any plant operating above 1 000 V.

Rule 2: Hook up at heights - no person may work at height where there is a risk of falling.

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 work under the influence of drugs and alcohol.)

Rule 5: Use a permit to work – where an authorization limitation exists, no person shall work without the required permit to work.

- Majuba Power Station Health and Safety Standards
- Specifications for *Contractors* attached to the Invitation to Tender. This procedure will be handed over during tender enquiry and will enable the successful Tenderer to compile a Health & Safety plan that has to be approved by the *Employer* prior to commencement of work.
- Compliance with Eskom & Majuba No Smoking Policy
- Adhere to the OHS Act 85 of 1993
- All staff will undergo Safety Induction, presented by Majuba Risk Management Department
- *Employer's* site regulations, covering the following:
  - Clean lines
  - Storage of material
  - Safety precautions and fire prevention
  - Permits to work
  - Other *Contractor's* work
  - Representation of *sub-contractors*
  - Constant Supervision for hot work
  - Handing over of *works*
  - *Contractor's* Site
  - Disposal of waste, oil residue and sludge
  - Hot Work permit for welding
  - Working at heights
  - Working in and around an area that contains flammable substances
  - Testing for combustible gases
  - Availability of fire extinguishers when working in an area that contains flammable Substances

### 5.2 People restrictions, hours of work, conduct and records

- The *Contractor* provides the necessary resources to carry out the *service* as stated in the Service Information.
- The *Contractor* provides everything to carry out the Service Information of this contract unless where otherwise stated in this Service Agreement. Everything that should be provided by the *Employer* is

stated in this Service Agreement, anything not stated in the Service Agreement should be provided by the *Contractor* to execute the work as stated in the Service Information

- It is very important that the *Contractor* keeps records of his people working on the Affected Property, including those of his Subcontractors. The *Service Manager* shall have access to all records of the *Contractor* and Subcontractor at any time when deemed necessary.

### 5.3 Health and safety facilities on the Affected Property

Any emergency equipment or fire suppression systems to be utilized by the *Contractor* when an emergency arise

Please refer to SHE Requirements for *Contractors* – Refer to RSR0001 Heading 8.1

### 5.4 Environmental controls, fauna & flora

General environmental requirements referred to in section 3 above, Majuba Power Station ISO14001.

### 5.5 Cooperating with and obtaining acceptance of Others

This sub-paragraph could be used to deal with two issues.

- 1) The cross reference from core clause 25.1 about cooperation generally as well as details about Others with whom the *Contractor* may be required to share the Affected Property. See clause 11.2(9) for the definition of Others.
- 2) Requirements for liaison with and acceptance from statutory authorities or inspection agencies.

### 5.6 Records of *Contractor's* Equipment

The *Contractor* will at all times keep record of his equipment on site with relevant inspections carried out. Inspection reports should be accessible by the *Service Manager* at any given time when he deems necessary.

All equipment or tools signed in by the *Contractor* should strictly adhere to the gate access rules and procedures.

All Equipment including hired should be inspected and approved before accepted on site.

The *Contractor* will keep records of all hired Equipment to execute the Service Information

### 5.7 Equipment provided by the *Employer*

It is the responsibility of the *Contractor* to provide his Equipment list to the *Service Manager* with all calibration certificates etc.

The *Employer* provides Equipment as stated in the Service Information, anything not stated in the Service Information the *Contractor* have to provide and already accounted for in the Price List.

### 5.8 Site services and facilities

#### 5.8.1 Provided by the *Employer*

The *Employer* will provide in the way of water, waste disposal, ablutions, fire protection and lighting (etc) on the Affected Property. Power will be provided by the *Employer* the *Contractor* needs to ensure his own cabling, connections, DB Boards and CoC certificates of installations and connections.

#### 5.8.1.1 Refuse Disposal

The *Employer* provides special colour coded bins for refuse disposal. These bins are emptied by the *Employer* free of charge.

The *Contractor* ensures that all workers under his control strictly adhere to the correct use of refuse bins as stated in the Plant.

#### **5.8.1.2 Supply of Electricity**

- *Employer* will make available to the *Contractor* 220/230-volt electrical supply free of charge from the closest existing point of supply.
- The *Contractor* is to make provision for the necessary extensions and plug points.
- All Electrical boards must be inspected and tested before connecting to a power supply and then a CoC must be issued by the *Contractor*
- The *Contractor* will adhere to the Electrical Installation Regulations of 1992

#### **5.8.1.3 Medical Facilities**

- The *Contractor* provides a First Aid service to his employees and subcontractor. In the case where these prove to be inadequate, like in the event of a serious injury, the *Employer's* Medical Centre and facilities are available.
- Outside the *Employer's* office hours, the *Employer's* First Aid Services are only available for serious injuries and life-threatening situations.
- The *Employer* is entitled, however, to recover the costs incurred, in the use of the above *Employer's* facilities, from the *Contractor*.

