NEC3 Supply Contract (SC3)

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

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

for **Supply and Delivery of Various Boiler Tubes on an "as and when required basis" for a period of 5 years at Tutuka Power Station – Main Stores**

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

PART C1: AGREEMENTS & CONTRACT DATA

Contents:

C1.1 Form of Offer & Acceptance

Offer

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

Supply and Delivery of Various Boiler Tubes on an "as and when required basis" for a period of 5 years at Tutuka Power Station – Main Stores

The tenderer, identified in the Offer signature block, has

either	examined the documents listed in the Tender Data and addenda thereto as listed in the Returnable Schedules, and by submitting this Offer has accepted the Conditions of Tender.
or	examined the draft contract as listed in the Acceptance section and agreed to provide this Offer.

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 *Supplier* 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.

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

This Offer may be accepted by the *Purchaser* 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 *Supplier* 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 .....

[1] This total is required by the *Purchaser* 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 *Purchaser* identified below accepts the tenderer's Offer. In consideration thereof, the Purchaser shall pay the Supplier 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 *Purchaser* 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: Goods Information including Supply Requirements

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 *Purchaser* 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 *Purchaser'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 Purchaser **Eskom Holdings SOC Ltd, Megawatt Park, Maxwell Drive, Sandton, Johannesburg, 2199**

(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 *Purchaser* prior to contract award

No.	Subject	Details
1	**N/A**	**N/A**
2		

By the duly authorised representatives signing this Schedule of Deviations below, the *Purchaser* 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 Purchaser 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 *Purchaser***
Signature		
Name		
Capacity		
On behalf of	*(Insert name and address of organisation)*	**Eskom Holdings SOC Ltd, Megawatt Park, Maxwell Drive, Sandton, Johannesburg, 2199**
Name & signature of witness		
Date		

C1.2 SC3 Contract Data

Part one - Data provided by the *Purchaser*

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

Clause	Statement	Data
1	**General**	
	The *conditions of contract* are the core clauses and the clauses for Options	
		X1: Price adjustment for inflation
		X2 Changes in the law
		X7: Delay damages
		X17: Low performance damages
		X20 Key performance indicators
		Z: *Additional conditions of contract*
	of the NEC3 Supply Contract (April 2013) [2]	(If the December 2009 edition is to be used delete April 2013 and replace by December 2013)
10.1	The *Purchaser* is (name):	**Eskom Holdings SOC Ltd (reg no: 2002/015527/30), a state owned company incorporated in terms of the company laws of the Republic of South Africa**
	Address	**Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg**
	Tel No.	**[●]**
	Fax No.	**[●]**
10.1	The *Supply Manager* is (name):	**[●]**
	Address	**[●]**
	Tel	**[●]**
	Fax	**[●]**
	e-mail	**[●]**
11.2(13)	The *goods* are	**Various Boiler Tubes**
11.2(13)	The *services* are	**Supply and Delivery of Various Boiler Tubes** on **an "as and when required basis" for a period of**

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

5 years at Tutuka Power Station – Main Stores

11.2(14)	The following matters will be included in the Risk Register	1) **Delay in manufacturing of boiler tubes** 2) **Delay in delivery of the boiler tubes** 3) **Damage during unloading at site** 4) **Delivery of incorrect boiler tubes** 5) **Incorrect quantity delivered** 6) **Non submission of data Pack**
11.2(15)	The Goods Information is in	**Part 3: Scope of Work and all documents and drawings to which it refers.**
11.2(15)	The Supply Requirements as part of the Goods Information is in	**Annexure A to this Contract Data**
12.2	The *law of the contract* is the law of	**the Republic of South Africa**
13.1	The *language of this contract* is	**English**
13.3	The *period for reply* is	**Three (3) working days**
2	**The *Supplier's* main responsibilities**	**Data required by this section of the core clauses is provided by the *Supplier* in Part 2 and terms in italics used in this section are identified elsewhere in this Contract Data.**
3	**Time**	
30.1	The *starting date* is.	**[●]**
30.1	The *delivery date* of the *goods* and *service*s is:	***goods and services*** / ***delivery date*** **1** **Supply and Delivery of Various Boiler Tubes** / **As per the delivery date on each Order**
30.2	The *Supplier* does not bring the *goods* to the Delivery Place more than one week before the Delivery Date.	
31.1	The *Supplier* is to submit a first programme for acceptance within	**Delivery schedule to be submitted within Three (3) days after order placement**
32.2	The *Supplier* submits revised programmes at intervals no longer than	**2 days after any deviation from the accepted delivery schedule**
4	**Testing and defects**	
42	The *defects date* is	**52 weeks after Delivery.**
43.2	The *defect correction period* is	**3 days after notification**
	except that the *defect correction period* for	**Defects that affect the plant performance and defects that might contribute to loss of production** **Defect correction period is is 24 hours**

	and the *defect correction period* for	**Defects that pose a threat to the safety of people** **Defect correction period is is 12 hours**
42.2	The *defects access period* is	**3 days after notification**
	except that the *defect access period* for	**Defects that affect the plant performance and defects that might contribute to loss of production** **Defect correction period is is 24 hours**
	and the *defect access period* for	**Defects that pose a threat to the safety of people** **Defect correction period is is 12 hours**
5	**Payment**	
50.1	The *assessment interval* is	**1 Week after each delivery**
51.1	The *currency of this contract* is the	**South African Rand**
51.2	The period within which payments are made is	**60 days**
51.4	The *interest rate* is	**the publicly quoted prime rate of interest (calculated on a 365 day year) charged from time to time by the Standard Bank of South Africa Limited (as certified, in the event of any dispute, by any manager of such bank, whose appointment it shall not be necessary to prove) for amounts due in Rands and** **(ii) the LIBOR rate applicable at the time for amounts due in other currencies. LIBOR is the 6 month London Interbank Offered Rate quoted under the caption "Money Rates" in The Wall Street Journal for the applicable currency or if no rate is quoted for the currency in question then the rate for United States Dollars, and if no such rate appears in The Wall Street Journal then the rate as quoted by the Reuters Monitor Money Rates Service (or such service as may replace the Reuters Monitor Money Rates Service) on the due date for the payment in question, adjusted *mutatis mutandis* every 6 months thereafter and as certified, in the event of any dispute, by any manager employed in the foreign exchange department of The Standard Bank of South Africa Limited, whose appointment it shall not be necessary to prove.**
6	**Compensation events**	**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.**

7	**Title**	**There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data.**
8	**Risks, liabilities, indemnities and insurance**	
80.1	These are additional *Purchaser's* risks	**None**
88.1	The *Supplier's* liability to the *Purchaser* for indirect or consequential loss, including loss of profit, revenue and goodwill is limited to	**R0.0 (zero Rand)**
88.2	For any one event, the *Supplier's* liability to the *Purchaser* for loss of or damage to the *Purchaser's* property is limited to	**(1) for the *Purchaser's* existing and surrounding property in the care, custody and control of the *Supplier* the amount of the deductible (first amount payable) relevant to the event** **and** **(2) for all other existing *Purchaser's* property the applicable deductible as at contract date**
88.3	The *Supplier's* liability for Defects due to his design which are not notified before the last *defects date* is limited to:	**The total price of the design, manufacturing, and delivery.**
88.4	The *Supplier's* total liability to the *Purchaser*, for all matters arising under or in connection with this contract, other than the excluded matters, is limited to	**The purchase order value.**
88.5	The *end of liability date* is	**52 Weeks after Delivery of the whole of the goods and services.**
9	**Termination and dispute resolution**	**Termination will be dealt with as per NEC3 SC termination clauses.**
94.1	The *Adjudicator* is	**the person selected from the ICE-SA Division (or its successor body) of the South African Institution of Civil Engineering Panel of Adjudicators by the Party intending to refer a dispute to him. (see www.ice-sa.org.za). If the Parties do not agree on an Adjudicator the Adjudicator will be appointed by the Arbitration Foundation of Southern Africa (AFSA).**
	Address	**[●]**
	Tel No.	**[●]**
	Fax No.	**[●]**

	e-mail	**[●]**
94.2(3)	The *Adjudicator nominating body* is:	**the Chairman of ICE-SA, a Division of the South African Institution of Civil Engineering, or its successor body (See www.ice-sa.org.za)**
94.4(2)	The *tribunal* is:	**arbitration**
94.4(5)	The *arbitration procedure* is	**the latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.**
94.4(5)	The place where arbitration is to be held is	**South Africa**
	The person or organisation who will choose an arbitrator - if the Parties cannot agree a choice or - if the arbitration procedure does not state who selects an arbitrator, is	**the Chairman for the time being or his nominee of the Association of Arbitrators (Southern Africa) or its successor body.**

10 Data for Option clauses

X1	**Price adjustment for inflation**	
X1.1	The *base date* for indices is	**The month prior to the enquiry closing date.**
	The proportions used to calculate the Price Adjustment Factor are:	**proportion** / **linked to index for** / **Index prepared by** **0.** / **[●]** / **[●]** **0.** / **[●]** / **[●]** **0.** / **[●]** / **[●]** **0.** / **[●]** / **[●]** **0.** / **[●]** / **[●]** **15%** / **non-adjustable** **100%**
X2	**Changes in the law**	
X2.1	A change in the law of	**Republic of South Africa is a compensation event if it occurs after the Contract Date**
X7	**Delay damages**	
X7.1	Delay damages for Delivery are	**1% of purchase order value per day to a maximum of 10% of the purchase order value** **Once the maximum is reached Z11 will come into effect.**
X17	**Low performance damages**	
X17.1	The amounts for low performance damages are:	**Amount** / **performance level**

		Supplier to provide missing quantity and a penalty of 1% of PO value will apply	**Quantity Accuracy, not delivering required quantities as per the PO**
		Hold payment until complete documents received	**failure to submit complete delivery documents (data pack)**
		100% of the value will be upheld until all *goods* damaged due to the *Supplier*'s fault are replaced	**For *Goods* damage due to poor handling and storage by the *Supplier***
		2% of the order value will be deducted per incident	**goods failing quality inspection**
X20	**Key Performance Indicators**	**Annexure [B] in this Contract Data**	
X20.1	The *incentive schedule* for Key Performance Indicators is in	**N/A** **No incentives will be paid out for Key performance indicators. KPI's are there to monitor performance of this contract**	
X20.2	A report of performance against each Key Performance Indicator is provided at intervals of	**6 months**	
Z	**The *additional conditions of contract* are**	**Z1 to Z15 always apply for Eskom**	

Z1 Cession delegation and assignment

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

Z1.2 Notwithstanding the above, the *Purchaser* may on written notice to the *Supplier* 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 *Supplier* 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 *Purchaser* for the performance of this contract.

Z2.2 Unless already notified to the *Purchaser*, the persons or organisations notify the *Supply Manager* within two weeks of the Contract Date of the key person who has the authority to bind

the *Supplier* on their behalf.

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

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

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

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

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

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

Z4 Confidentiality

Z4.1 The *Supplier* 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 *Supplier*, enters the public domain or to information which was already in the possession of the *Supplier* at the time of disclosure (evidenced by written records in existence at that time). Should the *Supplier* disclose information to Others in terms of clause 23.1, the *Supplier* ensures that the provisions of this clause are complied with by the recipient.

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

Z4.3 In the event that the *Supplier* is, at any time, required by law to disclose any such information which is required to be kept confidential, the *Supplier*, to the extent permitted by law prior to disclosure, notifies the *Purchaser* 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 *Supplier* 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 *goods* or any portion thereof, in the course of Providing the Goods and Services and after Delivery, requires the prior written consent of the *Supply Manager*. All rights in and to all such images vests exclusively in the *Purchaser*.

Z4.5 The *Supplier* 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 *Supply 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 25.4

Z6.1 The *Supplier* undertakes to take all reasonable precautions to maintain the health and safety of persons in and about the provision of the *goods* and execution of the *services*.

Without limitation the *Supplier*:

- warrants that the total of the Prices as at the Contract Date includes a sufficient amount for proper compliance with 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 supply and
- undertakes, in and about the execution of the supply, to comply 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 *Supplier's* direction and control, likewise observe and comply with the foregoing.

Z6.2 The *Supplier*, in and about the execution of the supply, 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 *Supplier'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 *Supply Manager* in terms of core clause 51.1, the *Supplier* provides the *Purchaser* with a tax invoice in accordance with the *Purchaser*'s procedures stated in the Goods Information, showing the amount due for payment equal to that stated in the payment certificate.

Z7.2 If the *Supplier* does not provide a tax invoice in the form and by the time required by this contract, the time by when the *Purchaser* 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 *Purchaser* in terms of core clause 51.2 is then calculated from the delayed date by when payment is to be made.

Z7.3 The *Supplier* (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 *Purchaser*'s VAT number 4740101508 on each invoice he submits for payment.

Z8 Notifying compensation events

Z8.1 Delete from the last sentence in core clause 61.3 the words, "unless the event arises from the *Supply Manager* giving an instruction, changing an earlier decision or correcting an assumption".

Z9 *Purchaser's* limitation of liability

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

Z9.2 The *Supplier*'s entitlement under the indemnity in 83.1 is provided for in 60.1(12) and the *Purchaser*'s liability under the indemnity is limited.

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

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

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

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

Z12 Ethics

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

Affected Party	means, as the context requires, any party, irrespective of whether it is the *Supplier* 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 *Supplier*, 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.

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

Z12.2 The *Purchaser* may terminate the *Supplier*'s obligation to Provide the Services if a Committing Party has taken such Prohibited Action and the *Supplier* did not take timely and appropriate action to prevent or remedy the situation, without limiting any other rights or remedies the *Purchaser* 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 *Purchaser* can

terminate the *Supplier*'s obligation to Provide the Services for this reason.

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

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

Z13 Insurance

Z 13.1 Replace core clause 84 with the following:

Insurance cover

84

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

84.2 The *Supplier* provides the insurances stated in the Insurance Table A for events which are at the *Supplier*'s risk from the *starting date* until the last *defects date* or a termination certificate has been issued.

INSURANCE TABLE A

Insurance against	**Minimum amount of cover or minimum limit of indemnity**
Loss of or damage to the *goods*, plant and materials	The replacement cost where not covered by the *Purchaser*'s insurance. The *Purchaser*'s policy deductible as at Contract Date, where covered by the *Purchaser*'s insurance.
Liability for loss of or damage to property (except the *goods*, plant and materials and equipment) and liability for bodily injury to or death of a person (not an employee of the *Supplier*) caused by activity in connection with this contract	**Loss of or damage to property** *Purchaser*'s property The replacement cost where not covered by the *Purchaser*'s insurance. The *Purchaser*'s policy deductible as at Contract Date, where covered by the *Purchaser*'s insurance. Other property The replacement cost **Death of or bodily injury** The amount required by the applicable law.
Liability for death of or bodily injury to employees of the *Supplier* arising out of and in the course of their employment in connection with this contract	The amount required by the applicable law

Z_13.2 Replace core clause 87 with the following:

Insurance by the *Purchaser*

87

87.1 The *Purchaser* provides the insurances stated in the Insurance Table B

INSURANCE TABLE B

Insurance against or name of policy	**Minimu of indemnity**
Assets All Risk	Per the insurance policy document
Contract Works insurance	Per the insurance policy document
Environmental Liability	Per the insurance policy document
General and Public Liability	Per the insurance policy document
Transportation (Marine)	Per the insurance policy document
Motor Fleet and Mobile Plant	Per the insurance policy document
Terrorism	Per the insurance policy document
Cyber Liability	Per the insurance policy document

Nuclear Material Damage and Business Interruption	Per the insurance policy document
Nuclear Material Damage Terrorism	Per the insurance policy document

Z14 Nuclear Liability

Z14.1 The *Purchaser* is the operator of the Koeberg Nuclear Power Station (KNPS), a nuclear installation, as designated by the National Nuclear Regulator of the Republic of South Africa, and is the holder of a nuclear licence in respect of the KNPS.

Z14.2 The *Purchaser* is solely responsible for and indemnifies the *Supplier* or any other person against any and all liabilities which the *Supplier* 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 *Supplier* or any other person or the presence of the *Supplier* or that person or any property of the *Supplier* or such person at or in the KNPS or on the KNPS site, without the permission of the *Purchaser* or of a person acting on behalf of the *Purchaser*.

Z14.3 Subject to clause Z14.4 below, the *Purchaser* 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 *Supplier* or any other person, or the presence of the *Supplier* or that person or any property of the *Supplier* or such person at or in the KNPS or on the KNPS site, without the permission of the *Purchaser* or of a person acting on behalf of the *Purchaser*.

Z14.4 The *Purchaser* does not waive its rights provided for in section 30 (7) of Act 47 of 1999, or any replacement section dealing with the same subject matter.

Z14.5 The protection afforded by the provisions hereof shall be in effect until the KNPS is decommissioned.

Z15 Asbestos

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

AAIA means approved asbestos inspection authority.

ACM means asbestos containing materials.

AL means action level, i.e. a level of 50% of the OEL, i.e. 0.1 regulated asbestos fibres per ml of air measured over a 4 hour period. The value at which proactive actions is required in order to control asbestos exposure to prevent exceeding the OEL.

Ambient Air means breathable air in area of work with specific reference to breathing zone, which is defined to be a virtual area within a radius of approximately 30cm from the nose inlet.

Compliance Monitoring means compliance sampling used to assess whether or not the personal exposure of workers to regulated asbestos fibres is in compliance with the Standard's requirements for safe processing, handling, storing, disposal and phase-out of asbestos and asbestos containing material, equipment and articles.

OEL means occupational exposure limit.

Parallel Measurements	means measurements performed in parallel, yet separately, to existing measurements to verify validity of results.
Safe Levels	means airborne asbestos exposure levels conforming to the Standard's requirements for safe processing, handling, storing, disposal and phase-out of asbestos and asbestos containing material, equipment and articles.
Standard	means the *Purchaser*'s Asbestos Standard 32-303: Requirements for Safe Processing, Handling, Storing, Disposal and Phase-out of Asbestos and Asbestos Containing Material, Equipment and Articles.
SANAS	means the South African National Accreditation System.
TWA	means the average exposure, within a given workplace, to airborne asbestos fibres, normalised to the baseline of a 4 hour continuous period, also applicable to short term exposures, i.e. 10-minute TWA.

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

Z15.2 Upon written request by the *Supplier*, the *Purchaser* 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 *Supplier* may perform Parallel Measurements and related control measures at the *Supplier*'s expense. For the purposes of compliance the results generated from Parallel Measurements are evaluated only against South African statutory limits as detailed in clause Z15.1. Control measures conform to the requirements stipulated in the AAIA-approved asbestos work plan.

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

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

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

Z15.6 The *Supplier* 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.

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

Annexure A: Supply Requirements

The Supply Requirements for this contract are based on the use of INCOTERMS:

The *Supplier* supplies the *goods* in accordance with INCOTERMS 2010[3] as follows:

Group	Category	Term	Delivery Place
	Delivery Cost Included	DCI	*Employer's* stores

The Parties obligations described in Incoterms for the category and term selected are now incorporated into this contract as part of the Supply Requirements and hence the Goods Information.

The obligations of seller and buyer for the selected Incoterm determine each Party's costs, risks and insurance requirements incidental to the supply and transport of the *goods* from *Supplier* to *Purchaser*.

For each of the thirteen terms, Incoterms set out obligations of the seller (the *Supplier*) in ten paragraphs identified as A1 to A10 and the corresponding obligations of the buyer (the *Purchaser*) in paragraphs B1 to B10. These obligations cover the following subjects:

A	The *Supplier*'s obligations	B	The *Purchaser*'s obligations
A1	Provision of goods in conformity with contract	**B1**	Payment of the price
A2	Licences, authorisations and formalities	**B2**	Licences, authorisations and formalities
A3	Contracts of carriage and insurance	**B3**	Contracts of carriage and insurance
A4	Delivery	**B4**	Taking delivery
A5	Transfer of risks	**B5**	Transfer of risks
A6	Division of costs	**B6**	Division of costs
A7	Notice to the buyer	**B7**	Notice to the seller
A8	Proof of delivery, transport document or equivalent electronic message	**B8**	Proof of delivery, transport document or equivalent electronic message
A9	Checking - packing - marking	**B9**	Inspection of goods
A10	Other obligations	**B10**	Other obligations

All other information NOT pertinent to the above is given in the balance of the Goods Information

[3] International Chamber of Commerce, Incoterms 2010, Paris, January 2011

The Supply Requirements for this contract are as follows:

[Use these when INCOTERMS do not apply].

1. The requirements for the supply are	As stated in the contract goods information	
2. The requirements for transport are	As stated in the contract goods information	
3. The delivery place is	Tutuka Power Station Stores(receiving)	
4. Actions of the Parties during supply	**Action**	**Party which does it**
	Giving notice of Delivery	Supplier
	Checking packing and marking before dispatch	Supplier
	Contracting for transport	Supplier
	Pay costs of transport	Included in tendered rates
	Arrange access to delivery place	Purchaser
	Loading the *goods*	Supplier
	Unloading the *goods*	As stated in the contract goods information
For international procurement	Undertake export requirements	Supplier
	Undertake import requirements	Supplier
5. Information to be provided by the *Supplier*	**Title of document**	
	Packing lists for cases and their contents	
	Copy of invoice for the *goods*	
	Delivery Note	
	Test results and maintenance manuals	
For international procurement	Licences, authorisations and other formalities associated with export of the *goods*	
	Air Waybill or Bill of Lading with associated landing, delivery and forwarding order	
	The Bill of Entry endorsed by the importation authority	
	Customs work sheets, showing tax, duties and surcharges which the law of the country into which the *goods* are being imported requires the importer to pay	
	Invoice from the importation clearing agent showing airline fees, landing charges, wharfage and dock dues as applicable	
	Specify other import documents required by authorised officials.	

All other information NOT pertinent to the above is given in the balance of the Goods Information

C1.2 Contract Data

Part two - Data provided by the *Supplier.*

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

Clause	Statement	Data
10.1	The *Supplier* is (Name): Address Tel No. Fax No.	
11.2(8)	The Goods Information for the *Supplier's* design is in:	
11.2(11)	The tendered total of the Prices is	**R ,** **(in words)**
11.2(12)	The *price schedule* is in:	
11.2(14)	The following matters will be included in the Risk Register	
25.2	The restrictions to access for the *Supply Manager* and Others to work being done for this contract are	
30.1	The *delivery date* of the *goods* and *service*s is:	***goods and services*** / ***delivery date*** **1** **[•]** **[•]** **2** **[•]** **[•]** **3** **[•]** **[•]**
31.1	The programme identified in the Contract Data is contained in:	
63.2	The *percentage for overheads and profit* added to the Defined Cost is	**%**

PART 2: PRICING DATA

NEC3 Supply Contract

Document reference	Title
C2.1	Pricing assumptions
C2.2	The *price schedule*

C2.1 Pricing assumptions

How *goods* and *service*s are priced and assessed for payment

Clause 11 in NEC3 Supply Contract, (SC3) core clauses states:

Identified and defined terms	11 11.2	(11) The Prices are the amounts stated in the price column of the Price Schedule. Where a quantity is stated for an item in the Price Schedule, the Price is calculated by multiplying the quantity by the rate. (12) The Price Schedule is the *price schedule* unless later changed in accordance with this contract.
Assessing the amount due	50.2	The amount due is • the Price for each lump sum item in the Price Schedule which the *Supplier* has completed, • where a quantity is stated for an item in the Price Schedule, an amount calculated by multiplying the quantity which the *Supplier* has completed by the rate, • plus other amounts to be paid to the *Supplier*, • less amounts to be paid by or retained from the *Supplier*. Any tax which the law requires the *Purchaser* to pay to the *Supplier* is included in the amount due.