#### **5.8.1.4 Toilet Facilities**

- The *Employer* provides the *Contractor* access to toilet facilities.
- Temporary chemical toilets are provided by the *Contractor* where it is deemed necessary.

#### **5.8.2 Provided by the Contractor**

- The *Contractor* shall provide, for his own use adequate size offices.
- A cleaning service must also be provided.
- Domestic rubbish will be removed free of charge.
- The *Contractor* shall dismantle and clear off site all such infrastructure at the discretion of the *Service Manager* on completion of the contract.
- No such dismantling and clearance work shall be carried out without prior approval by the *Service Manager*.
- Any electrical equipment or appliances used by the *Contractor* shall conform to the applicable South African Safety standards and Majuba standard PSR 010 and shall be maintained in safe and proper working condition.
- The *Employer* shall have the right to stop the *Contractor's* use of any electrical equipment or appliance, which in the *Employer's* opinion does not conform to the foregoing.

#### **- Site Location**

- The boundary of the site is within the Power Station boundary fences.
- The *Contractor* is to mark the boundaries of his site clearly.
- The *Contractor* is to ensure that all his material and equipment is always within the boundaries of his site.
- A site for the *Contractor* will be provided if needed. (The exact position will be determined on site). - The *Contractor* will ensure further treatment of the yard area to keep all neat and tidy at all times.
- The *Contractor* shall also include for such items as security, watch and access arrangements to his yard area.



- The *Contractor* shall not occupy any site area other than that located to him
- On completion of the service on Site, all areas allocated to the *Contractor* shall be re-instated to their former condition to the satisfaction of *Employer*

#### **Contractor's site requirements**

- The *Contractor* supplies, installs, properly maintains and removes all temporary construction facilities and utilities necessary for the complete performance of the service including the following:
- The *Contractor's* yard should adhere to sound housekeeping, failing with this the *Employer* may use another *Contractor* to clean up the *Contractor's* yard. These costs will be carried by the *Contractor*.
- Any damage to installed lighting is repaired at the *Contractor's* expense.
- The reticulation of electricity, water and any other services required by the *Contractor* from a supplied central distribution point.
- Hazardous Substances to be contained as per Eskom requirements.
- Transportation on and off site
- Telephone connections may be available, and the *Contractor* applies via the *Services Manager* for a connection. Connection fees and calls are for the *Contractor's* account.
- Compressed air and gases
- Maintenance of lay-down and storage areas
- Electric panels and distribution wiring for erection and within *Contractor's* yard
- Security of *Contractor's* yard
- Temporary lighting to ensure safe working conditions.

#### **Accommodation**

- The provision of accommodation for *Contractor's* personnel is the responsibility of the *Contractor*.
- The *Contractor* or any of his employees or subcontractors is not allowed to use the *Employer's* dining facilities. The shop in the station may be utilized by the *Contractors*.

### **5.9 Control of noise, dust, water and waste**

All waste introduced to and/or produced on *Employer's* Premises by the *Contractor* for this order, must be handled in accordance with the minimum requirements for the Handling and Disposal of hazardous waste in terms of Government Legislation as proclaimed by the Department of Water Affairs and Forestry 1994 Ref.: BN0621-16296-5. (A copy of this document is available at the Power Station for reference purposes).

Provide sufficient storage containers, labelled depicting general or hazardous waste and store in a designated storage area

No hazardous waste may be stored for a period of more than 90 days on the Majuba Power Station's premises.

Ensure that all hazardous waste is disposed of at a licensed Class H disposal site. A copy of the hazardous waste disposal certificate must be submitted to the *Service Manager*.

Ensure that the *Contractor's* site does comply with the general good housekeeping practices. Redundant material will be removed to allocated sites. No scrap shall be stored in the *Contractor's* yard. Scrap is to be cleared from Site daily.

### **5.10 Hook ups to existing works**

Any work performed at heights, must adhere to the correct safety standards, procedures and specifications stated in the health and safety risk management of Majuba Power Station. Refer to RSR0001 heading 5.7

### **5.11 Tests and inspections**

#### **5.11.1 Description of tests and inspections**

The *Contractor* gives at least 48 hours in advance notification to the Supervisor or the Authority for inspection/test and hold or witness points, which require their attendance. The *Contractor* confirms readiness for inspection at least 24 hours prior to the test.

The *Contractor* ensures that all work has been fully inspected, accepted, and documented prior to requesting any inspection by the Supervisor.

The *Contractor* and the *Employer* provide materials, facilities and samples for tests and inspections as stated in the Service Information.

#### 5.11.2 Materials facilities and samples for tests and inspections

The *Contractor* shall ensure that surfaces to be protected are inspected in order to evaluate extent of surface preparation for which he will be responsible. All inspection arrangements with Majuba Power Station Engineering Department will be made 24 hours in advance.

### 6 List of drawings

#### 6.1 Drawings issued by the *Employer*

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

Drawing number	Revision	Title
N/A	N/A	N/A