This confirms that the Supply Contract is a priced contract where the Prices are derived from a list of items of *goods* and *service*s which can be priced as lump sums or as expected quantities of *goods* and *service*s multiplied by a rate, or a mix of both.

Function of the Price Schedule

Clause 53.1 states: "Information in the Price Schedule is not Goods Information". This confirms that instructions to do work or how it is to be done are not included in the Price Schedule but in the Goods Information. This is further confirmed by Clause 20.1 which states, "The *Supplier* Provides the Goods and Services in accordance with the Goods Information". Hence the *Supplier* does **not** Provide the Goods and Services in accordance with the Price Schedule. The Price Schedule is only a pricing document.

Preparing the *price schedule*

Items in the *price schedule* may have been inserted by the *Purchaser* and the tendering supplier should insert any additional items which he considers necessary. Whichever party provides the items in the *price schedule* the total of the Prices is assumed to be fully inclusive of everything necessary to Provide the Goods and Services as described at the time of entering into this contract.

It will be assumed that the tendering supplier has

- Read Pages 8, 11, 12 and Appendix 5 of the SC3 Guidance Notes before preparing the *price schedule;*
- Included in his Prices and rates for correction of Defects (core clause 43.1) as there is no compensation event for this unless the Defect is due to a *Supplier's* risk;

- Spread the cost of doing work he chooses not to list as separate items in the *price schedule* across other Prices and rates in order to fulfil the obligation to Provide the Goods and Services for the tendered total of the Prices;
- Understood that there is no adjustment to lump sum prices in the *price schedule* if the amount, or quantity, of work within that lump sum item later turns out to be different to that which the *Supplier* estimated at time of tender. The only basis for a change to the Prices is as a result of a compensation event per clause 60.1;
- Understood that the *Supplier* does not have to allow in his Prices and rates for matters that may arise as a result of a compensation event.

Format of the *price schedule*

Entries in the first four columns in the *price schedule* in section C2.2 are made either by the *Purchaser* or the tendering supplier.

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

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

If the *Supplier* is to be paid an amount for an item proportional to the length of time for which the *goods* and *service*s are provided, a unit of time is stated in the Unit column and the length of time (as a quantity of the stated units of time) is stated in the Quantity column.

C2.2 the *price schedule*

No	Eskom Stock Number	Material Description	Unit	Rate
1	598158	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 26.9 MM; WALL THICKNESS: 5 MM; MATERIAL: STL ALLOY 15MO3 HOT DRAWN; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN; FLOW 48; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; TEST CERTIFICATES TO BE SUPPLIED ACCORDING TO TYPE 3.01 A OR 3.1 C, ALL TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH, END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EACH, COLOUR CODE RED, EN3.2 DOCUMENT CERTIFICATE ACCORDING TO EN10204	EA	
2	598162	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 38 MM; WALL THICKNESS: 4 MM; MATERIAL: 16M03; LENGTH: 6-11.8 M; STRUCTURE: SMLS; DELIVER AS PER SPEC UNIQUE IDENTIFIER: 474-10206 REV 2; EN10204 3.2; ADHERE TO ESKOM GOODS INFORMATION REQUIREMENTS AND THE SUPPLIER WILL COMPLY TO THE FOLLOWING STANDARD (SEE PROCUREMENT OF HIGH PRESSURE PIPEWORK AND BOILER TUBING MATERIAL STANDARD IN THE GENERATION DIVISION 240-87733094 LATEST REVISION); MATERIAL CERTIFICATION TO EN10204/3.2; CONDUCT A MATERIAL ANALYSIS (SPECTROMETER TEST) ON EACH BATCH OF MATERIAL AT THE SUPPLIER'S PREMISES PRIOR DELIVERY TO THE POWER STATION; THE POWER STATION AIA WILL BE PRESENT TO REVIEW AND VERIFIED THE SPECTROMETER RESULTS. MATERIAL NOT MEETING THE REQUIREMENTS WILL BE REJECTED; THE SPECTROMETER RESULTS MUST CORRESPOND WITH THE MATERIAL CERTIFICATE; ALL THE DOCUMENTATION WILL BE EVALUATED BY ENGINEERING INCLUDING THE SPECTROMETER TEST RESULTS SIGNED BY POWER STATION AIA UPON DELIVERY BEFORE ACCEPTANCE OF THE MATERIAL; NOTE MATERIAL WILL NOT BE ACCEPTED	EA	

		WITHOUT THE MATERIAL CERTIFICATES AND THE SPECTROMETER TEST CERTIFICATE SIGNED AND VERIFIED BY POWER STATION AIA		
3	50883	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 38 MM; WALL THICKNESS: 5 MM; MATERIAL: STL ALLOY 15MO3 HOT DRAWN; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN SQ CUT; TYPE: FLOW WEB; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; TEST CERTIFICATES TO BE SUPPLIED ACCORDING TO TYPE 3.1.A OR 3.1.C, TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH, END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EACH TUBE, COLOUR CODE RED, EN3.2 DOCUMENT CERTIFICATE ACCORDING TO EN10204	EA	
4	50885	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 44.5 MM; WALL THICKNESS: 4.5 MM; MATERIAL: STL ALLOY 15MO3 HOT DRAWN; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN SQ CUT; TYPE: FLOW 72, 74; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; TEST CERTIFICATES TO BE SUPPL IED ACCORDING TO TYPE 3.1.A OR 3.1.C, ALL TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE W HOLE LENGTH, END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EACH TUBE, COLOUR CODE RED, EN3.2 DOCUMENT CERTIFICATE ACCORDING TO EN10204	EA	
5	50886	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 44.5 MM; WALL THICKNESS: 5 MM; MATERIAL: STL ALLOY 15MO3 HOT DRAWN; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN SQ CUT; TYPE: FLOW 75, 76; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; TEST CERTIFICATES TO BE SUPPLIED ACCORDING TO DIN 50049 TYPE 3.1.A OR 3.1.C, ALL TUBING TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH OF THE TUBE, END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EACH TUBE, EN3.2 DOCUMENT CERTIFICATE ACCORDING TO EN10204	EA	
6	50977	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 44.5 MM; WALL THICKNESS: 5.6 MM; MATERIAL: STL ALLOY 15MO3 HOT	EA	

		DRAWN; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN; TYPE: FLOW 39; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; DRAWING NO: STEIN/M-KIE 26207C REV 1; SLING, WITH SQUIRE ENDS, TEST CERTIFICATES TO BE SUPPLIED ACCORDING TO TYPE 3.1.A OR 3.1.C, ALL TUBING TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG T HE WHOLE LENGTH OF THE TUBE, END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EACH TUBE, COLOUR CODE RED, EN3.2 DOCUMENT CERTI FICATE ACCORDING TO EN10204		
7	50887	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 26.9 MM; WALL THICKNESS: 5 MM; MATERIAL: STL ALLOY 15MO3 HOT DRAWN; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN; FLOW 48; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; TEST CERTIFICATES TO BE SUPPLIED ACCORDING TO TYPE 3.01 A OR 3.1 C, ALL TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH, END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EACH, COLOUR CODE RED, EN3.2 DOCUMENT CERTIFICATE ACCORDING TO EN10204	EA	
8	51080	WYE: TYPE: BIFURCATION; SIZE: OD 44.5 MM; MATERIAL: 13CRMO44; TO GO WITH BOILER TUBE; WALL THK 5.6 MM; TO BE DELIVERED WITH A DIN 50049-3.1 A / 3.1C OR EN10204 3.2; MATERIAL CERTIFICATES TO BE SUPPLIED WITH DELIVERY; PIECES TO BE STAMPED EVERY 500 MM/VERIFIED BY THIRD PARTY STAMP	EA	
9	50890	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 51 MM; WALL THICKNESS: 3.6 MM; MATERIAL: STL ALLOY 15MO3 HOT DRAWN; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN SQ CUT; TYPE: FLOW 113; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; TEST CERTIFICATES TO BE SUPPLIED ACCORDING TO DIN 50049 TYPE 3.1.A OR 3.1.C, ALL TUBING TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH OF THE TUBE, END CAPS TO BE FITTED, COLOUR CODE RED, EN3.2 DOCUMENT CERTIFICATE ACCORDING TO EN 10204	EA	

10	52464	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 51 MM; WALL THICKNESS: MIN 5.6 MM; MATERIAL: 15M03; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN; TYPE: ECONOMIZER; SPECIFICATION: EN10216-2; FLOW SCHEME 13, WALL TUBING, MATERIAL CERTIFICATES TO BE SUPPLIED WITH ALL TUBES, ALL TUBES TO BE CAPPED, ALL TUBES TO BE COLOUR CODED, ALL TUBES TO BE HARD STAMPED WITH LOW STRESS STAMPS, MATERIAL AND TEST CERTIFICATES TO BE ACCORDING TO BS EN 10204:2004 TYPE 3.2; ADHERE TO ESKOM GOODS INFORMATION REQUIREMENTS AND THE SUPPLIER WILL COMPLY TO THE FOLLOWING STANDARD (SEE PROCUREMENT OF HIGH PRESSURE PIPEWORK AND BOILER TUBING MATERIAL STANDARD IN THE GENERATION DIVISION 240-87733094 LATEST REVISION); MATERIAL CERTIFICATION TO EN10204/3.2; CONDUCT A MATERIAL ANALYSIS (SPECTROMETER TEST) ON EACH BATCH OF MATERIAL AT THE SUPPLIER'S PREMISES PRIOR DELIVERY TO THE POWER STATION; THE POWER STATION AIA WILL BE PRESENT TO REVIEW AND VERIFIED THE SPECTROMETER RESULTS. MATERIAL NOT MEETING THE REQUIREMENTS WILL BE REJECTED; THE SPECTROMETER RESULTS MUST CORRESPOND WITH THE MATERIAL CERTIFICATE; ALL THE DOCUMENTATION WILL BE EVALUATED BY ENGINEERING INCLUDING THE SPECTROMETER TEST RESULTS SIGNED BY POWER STATION AIA UPON DELIVERY BEFORE ACCEPTANCE OF THE MATERIAL; NOTE MATERIAL WILL NOT BE ACCEPTED WITHOUT THE MATERIAL CERTIFICATES AND THE SPECTROMETER TEST CERTIFICATE SIGNED AND VERIFIED BY POWER STATION AIA	EA	
11	50893	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 51 MM; WALL THICKNESS: 5.6 MM; MATERIAL: 15MO3 HOT DRAWN; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN; TYPE: FLOW 10, 13; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; FINNED TUBES, TOTAL THICKNESS 65MM, TEST CERTIFICATES TO BE SUPPLIE D ACCORDING TO TYPE 3.1 A OR 3.1 C, ALL TUBING TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED	EA	

		ALONG THE WHOLE LENGTH OF THE TUBE, END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EACH TUBE, COLOUR CODED RED, EN3.2 DOCUMENT CERTIFICATE ACCORDING TO EN10204		
12	50880	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 38 MM; WALL THICKNESS: 4 MM; MATERIAL: STL ALLOY CR13MO44 HOT DRAWN; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN SQ CUT; TYPE: FLOW 82; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; TEST CERTIFICATES TO BE SUPPLIED ACCORDING TO TY PE 3.1.A OR 3.1.C, ALL TUBING TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH, END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EACH TUBE, COLOUR CODE SILVER, EN3.2 DOCUMENT CERTIFICATE ACCORDING TO EN10204	EA	
13	598217	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 48.3 MM; WALL THICKNESS: 3.6 MM; MATERIAL: 10CRMO9-10; LENGTH: 6-11.8 M; STRUCTURE: SMLS; DELIVER AS PER SPEC UNIQUE IDENTIFIER: 474-10206 REV 2; EN10204 3.2; ADHERE TO ESKOM GOODS INFORMATION REQUIREMENTS AND THE SUPPLIER WILL COMPLY TO THE FOLLOWING STANDARD (SEE PROCUREMENT OF HIGH PRESSURE PIPEWORK AND BOILER TUBING MATERIAL STANDARD IN THE GENERATION DIVISION 240-87733094 LATEST REVISION); MATERIAL CERTIFICATION TO EN10204/3.2; CONDUCT A MATERIAL ANALYSIS (SPECTROMETER TEST) ON EACH BATCH OF MATERIAL AT THE SUPPLIER'S PREMISES PRIOR DELIVERY TO THE POWER STATION; THE POWER STATION AIA WILL BE PRESENT TO REVIEW AND VERIFIED THE SPECTROMETER RESULTS. MATERIAL NOT MEETING THE REQUIREMENTS WILL BE REJECTED; THE SPECTROMETER RESULTS MUST CORRESPOND WITH THE MATERIAL CERTIFICATE; ALL THE DOCUMENTATION WILL BE EVALUATED BY ENGINEERING INCLUDING THE SPECTROMETER TEST RESULTS SIGNED BY POWER STATION AIA UPON DELIVERY BEFORE ACCEPTANCE OF THE MATERIAL; NOTE MATERIAL WILL NOT BE ACCEPTED WITHOUT THE MATERIAL CERTIFICATES AND THE SPECTROMETER TEST	EA	

		CERTIFICATE SIGNED AND VERIFIED BY POWER STATION AIA		
14	50892	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 51 MM; WALL THICKNESS: 3.6 MM; MATERIAL: STL ALLOY CR10MO910 HOT DRAWN; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN; TYPE: FLOW 111, 114; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; TEST CERTIFICATES TO BE SUPPLIED ACCORDING TO TYPE 3.1 A OR 3.1 C, ALL TUBING TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGT H, END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EACH TUBE, COLOUR CODE GREEN, EN3.2 DOCUMENT CERTIFICATE ACCORDING TO EN10204	EA	
15	50879	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 38 MM; WALL THICKNESS: 4 MM; MATERIAL: STL ALLOY CR13MO44 HOT DRAWN; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN SQ CUT; TYPE: FLOW 82; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; TEST CERTIFICATES TO BE SUPPLIED ACCORDING TO TY PE 3.1.A OR 3.1.C, ALL TUBING TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH, END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EACH TUBE, COLOUR CODE SILVER, EN3.2 DOCUMENT CERTIFICATE ACCORDING TO EN10204	EA	
16	50881	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 38 MM; WALL THICKNESS: 4.5 MM; MATERIAL: STL ALLOY CR13MO44 HOT DRAWN; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN; TYPE: FLOW 90; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; TEST CERTIFICATES TO BE SUPPLIED ACCORDING TO TYPE 3. 1 A OR 3.1 C, ALL TUBING TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH OF TH E TUBE, END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EACH TUBE, COLOUR CODE SILVER, EN3.2 DOCUMENT CERTIFICATE ACCORDING TO EN10204	EA	
17	598364	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 51 MM; WALL THICKNESS: 3.6 MM; MATERIAL: 13CRM04-5; LENGTH: 6-11.8 M; STRUCTURE: SMLS; DELIVER AS PER	EA	

		SPEC UNIQUE IDENTIFIER: 474-10206 REV 2; EN10204 3.2; ADHERE TO ESKOM GOODS INFORMATION REQUIREMENTS AND THE SUPPLIER WILL COMPLY TO THE FOLLOWING STANDARD (SEE PROCUREMENT OF HIGH PRESSURE PIPEWORK AND BOILER TUBING MATERIAL STANDARD IN THE GENERATION DIVISION 240-87733094 LATEST REVISION); MATERIAL CERTIFICATION TO EN10204/3.2; CONDUCT A MATERIAL ANALYSIS (SPECTROMETER TEST) ON EACH BATCH OF MATERIAL AT THE SUPPLIER'S PREMISES PRIOR DELIVERY TO THE POWER STATION; THE POWER STATION AIA WILL BE PRESENT TO REVIEW AND VERIFIED THE SPECTROMETER RESULTS. MATERIAL NOT MEETING THE REQUIREMENTS WILL BE REJECTED; THE SPECTROMETER RESULTS MUST CORRESPOND WITH THE MATERIAL CERTIFICATE; ALL THE DOCUMENTATION WILL BE EVALUATED BY ENGINEERING INCLUDING THE SPECTROMETER TEST RESULTS SIGNED BY POWER STATION AIA UPON DELIVERY BEFORE ACCEPTANCE OF THE MATERIAL; NOTE MATERIAL WILL NOT BE ACCEPTED WITHOUT THE MATERIAL CERTIFICATES AND THE SPECTROMETER TEST CERTIFICATE SIGNED AND VERIFIED BY POWER STATION AIA		
18	56210	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 38 MM; WALL THICKNESS: MIN 4 MM; MATERIAL: X20CRMOV12-1/X20CRMOV11-1; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN FLAT SQ CUT; TYPE: SUPERHEATER 3 AND 4; GRADE: 3; SPECIFICATION: EN10216-2; FLOW 100; TEST CERTIFICATES TO BE SUPPLIED ACCORDING TO BS EN 10204:2004 TYPE 3.2. COLOUR CODE BLUE; ALL TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP , AND COLOUR CODED ALONG THE WHOLE LENGTH OF THE END CAPS TO BE FITTED; HEAT NUMBERS MUST BE PRESENT ON EACH; ADHERE TO ESKOM GOODS INFORMATION REQUIREMENTS AND THE SUPPLIER WILL COMPLY TO THE FOLLOWING STANDARD (SEE PROCUREMENT OF HIGH PRESSURE PIPEWORK AND BOILER TUBING MATERIAL STANDARD IN THE GENERATION DIVISION 240-87733094 LATEST REVISION); MATERIAL CERTIFICATION TO EN10204/3.2;	EA	

		CONDUCT A MATERIAL ANALYSIS (SPECTROMETER TEST) ON EACH BATCH OF MATERIAL AT THE SUPPLIER'S PREMISES PRIOR DELIVERY TO THE POWER STATION; THE POWER STATION AIA WILL BE PRESENT TO REVIEW AND VERIFIED THE SPECTROMETER RESULTS. MATERIAL NOT MEETING THE REQUIREMENTS WILL BE REJECTED; THE SPECTROMETER RESULTS MUST CORRESPOND WITH THE MATERIAL CERTIFICATE; ALL THE DOCUMENTATION WILL BE EVALUATED BY ENGINEERING INCLUDING THE SPECTROMETER TEST RESULTS SIGNED BY POWER STATION AIA UPON DELIVERY BEFORE ACCEPTANCE OF THE MATERIAL; NOTE MATERIAL WILL NOT BE ACCEPTED WITHOUT THE MATERIAL CERTIFICATES AND THE SPECTROMETER TEST CERTIFICATE SIGNED AND VERIFIED BY POWER STATION AIA		
19	56212	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 38 MM; WALL THICKNESS: MIN 4.5 MM; MATERIAL: X20CRMOV12-1/X20CRMOV11-1; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN FLAT SQ CUT; TYPE: FLOW 101; GRADE: 3; SPECIFICATION: EN10216-2; TEST CERTIFICATE TO BE SUPPLIED ACCORDING TO BS EN 10204: 2004 TYPE3.2; ALL TUBING TO BE STAMPED, EVERY 500M AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH OF THE TUBE END CAPS TO BE FITTED; HEAT NUMBERS MUST BE PRESENT ON EACH TUBE; COLOUR CODE BLUE; ADHERE TO ESKOM GOODS INFORMATION REQUIREMENTS AND THE SUPPLIER WILL COMPLY TO THE FOLLOWING STANDARD (SEE PROCUREMENT OF HIGH PRESSURE PIPEWORK AND BOILER TUBING MATERIAL STANDARD IN THE GENERATION DIVISION 240-87733094 LATEST REVISION); MATERIAL CERTIFICATION TO EN10204/3.2; CONDUCT A MATERIAL ANALYSIS (SPECTROMETER TEST) ON EACH BATCH OF MATERIAL AT THE SUPPLIER'S PREMISES PRIOR DELIVERY TO THE POWER STATION; THE POWER STATION AIA WILL BE PRESENT TO REVIEW AND VERIFIED THE SPECTROMETER RESULTS. MATERIAL NOT MEETING THE REQUIREMENTS WILL BE REJECTED; THE SPECTROMETER RESULTS MUST CORRESPOND WITH THE MATERIAL CERTIFICATE; ALL THE DOCUMENTATION	EA	

		WILL BE EVALUATED BY ENGINEERING INCLUDING THE SPECTROMETER TEST RESULTS SIGNED BY POWER STATION AIA UPON DELIVERY BEFORE ACCEPTANCE OF THE MATERIAL; NOTE MATERIAL WILL NOT BE ACCEPTED WITHOUT THE MATERIAL CERTIFICATES AND THE SPECTROMETER TEST CERTIFICATE SIGNED AND VERIFIED BY POWER STATION AIA		
20	56211 Fin 102	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 38 MM; WALL THICKNESS: MIN 5 MM; MATERIAL: X20CRMOV12-1/X20CRMOV11-1; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN FLAT SQ CUT; TYPE: FLOW 101; GRADE: 3; SPECIFICATION: EN10216-2; TEST CERTIFICATE TO BE SUPPLIED ACCORDING TO BS EN 10204: 2004 TYPE3.2; ALL TUBING TO BE STAMPED, EVERY 500M AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH OF THE TUBE END CAPS TO BE FITTED; HEAT NUMBERS MUST BE PRESENT ON EACH TUBE; COLOUR CODE BLUE; ADHERE TO ESKOM GOODS INFORMATION REQUIREMENTS AND THE SUPPLIER WILL COMPLY TO THE FOLLOWING STANDARD (SEE PROCUREMENT OF HIGH PRESSURE PIPEWORK AND BOILER TUBING MATERIAL STANDARD IN THE GENERATION DIVISION 240-87733094 LATEST REVISION); MATERIAL CERTIFICATION TO EN10204/3.2; CONDUCT A MATERIAL ANALYSIS (SPECTROMETER TEST) ON EACH BATCH OF MATERIAL AT THE SUPPLIER'S PREMISES PRIOR DELIVERY TO THE POWER STATION; THE POWER STATION AIA WILL BE PRESENT TO REVIEW AND VERIFIED THE SPECTROMETER RESULTS. MATERIAL NOT MEETING THE REQUIREMENTS WILL BE REJECTED; THE SPECTROMETER RESULTS MUST CORRESPOND WITH THE MATERIAL CERTIFICATE; ALL THE DOCUMENTATION WILL BE EVALUATED BY ENGINEERING INCLUDING THE SPECTROMETER TEST RESULTS SIGNED BY POWER STATION AIA UPON DELIVERY BEFORE ACCEPTANCE OF THE MATERIAL; NOTE MATERIAL WILL NOT BE ACCEPTED WITHOUT THE MATERIAL CERTIFICATES AND THE SPECTROMETER TEST CERTIFICATE SIGNED AND VERIFIED BY POWER STATION AIA	EA	
21	**56213**	TUBE, BOILER STRAIGHT: NOMINAL SIZE:	EA	

		38 MM; WALL THICKNESS: MIN 5.6 MM; MATERIAL: X20CRM0V12-1/XCRMOV1-1; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN FLAT SQ CUT; TYPE: FLOW 103; GRADE: 3; SPECIFICATION: EN10216-2; ALL TUBING TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WOLE LENGTH OF THE TUBE END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EAC H TUBE, COLOUR CODE BLUE, TEST CERTIFICATE TO BE SUPPLIED ACCORDING TO BS EN 10204:2004 TYPE 3.2; ADHERE TO ESKOM GOODS INFORMATION REQUIREMENTS AND THE SUPPLIER WILL COMPLY TO THE FOLLOWING STANDARD (SEE PROCUREMENT OF HIGH PRESSURE PIPEWORK AND BOILER TUBING MATERIAL STANDARD IN THE GENERATION DIVISION 240-87733094 LATEST REVISION); MATERIAL CERTIFICATION TO EN10204/3.2; CONDUCT A MATERIAL ANALYSIS (SPECTROMETER TEST) ON EACH BATCH OF MATERIAL AT THE SUPPLIER'S PREMISES PRIOR DELIVERY TO THE POWER STATION; THE POWER STATION AIA WILL BE PRESENT TO REVIEW AND VERIFIED THE SPECTROMETER RESULTS. MATERIAL NOT MEETING THE REQUIREMENTS WILL BE REJECTED; THE SPECTROMETER RESULTS MUST CORRESPOND WITH THE MATERIAL CERTIFICATE; ALL THE DOCUMENTATION WILL BE EVALUATED BY ENGINEERING INCLUDING THE SPECTROMETER TEST RESULTS SIGNED BY POWER STATION AIA UPON DELIVERY BEFORE ACCEPTANCE OF THE MATERIAL; NOTE MATERIAL WILL NOT BE ACCEPTED WITHOUT THE MATERIAL CERTIFICATES AND THE SPECTROMETER TEST CERTIFICATE SIGNED AND VERIFIED BY POWER STATION AIA		
22	56214	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 38 MM; WALL THICKNESS: MIN 6.3 MM; MATERIAL: X20CRM0V12-1/XCRMOV1-1; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN FLAT SQ CUT; TYPE: FLOW 104, 105; GRADE: 3; SPECIFICATION: EN10216-2; ALL TUBING TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WOLE LENGTH OF THE TUBE END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EAC H TUBE, COLOUR CODE BLUE, TEST CERTIFICATE	EA	

		TO BE SUPPLIED ACCORDING TO BS EN 10204:2004 TYPE 3.2; ADHERE TO ESKOM GOODS INFORMATION REQUIREMENTS AND THE SUPPLIER WILL COMPLY TO THE FOLLOWING STANDARD (SEE PROCUREMENT OF HIGH PRESSURE PIPEWORK AND BOILER TUBING MATERIAL STANDARD IN THE GENERATION DIVISION 240-87733094 LATEST REVISION); MATERIAL CERTIFICATION TO EN10204/3.2; CONDUCT A MATERIAL ANALYSIS (SPECTROMETER TEST) ON EACH BATCH OF MATERIAL AT THE SUPPLIER'S PREMISES PRIOR DELIVERY TO THE POWER STATION; THE POWER STATION AIA WILL BE PRESENT TO REVIEW AND VERIFIED THE SPECTROMETER RESULTS. MATERIAL NOT MEETING THE REQUIREMENTS WILL BE REJECTED; THE SPECTROMETER RESULTS MUST CORRESPOND WITH THE MATERIAL CERTIFICATE; ALL THE DOCUMENTATION WILL BE EVALUATED BY ENGINEERING INCLUDING THE SPECTROMETER TEST RESULTS SIGNED BY POWER STATION AIA UPON DELIVERY BEFORE ACCEPTANCE OF THE MATERIAL; NOTE MATERIAL WILL NOT BE ACCEPTED WITHOUT THE MATERIAL CERTIFICATES AND THE SPECTROMETER TEST CERTIFICATE SIGNED AND VERIFIED BY POWER STATION AIA		
23	56215	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 51 MM; WALL THICKNESS: 3.6 MM; MATERIAL: STL ALLOY X20CRMOV121; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN FLAT SQ CUT; TYPE: FLOW 129, 130; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; TEST CERTIFICATES TO BE SUPPLIED ACCORDING TO DIN 50049 TYPE 3.1.A OR 3.1.C, ALL TUBING TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH OF THE TUBE END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EACH TUBE, COLOUR CODE BLUE, EN3.2 DOCUMENT CERTIFICATE ACCORDING TO EN10204	EA	
24	665726	SHIELD, TUBE: DIMENSIONS: DIA 50.5MM X LG 2.45M; STYLE: BEND; MATERIAL: SS GR310; DRAWING NO: TUT-PP-GEN-122 REV 0; 0.61-02133 REV 2 REV 0; PROTECTION LHS SHIELD: ID 44.5MM X WALL THICKNESS 3MM; VENDOR TO CONFIRM LATEST REVISION DRAWING	EA	

		BEFRE COMMENCING WITH MANUFACTURING; PROTECTING SHIELD TO COVER 180DEG AND THE BANGLE 180DEG RADIUS TO FIT TIGHT AROUND THE APPLICABLE BOILER TUBE; BANGLES AND THE PROTECTION SHIELDS TO BE INCLUDED IN THE DELIVERY; AND BE CHARGED; BUT SUPPLIED AS SEPARATE ITEMS; QCP FOR PRESSING TO BE APPROVED BY ESKOM BEFORE COMMENCING WITH ANY MANIPULATION; PROCURING OF HP PIPEWORK SHOULD BE IN LINE WITH ESKOM STANDARD: 204-87733094; MATERIAL: SS 310; DIMENSIONS: OD 50.5 X WT 3MM; EACH BANGLE AND SHIELD SHOULD BE HARD STAMPED; HEAT NUMBER WITH LOW STRESS STAMPS; MATERIAL CERTIFICATE 3.1 I.A.W REQUIRED ON EVERY DELIVERY; STANDARD EN1024 3.1; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).		
25	665727	SHIELD, TUBE: DIMENSIONS: DIA 45MM X LG 2.45M; STYLE: STRAIGHT; MATERIAL: SS GR310; DRAWING NO: 67.SH2.SD.08.11 REV 0; PROTECTION SHIELD: ID 38MM X WALL THICKNESS 3MM; VENDOR TO CONFIRM LATEST REVISION DRAWING BEFRE COMMENCING WITH MANUFACTURING; PROTECTING SHIELD TO COVER 180DEG AND THE BANGLE 180DEG RADIUS TO FIT TIGHT AROUND THE APPLICABLE BOILER TUBE; BANGLES AND THE PROTECTION SHIELDS TO BE INCLUDED IN THE DELIVERY; AND BE CHARGED; BUT SUPPLIED AS SEPARATE ITEMS; QCP FOR PRESSING TO BE APPROVED BY ESKOM BEFORE COMMENCING WITH ANY MANIPULATION; PROCURING OF HP PIPEWORK SHOULD BE IN LINE WITH ESKOM STANDARD: 204-87733094; MATERIAL: SS 310; DIMENSIONS: OD 44 X WT 3MM; EACH BANGLE AND SHIELD SHOULD BE HARD STAMPED; HEAT NUMBER WITH LOW STRESS STAMPS; MATERIAL CERTIFICATE 3.1 I.A.W REQUIRED ON EVERY DELIVERY; STANDARD EN1024 3.1; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA	
26	665728	SHIELD, TUBE: DIMENSIONS: DIA 50.5MM	EA	

		X LG 2.45M; STYLE: BIFURCATION; MATERIAL: SS GR310; DRAWING NO: TUT-PP-GEN-118 REV 0; 60.ST.SDBIF3PB.10.11 REV 0; TUT-PP-GEN-119 REV 0; 60.ST.SDBIF3PB.08.11 REV 0; PROTECTION SHIELD: ID 44.5MM X WALL THICKNESS 3MM; RH OFFSET; VENDOR TO CONFIRM LATEST REVISION DRAWING BEFORE COMMENCING WITH MANUFACTURING; PROTECTING SHIELD TO COVER 180DEG AND THE BANGLE 180DEG RADIUS TO FIT TIGHT AROUND THE APPLICABLE BOILER TUBE; BANGLES AND THE PROTECTION SHIELDS TO BE INCLUDED IN THE DELIVERY; AND BE CHARGED; BUT SUPPLIED AS SEPARATE ITEMS; QCP FOR PRESSING TO BE APPROVED BY ESKOM BEFORE COMMENCING WITH ANY MANIPULATION; PROCURING OF HP PIPEWORK SHOULD BE IN LINE WITH ESKOM STANDARD: 204-87733094; MATERIAL: SS 310; DIMENSIONS: OD 50.5 X WT 3MM; EACH BANGLE AND SHIELD SHOULD BE HARD STAMPED; HEAT NUMBER WITH LOW STRESS STAMPS; MATERIAL CERTIFICATE 3.1 I.A.W REQUIRED ON EVERY DELIVERY; STANDARD EN1024 3.1; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).		
27	665729	SHIELD, TUBE: DIMENSIONS: DIA 57MM X LG 2.45M; STYLE: STRAIGHT; MATERIAL: SS GR310; DRAWING NO: 67.RH2.SD.08.11 REV 0; PROTECTION SHIELD: ID 51MM X WALL THICKNESS 3MM; RH OFFSET; VENDOR TO CONFIRM LATEST REVISION DRAWING BEFRE COMMENCING WITH MANUFACTURING; PROTECTING SHIELD TO COVER 180DEG AND THE BANGLE 180DEG RADIUS TO FIT TIGHT AROUND THE APPLICABLE BOILER TUBE; BANGLES AND THE PROTECTION SHIELDS TO BE INCLUDED IN THE DELIVERY; AND BE CHARGED; BUT SUPPLIED AS SEPARATE ITEMS; QCP FOR PRESSING TO BE APPROVED BY ESKOM BEFORE COMMENCING WITH ANY MANIPULATION; PROCURING OF HP PIPEWORK SHOULD BE IN LINE WITH ESKOM STANDARD: 204-87733094; MATERIAL: SS 310; DIMENSIONS: OD 57 X WT 3MM; EACH BANGLE AND SHIELD SHOULD BE HARD STAMPED; HEAT NUMBER WITH LOW STRESS STAMPS; MATERIAL CERTIFICATE 3.1 I.A.W	EA	

		REQUIRED ON EVERY DELIVERY; STANDARD EN1024 3.1; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).		
28	665730	SHIELD, TUBE: DIMENSIONS: DIA 54.3MM X LG 2.45M; STYLE: STRAIGHT; MATERIAL: SS GR310; DRAWING NO: 71.RH1.SD48.08.11 REV 0; PROTECTION SHIELD: ID 48.3MM X WALL THICKNESS 3MM; RH OFFSET; VENDOR TO CONFIRM LATEST REVISION DRAWING BEFRE COMMENCING WITH MANUFACTURING; PROTECTING SHIELD TO COVER 180DEG AND THE BANGLE 180DEG RADIUS TO FIT TIGHT AROUND THE APPLICABLE BOILER TUBE; BANGLES AND THE PROTECTION SHIELDS TO BE INCLUDED IN THE DELIVERY; AND BE CHARGED; BUT SUPPLIED AS SEPARATE ITEMS; QCP FOR PRESSING TO BE APPROVED BY ESKOM BEFORE COMMENCING WITH ANY MANIPULATION; PROCURING OF HP PIPEWORK SHOULD BE IN LINE WITH ESKOM STANDARD: 204-87733094; MATERIAL: SS 310; DIMENSIONS: OD 52 X WT 3MM; EACH BANGLE AND SHIELD SHOULD BE HARD STAMPED; HEAT NUMBER WITH LOW STRESS STAMPS; MATERIAL CERTIFICATE 3.1 I.A.W REQUIRED ON EVERY DELIVERY; STANDARD EN1024 3.1; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA	
29	665734	SHIELD, TUBE: DIMENSIONS: DIA 56 X LG 50 MM; STYLE: STRAIGHT; MATERIAL: SS GR310; DRAWING NO: TUT-PP-GEN-111 REV 0; PROTECTION SLOTTED SHIELD BANGLE; ID 51 X WALL THICKNESS 3MM; PROTECTING SHIELD TO COVER 180DEG AND THE BANGLE 180DEG + 10 DEG BOTH SIDES; RADIUS TO FIT TIGHT AROUND THE APPLICABLE BOILER TUBE; QCP FOR PRESSING TO BE APPROVED BY ESKOM BEFORE COMMENCING WITH ANY MANIPULATION; MATERIAL: SS 310; DIMENSIONS: OD 56 X WT 3MM; EACH BANGLE AND SHIELD SHOULD BE HARD STAMPED; HEAT NUMBER WITH LOW STRESS STAMPS; MATERIAL CERTIFICATE 3.1 I.A.W REQUIRED ON EVERY DELIVERY; STANDARD EN1024 3.1; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE	EA	

		PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).		
30	665736	SHIELD, TUBE: DIMENSIONS: DIA 57 X LG 50 MM; STYLE: STRAIGHT; MATERIAL: SS GR310; PROTECTION SHIELD BANGLE; ID 51 X WALL THICKNESS 3MM; PROTECTING SHIELD TO COVER 180DEG AND THE BANGLE 180DEG + 10 DEG BOTH SIDES; RADIUS TO FIT TIGHT AROUND THE APPLICABLE BOILER TUBE; QCP FOR PRESSING TO BE APPROVED BY ESKOM BEFORE COMMENCING WITH ANY MANIPULATION; MATERIAL: SS 310; DIMENSIONS: OD 57 X WT 3MM; EACH BANGLE AND SHIELD SHOULD BE HARD STAMPED; HEAT NUMBER WITH LOW STRESS STAMPS; MATERIAL CERTIFICATE 3.1 I.A.W REQUIRED ON EVERY DELIVERY; STANDARD EN1024 3.1; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA	
31	665739	SHIELD, TUBE: DIMENSIONS: DIA 50.5 X LG 50 MM; STYLE: STRAIGHT; MATERIAL: SS GR310; PROTECTION SLOTTED SHIELD BANGLE; ID 44.5 X WALL THICKNESS 3MM; PROTECTING SHIELD TO COVER 180DEG AND THE BANGLE 180DEG + 10 DEG BOTH SIDES; RADIUS TO FIT TIGHT AROUND THE APPLICABLE BOILER TUBE; QCP FOR PRESSING TO BE APPROVED BY ESKOM BEFORE COMMENCING WITH ANY MANIPULATION; MATERIAL: SS 310; DIMENSIONS: OD 50.5 X WD 3MM; EACH BANGLE AND SHIELD SHOULD BE HARD STAMPED; HEAT NUMBER WITH LOW STRESS STAMPS; MATERIAL CERTIFICATE 3.1 I.A.W REQUIRED ON EVERY DELIVERY; STANDARD EN1024 3.1; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA	
32	665740	BRACKET: TYPE: U-BEND; MATERIAL: INCOLOY 800; DIMENSIONS: WD 60 X LG 200 X THK 4 MM; SPECIFICATION: EN10216-2; APPLICATION: SUPERHEATER SUPPORT; 180DEG BEND AT 100MM (CENTRE); MATERIAL CERTIFICATE EN10204 3.1 REQUIRED ON EVERY DELIVERY; MATERIAL TO BE HARD STAMPED 'O' WITH LOW STRESS STAMPS	EA	

33	665748	BRACKET: TYPE: ALIGNMENT; MATERIAL: INCOLOY 800; DIMENSIONS: DIA 20 X LG 940 MM; APPLICATION: SUPERHEATER 2 SUPPORT; RADIUS: 27.5; CONSIST OF ROD AND HOOK; MATERIAL CERTIFICATE 3.1 IS REQUIRED ON EVERY DELIVERY; STAMPED; ESKOM WELDING STANDARD REQUIRED 240-106628253; WPS I.A.W EN ISO 15609-6 REQUIRED; QCP/ITP TO BE APPROVED BY ESKOM BEFORE WORK COMMENCE BENDING METHOD AND QCP TO BE APPROVED	EA	
34	665749	BRACKET: TYPE: ALIGNMENT; MATERIAL: INCOLOY 800; DIMENSIONS: DIA 20 X LG 70 MM; APPLICATION: REHEATER 2 SUPPORT; RADIUS: 22.5; CONSIST OF ROD AND HOOK; MATERIAL CERTIFICATE 3.1 IS REQUIRED ON EVERY DELIVERY; STAMPED; ESKOM WELDING STANDARD REQUIRED 240-106628253; WPS I.A.W EN ISO 15609-6 REQUIRED; QCP/ITP TO BE APPROVED BY ESKOM BEFORE WORK COMMENCE BENDING METHOD AND QCP TO BE APPROVED	EA	
35	665750	BRACKET: TYPE: RETAINING; MATERIAL: INCOLOY 800; DIMENSIONS: WD 30 X LG 69 X THK 6 MM; SPECIFICATION: EN10216-2; APPLICATION: REHEATER LUG SUPPORT; MATERIAL CERTIFICATE 3.1A IS REQUIRED ON EVERY DELIVERY; I.A.W STANDARD EN1024 3.1; HARD STAMPED WITH LOW STRESS STAMPS; HEAT NUMBERS	EA	
36	665751	BRACKET: TYPE: RETAINING; MATERIAL: INCOLOY 800; DIMENSIONS: WD 45 X LG 82 X THK 6 MM; SPECIFICATION: EN10216-2; APPLICATION: REHEATER LUG SUPPORT; MATERIAL CERTIFICATE 3.1A IS REQUIRED ON EVERY DELIVERY; I.A.W STANDARD EN1024 3.1; HARD STAMPED WITH LOW STRESS STAMPS; HEAT NUMBERS	EA	
37	665752	LUG: TYPE: CASTLE; DIMENSIONS: WD 35 X HT 25 MM; MATERIAL: INCOLOY 800; RADIUS 24 MM; WALL THICKNESS: 12 MM; SMALL CASTLE LUG WITH 40 MM BASE SUPERHEATER 4; MATERIAL CERITIFICATE EN10204 3.1 IS REQUIRED; STANDARD EN10216-2	EA	
38	56212	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 38 MM; WALL THICKNESS: MIN 4.5 MM; MATERIAL: X20CRMOV12-1/X20CRMOV11-1; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN FLAT SQ CUT; TYPE: FLOW	EA	

		101; GRADE: 3; SPECIFICATION: EN10216-2; TEST CERTIFICATE TO BE SUPPLIED ACCORDING TO BS EN 10204: 2004 TYPE3.2; ALL TUBING TO BE STAMPED, EVERY 500M AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH OF THE TUBE END CAPS TO BE FITTED; HEAT NUMBERS MUST BE PRESENT ON EACH TUBE; COLOUR CODE BLUE; ADHERE TO ESKOM GOODS INFORMATION REQUIREMENTS AND THE SUPPLIER WILL COMPLY TO THE FOLLOWING STANDARD (SEE PROCUREMENT OF HIGH PRESSURE PIPEWORK AND BOILER TUBING MATERIAL STANDARD IN THE GENERATION DIVISION 240-87733094 LATEST REVISION); MATERIAL CERTIFICATION TO EN10204/3.2; CONDUCT A MATERIAL ANALYSIS (SPECTROMETER TEST) ON EACH BATCH OF MATERIAL AT THE SUPPLIER'S PREMISES PRIOR DELIVERY TO THE POWER STATION; THE POWER STATION AIA WILL BE PRESENT TO REVIEW AND VERIFIED THE SPECTROMETER RESULTS. MATERIAL NOT MEETING THE REQUIREMENTS WILL BE REJECTED; THE SPECTROMETER RESULTS MUST CORRESPOND WITH THE MATERIAL CERTIFICATE; ALL THE DOCUMENTATION WILL BE EVALUATED BY ENGINEERING INCLUDING THE SPECTROMETER TEST RESULTS SIGNED BY POWER STATION AIA UPON DELIVERY BEFORE ACCEPTANCE OF THE MATERIAL; NOTE MATERIAL WILL NOT BE ACCEPTED WITHOUT THE MATERIAL CERTIFICATES AND THE SPECTROMETER TEST CERTIFICATE SIGNED AND VERIFIED BY POWER STATION AIA		
39	225683	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 51 MM; WALL THICKNESS: 5.6 MM; MATERIAL: STL ALLOY 15MO3 HOT DRAWN; LENGTH: 8 M; STRUCTURE: SMLS; ENDS: CAPS PLASTIC ENDS; TYPE: TEST CATEGORY 2 (TC2); SPECIFICATION: EN10216-2; MATERIAL TO COMPLY WITH ESKOM STANDARD 240-240-87733094 REV 3; 15MO3; RESISTANCE WELDING TO TUBES AT 20MM CENTRES (DRAWING AVAILABLE); SEAMLESS ACCORDING TO EN 10216-2; RED OXIDE CORROSION PROCTECTION LAYER ON TUBE AND FINS. 3.2 CERTIFICATION IAW EN 10204:2004 ; MATERIAL SUPPLIED WITH H FIN SIZE 120MM X 3MMTHK; FIN GAP 20MM	EA	

		CENTRE TO CENTRE APART; ALL TUBING TO BE STENCILED AND VERIFIED BY THIRD PARTY AND COLOUR CODED RED PLASTIC END CAPS TO BE FITTED; ALL WELDING DONE MUST BE ACCORDING TO ESKOM STANDARD 240-106628253; CONTROL OF REPAIR AND MACHINE WELDING CERTIFICATES AND QUALITY CERTIFICATE ACCORDING TO EN ISO 15609-1; MUST BE USED FOR WELDING THE FIN TO WELDS AND A QCP MUST BE APPROVED AND THE WELDING MUST BE TO ESKOM STANDARD AND BOILER DEPT MUST APPROVE AND QC BEFORE ACCEPTING DELIVERY; ESKOM STANDARD WELDING SPECIFICATION MUST BE COMPLIED TO SANS 3834 CERTIFICATION AND SANS ISO 9606; WELDER QUALIFICATIONS AND SANS AND BS EN 15614 AND WELDING PROCEDURE; EN 3.2 DOCUMENTATION IAW EN 10204:2004 MUST BE INCLUDED ON EVERY DELIVERY; DELIVERY COST TO TUTUKA POWER STATION INCLUDE		
40	51088	BEND, PIPE:15M03 HOT DRAWN;180 DEG;3; U bends, OD 51 WT 5.6	EA	

PART 3: SCOPE OF WORK

Document reference	Title
	This cover page
C3.1	*Purchaser*'s Goods Information
C3.2	*Supplier*'s Goods Information

C3.1: *PURCHASER'S* GOODS INFORMATION

Contents

1 Overview and purpose of the *goods* and *services*

Supply and deliver of various Boiler tubes on an as and when required "basis".

2 Specification and description of the *goods*

- As per full technical specification given on Goods Information / Price schedule Specifications (and drawing Numbers (where applicable). The *Supplier* implements a quality system and maintains the quality system until the delivery of all consumables. The system will be to the *Purchaser*'s satisfaction and will be accepted prior to the signing of the *contract*. The *Supplier* will be subject to periodic audits by the *Purchaser* in order to ensure compliance with the system. Any deviations will be corrected to the *Purchaser*'s satisfaction.

Technical Specifications

No	Eskom Stock Number	Material Description	Unit
1	598158	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 26.9 MM; WALL THICKNESS: 5 MM; MATERIAL: STL ALLOY 15MO3 HOT DRAWN; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN; FLOW 48; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; TEST CERTIFICATES TO BE SUPPLIED ACCORDING TO TYPE 3.01 A OR 3.1 C, ALL TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH, END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EACH, COLOUR CODE RED, EN3.2 DOCUMENT CERTIFICATE ACCORDING TO EN10204	EA
2	598162	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 38 MM; WALL THICKNESS: 4 MM; MATERIAL: 16M03; LENGTH: 6-11.8 M; STRUCTURE: SMLS; DELIVER AS PER SPEC UNIQUE IDENTIFIER: 474-10206 REV 2; EN10204 3.2; ADHERE TO ESKOM GOODS INFORMATION REQUIREMENTS AND THE SUPPLIER WILL COMPLY TO THE FOLLOWING STANDARD (SEE PROCUREMENT OF HIGH PRESSURE PIPEWORK AND BOILER TUBING MATERIAL STANDARD IN THE GENERATION DIVISION 240-87733094 LATEST REVISION); MATERIAL CERTIFICATION TO EN10204/3.2; CONDUCT A MATERIAL ANALYSIS (SPECTROMETER TEST) ON EACH BATCH OF MATERIAL AT THE SUPPLIER'S PREMISES PRIOR DELIVERY TO THE POWER STATION; THE POWER STATION AIA WILL BE PRESENT TO REVIEW AND VERIFIED THE SPECTROMETER RESULTS. MATERIAL NOT MEETING THE REQUIREMENTS WILL BE REJECTED; THE SPECTROMETER RESULTS MUST CORRESPOND WITH THE	EA

		MATERIAL CERTIFICATE; ALL THE DOCUMENTATION WILL BE EVALUATED BY ENGINEERING INCLUDING THE SPECTROMETER TEST RESULTS SIGNED BY POWER STATION AIA UPON DELIVERY BEFORE ACCEPTANCE OF THE MATERIAL; NOTE MATERIAL WILL NOT BE ACCEPTED WITHOUT THE MATERIAL CERTIFICATES AND THE SPECTROMETER TEST CERTIFICATE SIGNED AND VERIFIED BY POWER STATION AIA	
3	50883	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 38 MM; WALL THICKNESS: 5 MM; MATERIAL: STL ALLOY 15MO3 HOT DRAWN; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN SQ CUT; TYPE: FLOW WEB; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; TEST CERTIFICATES TO BE SUPPLIED ACCORDING TO TYPE 3.1.A OR 3.1.C, TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH, END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EACH TUBE, COLOUR CODE RED, EN3.2 DOCUMENT CERTIFICATE ACCORDING TO EN10204	EA
4	50885	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 44.5 MM; WALL THICKNESS: 4.5 MM; MATERIAL: STL ALLOY 15MO3 HOT DRAWN; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN SQ CUT; TYPE: FLOW 72, 74; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; TEST CERTIFICATES TO BE SUPPL IED ACCORDING TO TYPE 3.1.A OR 3.1.C, ALL TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE W HOLE LENGTH, END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EACH TUBE, COLOUR CODE RED, EN3.2 DOCUMENT CERTIFICATE ACCORDING TO EN10204	EA
5	50886	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 44.5 MM; WALL THICKNESS: 5 MM; MATERIAL: STL ALLOY 15MO3 HOT DRAWN; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN SQ CUT; TYPE: FLOW 75, 76; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; TEST CERTIFICATES TO BE SUPPLIED ACCORDING TO DIN 50049 TYPE 3.1.A OR 3.1.C, ALL TUBING TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH OF THE TUBE, END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EACH TUBE, EN3.2 DOCUMENT CERTIFICATE ACCORDING TO EN10204	EA
6	50977	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 44.5 MM; WALL THICKNESS: 5.6 MM; MATERIAL: STL ALLOY 15MO3 HOT DRAWN; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN; TYPE: FLOW 39; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; DRAWING	EA

		NO: STEIN/M-KIE 26207C REV 1; SLING, WITH SQUIRE ENDS, TEST CERTIFICATES TO BE SUPPLIED ACCORDING TO TYPE 3.1.A OR 3.1.C, ALL TUBING TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG T HE WHOLE LENGTH OF THE TUBE, END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EACH TUBE, COLOUR CODE RED, EN3.2 DOCUMENT CERTI FICATE ACCORDING TO EN10204	
7	50887	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 26.9 MM; WALL THICKNESS: 5 MM; MATERIAL: STL ALLOY 15MO3 HOT DRAWN; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN; FLOW 48; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; TEST CERTIFICATES TO BE SUPPLIED ACCORDING TO TYPE 3.01 A OR 3.1 C, ALL TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH, END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EACH, COLOUR CODE RED, EN3.2 DOCUMENT CERTIFICATE ACCORDING TO EN10204	EA
8	51080	WYE: TYPE: BIFURCATION; SIZE: OD 44.5 MM; MATERIAL: 13CRMO44; TO GO WITH BOILER TUBE; WALL THK 5.6 MM; TO BE DELIVERED WITH A DIN 50049-3.1 A / 3.1C OR EN10204 3.2; MATERIAL CERTIFICATES TO BE SUPPLIED WITH DELIVERY; PIECES TO BE STAMPED EVERY 500 MM/VERIFIED BY THIRD PARTY STAMP	EA
9	50890	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 51 MM; WALL THICKNESS: 3.6 MM; MATERIAL: STL ALLOY 15MO3 HOT DRAWN; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN SQ CUT; TYPE: FLOW 113; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; TEST CERTIFICATES TO BE SUPPLIED ACCORDING TO DIN 50049 TYPE 3.1.A OR 3.1.C, ALL TUBING TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH OF THE TUBE, END CAPS TO BE FITTED, COLOUR CODE RED, EN3.2 DOCUMENT CERTIFICATE ACCORDING TO EN 10204	EA
10	52464	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 51 MM; WALL THICKNESS: MIN 5.6 MM; MATERIAL: 15M03; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN; TYPE: ECONOMIZER; SPECIFICATION: EN10216-2; FLOW SCHEME 13, WALL TUBING, MATERIAL CERTIFICATES TO BE SUPPLIED WITH ALL TUBES, ALL TUBES TO BE CAPPED, ALL TUBES TO BE COLOUR CODED, ALL TUBES TO BE HARD STAMPED WITH LOW STRESS STAMPS, MATERIAL AND TEST CERTIFICATES TO BE ACCORDING TO BS EN 10204:2004 TYPE 3.2; ADHERE TO ESKOM GOODS INFORMATION REQUIREMENTS AND THE SUPPLIER WILL COMPLY TO THE FOLLOWING	EA

		STANDARD (SEE PROCUREMENT OF HIGH PRESSURE PIPEWORK AND BOILER TUBING MATERIAL STANDARD IN THE GENERATION DIVISION 240-87733094 LATEST REVISION); MATERIAL CERTIFICATION TO EN10204/3.2; CONDUCT A MATERIAL ANALYSIS (SPECTROMETER TEST) ON EACH BATCH OF MATERIAL AT THE SUPPLIER'S PREMISES PRIOR DELIVERY TO THE POWER STATION; THE POWER STATION AIA WILL BE PRESENT TO REVIEW AND VERIFIED THE SPECTROMETER RESULTS. MATERIAL NOT MEETING THE REQUIREMENTS WILL BE REJECTED; THE SPECTROMETER RESULTS MUST CORRESPOND WITH THE MATERIAL CERTIFICATE; ALL THE DOCUMENTATION WILL BE EVALUATED BY ENGINEERING INCLUDING THE SPECTROMETER TEST RESULTS SIGNED BY POWER STATION AIA UPON DELIVERY BEFORE ACCEPTANCE OF THE MATERIAL; NOTE MATERIAL WILL NOT BE ACCEPTED WITHOUT THE MATERIAL CERTIFICATES AND THE SPECTROMETER TEST CERTIFICATE SIGNED AND VERIFIED BY POWER STATION AIA	
11	50893	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 51 MM; WALL THICKNESS: 5.6 MM; MATERIAL: 15MO3 HOT DRAWN; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN; TYPE: FLOW 10, 13; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; FINNED TUBES, TOTAL THICKNESS 65MM, TEST CERTIFICATES TO BE SUPPLIE D ACCORDING TO TYPE 3.1 A OR 3.1 C, ALL TUBING TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH OF THE TUBE, END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EACH TUBE, COLOUR CODED RED, EN3.2 DOCUMENT CERTIFICATE ACCORDING TO EN10204	EA
12	50880	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 38 MM; WALL THICKNESS: 4 MM; MATERIAL: STL ALLOY CR13MO44 HOT DRAWN; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN SQ CUT; TYPE: FLOW 82; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; TEST CERTIFICATES TO BE SUPPLIED ACCORDING TO TY PE 3.1.A OR 3.1.C, ALL TUBING TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH, END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EACH TUBE, COLOUR CODE SILVER, EN3.2 DOCUMENT CERTIFICATE ACCORDING TO EN10204	EA
13	598217	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 48.3 MM; WALL THICKNESS: 3.6 MM; MATERIAL: 10CRMO9-10; LENGTH: 6-11.8 M; STRUCTURE: SMLS;	EA

		DELIVER AS PER SPEC UNIQUE IDENTIFIER: 474-10206 REV 2; EN10204 3.2; ADHERE TO ESKOM GOODS INFORMATION REQUIREMENTS AND THE SUPPLIER WILL COMPLY TO THE FOLLOWING STANDARD (SEE PROCUREMENT OF HIGH PRESSURE PIPEWORK AND BOILER TUBING MATERIAL STANDARD IN THE GENERATION DIVISION 240-87733094 LATEST REVISION); MATERIAL CERTIFICATION TO EN10204/3.2; CONDUCT A MATERIAL ANALYSIS (SPECTROMETER TEST) ON EACH BATCH OF MATERIAL AT THE SUPPLIER'S PREMISES PRIOR DELIVERY TO THE POWER STATION; THE POWER STATION AIA WILL BE PRESENT TO REVIEW AND VERIFIED THE SPECTROMETER RESULTS. MATERIAL NOT MEETING THE REQUIREMENTS WILL BE REJECTED; THE SPECTROMETER RESULTS MUST CORRESPOND WITH THE MATERIAL CERTIFICATE; ALL THE DOCUMENTATION WILL BE EVALUATED BY ENGINEERING INCLUDING THE SPECTROMETER TEST RESULTS SIGNED BY POWER STATION AIA UPON DELIVERY BEFORE ACCEPTANCE OF THE MATERIAL; NOTE MATERIAL WILL NOT BE ACCEPTED WITHOUT THE MATERIAL CERTIFICATES AND THE SPECTROMETER TEST CERTIFICATE SIGNED AND VERIFIED BY POWER STATION AIA	
14	50892	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 51 MM; WALL THICKNESS: 3.6 MM; MATERIAL: STL ALLOY CR10MO910 HOT DRAWN; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN; TYPE: FLOW 111, 114; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; TEST CERTIFICATES TO BE SUPPLIED ACCORDING TO TYPE 3.1 A OR 3.1 C, ALL TUBING TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGT H, END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EACH TUBE, COLOUR CODE GREEN, EN3.2 DOCUMENT CERTIFICATE ACCORDING TO EN10204	EA
15	50879	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 38 MM; WALL THICKNESS: 4 MM; MATERIAL: STL ALLOY CR13MO44 HOT DRAWN; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN SQ CUT; TYPE: FLOW 82; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; TEST CERTIFICATES TO BE SUPPLIED ACCORDING TO TY PE 3.1.A OR 3.1.C, ALL TUBING TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH, END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EACH TUBE, COLOUR CODE SILVER, EN3.2 DOCUMENT CERTIFICATE ACCORDING TO EN10204	EA
16	50881	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 38 MM;	EA

		WALL THICKNESS: 4.5 MM; MATERIAL: STL ALLOY CR13MO44 HOT DRAWN; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN; TYPE: FLOW 90; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; TEST CERTIFICATES TO BE SUPPLIED ACCORDING TO TYPE 3. 1 A OR 3.1 C, ALL TUBING TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH OF TH E TUBE, END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EACH TUBE, COLOUR CODE SILVER, EN3.2 DOCUMENT CERTIFICATE ACCORDING TO EN10204	
17	598364	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 51 MM; WALL THICKNESS: 3.6 MM; MATERIAL: 13CRM04-5; LENGTH: 6-11.8 M; STRUCTURE: SMLS; DELIVER AS PER SPEC UNIQUE IDENTIFIER: 474-10206 REV 2; EN10204 3.2; ADHERE TO ESKOM GOODS INFORMATION REQUIREMENTS AND THE SUPPLIER WILL COMPLY TO THE FOLLOWING STANDARD (SEE PROCUREMENT OF HIGH PRESSURE PIPEWORK AND BOILER TUBING MATERIAL STANDARD IN THE GENERATION DIVISION 240-87733094 LATEST REVISION); MATERIAL CERTIFICATION TO EN10204/3.2; CONDUCT A MATERIAL ANALYSIS (SPECTROMETER TEST) ON EACH BATCH OF MATERIAL AT THE SUPPLIER'S PREMISES PRIOR DELIVERY TO THE POWER STATION; THE POWER STATION AIA WILL BE PRESENT TO REVIEW AND VERIFIED THE SPECTROMETER RESULTS. MATERIAL NOT MEETING THE REQUIREMENTS WILL BE REJECTED; THE SPECTROMETER RESULTS MUST CORRESPOND WITH THE MATERIAL CERTIFICATE; ALL THE DOCUMENTATION WILL BE EVALUATED BY ENGINEERING INCLUDING THE SPECTROMETER TEST RESULTS SIGNED BY POWER STATION AIA UPON DELIVERY BEFORE ACCEPTANCE OF THE MATERIAL; NOTE MATERIAL WILL NOT BE ACCEPTED WITHOUT THE MATERIAL CERTIFICATES AND THE SPECTROMETER TEST CERTIFICATE SIGNED AND VERIFIED BY POWER STATION AIA	EA
18	56210	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 38 MM; WALL THICKNESS: MIN 4 MM; MATERIAL: X20CRMOV12-1/X20CRMOV11-1; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN FLAT SQ CUT; TYPE: SUPERHEATER 3 AND 4; GRADE: 3; SPECIFICATION: EN10216-2; FLOW 100; TEST CERTIFICATES TO BE SUPPLIED ACCORDING TO BS EN 10204:2004 TYPE 3.2. COLOUR CODE BLUE; ALL TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP , AND COLOUR CODED ALONG THE WHOLE LENGTH OF THE END CAPS TO BE FITTED; HEAT NUMBERS MUST BE PRESENT ON EACH; ADHERE TO ESKOM GOODS	EA

		INFORMATION REQUIREMENTS AND THE SUPPLIER WILL COMPLY TO THE FOLLOWING STANDARD (SEE PROCUREMENT OF HIGH PRESSURE PIPEWORK AND BOILER TUBING MATERIAL STANDARD IN THE GENERATION DIVISION 240-87733094 LATEST REVISION); MATERIAL CERTIFICATION TO EN10204/3.2; CONDUCT A MATERIAL ANALYSIS (SPECTROMETER TEST) ON EACH BATCH OF MATERIAL AT THE SUPPLIER'S PREMISES PRIOR DELIVERY TO THE POWER STATION; THE POWER STATION AIA WILL BE PRESENT TO REVIEW AND VERIFIED THE SPECTROMETER RESULTS. MATERIAL NOT MEETING THE REQUIREMENTS WILL BE REJECTED; THE SPECTROMETER RESULTS MUST CORRESPOND WITH THE MATERIAL CERTIFICATE; ALL THE DOCUMENTATION WILL BE EVALUATED BY ENGINEERING INCLUDING THE SPECTROMETER TEST RESULTS SIGNED BY POWER STATION AIA UPON DELIVERY BEFORE ACCEPTANCE OF THE MATERIAL; NOTE MATERIAL WILL NOT BE ACCEPTED WITHOUT THE MATERIAL CERTIFICATES AND THE SPECTROMETER TEST CERTIFICATE SIGNED AND VERIFIED BY POWER STATION AIA	
19	56212	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 38 MM; WALL THICKNESS: MIN 4.5 MM; MATERIAL: X20CRMOV12-1/X20CRMOV11-1; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN FLAT SQ CUT; TYPE: FLOW 101; GRADE: 3; SPECIFICATION: EN10216-2; TEST CERTIFICATE TO BE SUPPLIED ACCORDING TO BS EN 10204: 2004 TYPE3.2; ALL TUBING TO BE STAMPED, EVERY 500M AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH OF THE TUBE END CAPS TO BE FITTED; HEAT NUMBERS MUST BE PRESENT ON EACH TUBE; COLOUR CODE BLUE; ADHERE TO ESKOM GOODS INFORMATION REQUIREMENTS AND THE SUPPLIER WILL COMPLY TO THE FOLLOWING STANDARD (SEE PROCUREMENT OF HIGH PRESSURE PIPEWORK AND BOILER TUBING MATERIAL STANDARD IN THE GENERATION DIVISION 240-87733094 LATEST REVISION); MATERIAL CERTIFICATION TO EN10204/3.2; CONDUCT A MATERIAL ANALYSIS (SPECTROMETER TEST) ON EACH BATCH OF MATERIAL AT THE SUPPLIER'S PREMISES PRIOR DELIVERY TO THE POWER STATION; THE POWER STATION AIA WILL BE PRESENT TO REVIEW AND VERIFIED THE SPECTROMETER RESULTS. MATERIAL NOT MEETING THE REQUIREMENTS WILL BE REJECTED; THE SPECTROMETER RESULTS MUST CORRESPOND WITH THE MATERIAL CERTIFICATE; ALL THE DOCUMENTATION WILL BE EVALUATED BY ENGINEERING INCLUDING THE SPECTROMETER	EA

		TEST RESULTS SIGNED BY POWER STATION AIA UPON DELIVERY BEFORE ACCEPTANCE OF THE MATERIAL; NOTE MATERIAL WILL NOT BE ACCEPTED WITHOUT THE MATERIAL CERTIFICATES AND THE SPECTROMETER TEST CERTIFICATE SIGNED AND VERIFIED BY POWER STATION AIA	
20	56211 Fin 102	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 38 MM; WALL THICKNESS: MIN 5 MM; MATERIAL: X20CRMOV12-1/X20CRMOV11-1; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN FLAT SQ CUT; TYPE: FLOW 101; GRADE: 3; SPECIFICATION: EN10216-2; TEST CERTIFICATE TO BE SUPPLIED ACCORDING TO BS EN 10204: 2004 TYPE3.2; ALL TUBING TO BE STAMPED, EVERY 500M AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH OF THE TUBE END CAPS TO BE FITTED; HEAT NUMBERS MUST BE PRESENT ON EACH TUBE; COLOUR CODE BLUE; ADHERE TO ESKOM GOODS INFORMATION REQUIREMENTS AND THE SUPPLIER WILL COMPLY TO THE FOLLOWING STANDARD (SEE PROCUREMENT OF HIGH PRESSURE PIPEWORK AND BOILER TUBING MATERIAL STANDARD IN THE GENERATION DIVISION 240-87733094 LATEST REVISION); MATERIAL CERTIFICATION TO EN10204/3.2; CONDUCT A MATERIAL ANALYSIS (SPECTROMETER TEST) ON EACH BATCH OF MATERIAL AT THE SUPPLIER'S PREMISES PRIOR DELIVERY TO THE POWER STATION; THE POWER STATION AIA WILL BE PRESENT TO REVIEW AND VERIFIED THE SPECTROMETER RESULTS. MATERIAL NOT MEETING THE REQUIREMENTS WILL BE REJECTED; THE SPECTROMETER RESULTS MUST CORRESPOND WITH THE MATERIAL CERTIFICATE; ALL THE DOCUMENTATION WILL BE EVALUATED BY ENGINEERING INCLUDING THE SPECTROMETER TEST RESULTS SIGNED BY POWER STATION AIA UPON DELIVERY BEFORE ACCEPTANCE OF THE MATERIAL; NOTE MATERIAL WILL NOT BE ACCEPTED WITHOUT THE MATERIAL CERTIFICATES AND THE SPECTROMETER TEST CERTIFICATE SIGNED AND VERIFIED BY POWER STATION AIA	EA
21	**56213**	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 38 MM; WALL THICKNESS: MIN 5.6 MM; MATERIAL: X20CRM0V12-1/XCRMOV1-1; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN FLAT SQ CUT; TYPE: FLOW 103; GRADE: 3; SPECIFICATION: EN10216-2; ALL TUBING TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WOLE LENGTH OF THE TUBE END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EAC H TUBE, COLOUR CODE BLUE, TEST CERTIFICATE TO BE	EA

		SUPPLIED ACCORDING TO BS EN 10204:2004 TYPE 3.2; ADHERE TO ESKOM GOODS INFORMATION REQUIREMENTS AND THE SUPPLIER WILL COMPLY TO THE FOLLOWING STANDARD (SEE PROCUREMENT OF HIGH PRESSURE PIPEWORK AND BOILER TUBING MATERIAL STANDARD IN THE GENERATION DIVISION 240-87733094 LATEST REVISION); MATERIAL CERTIFICATION TO EN10204/3.2; CONDUCT A MATERIAL ANALYSIS (SPECTROMETER TEST) ON EACH BATCH OF MATERIAL AT THE SUPPLIER'S PREMISES PRIOR DELIVERY TO THE POWER STATION; THE POWER STATION AIA WILL BE PRESENT TO REVIEW AND VERIFIED THE SPECTROMETER RESULTS. MATERIAL NOT MEETING THE REQUIREMENTS WILL BE REJECTED; THE SPECTROMETER RESULTS MUST CORRESPOND WITH THE MATERIAL CERTIFICATE; ALL THE DOCUMENTATION WILL BE EVALUATED BY ENGINEERING INCLUDING THE SPECTROMETER TEST RESULTS SIGNED BY POWER STATION AIA UPON DELIVERY BEFORE ACCEPTANCE OF THE MATERIAL; NOTE MATERIAL WILL NOT BE ACCEPTED WITHOUT THE MATERIAL CERTIFICATES AND THE SPECTROMETER TEST CERTIFICATE SIGNED AND VERIFIED BY POWER STATION AIA	
22	56214	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 38 MM; WALL THICKNESS: MIN 6.3 MM; MATERIAL: X20CRM0V12-1/XCRMOV1-1; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN FLAT SQ CUT; TYPE: FLOW 104, 105; GRADE: 3; SPECIFICATION: EN10216-2; ALL TUBING TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WOLE LENGTH OF THE TUBE END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EAC H TUBE, COLOUR CODE BLUE, TEST CERTIFICATE TO BE SUPPLIED ACCORDING TO BS EN 10204:2004 TYPE 3.2; ADHERE TO ESKOM GOODS INFORMATION REQUIREMENTS AND THE SUPPLIER WILL COMPLY TO THE FOLLOWING STANDARD (SEE PROCUREMENT OF HIGH PRESSURE PIPEWORK AND BOILER TUBING MATERIAL STANDARD IN THE GENERATION DIVISION 240-87733094 LATEST REVISION); MATERIAL CERTIFICATION TO EN10204/3.2; CONDUCT A MATERIAL ANALYSIS (SPECTROMETER TEST) ON EACH BATCH OF MATERIAL AT THE SUPPLIER'S PREMISES PRIOR DELIVERY TO THE POWER STATION; THE POWER STATION AIA WILL BE PRESENT TO REVIEW AND VERIFIED THE SPECTROMETER RESULTS. MATERIAL NOT MEETING THE REQUIREMENTS WILL BE REJECTED; THE SPECTROMETER RESULTS MUST CORRESPOND WITH THE MATERIAL CERTIFICATE; ALL THE	EA

		DOCUMENTATION WILL BE EVALUATED BY ENGINEERING INCLUDING THE SPECTROMETER TEST RESULTS SIGNED BY POWER STATION AIA UPON DELIVERY BEFORE ACCEPTANCE OF THE MATERIAL; NOTE MATERIAL WILL NOT BE ACCEPTED WITHOUT THE MATERIAL CERTIFICATES AND THE SPECTROMETER TEST CERTIFICATE SIGNED AND VERIFIED BY POWER STATION AIA	
23	56215	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 51 MM; WALL THICKNESS: 3.6 MM; MATERIAL: STL ALLOY X20CRMOV121; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN FLAT SQ CUT; TYPE: FLOW 129, 130; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; TEST CERTIFICATES TO BE SUPPLIED ACCORDING TO DIN 50049 TYPE 3.1.A OR 3.1.C, ALL TUBING TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH OF THE TUBE END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EACH TUBE, COLOUR CODE BLUE, EN3.2 DOCUMENT CERTIFICATE ACCORDING TO EN10204	EA
24	665726	SHIELD, TUBE: DIMENSIONS: DIA 50.5MM X LG 2.45M; STYLE: BEND; MATERIAL: SS GR310; DRAWING NO: TUT-PP-GEN-122 REV 0; 0.61-02133 REV 2 REV 0; PROTECTION LHS SHIELD: ID 44.5MM X WALL THICKNESS 3MM; VENDOR TO CONFIRM LATEST REVISION DRAWING BEFRE COMMENCING WITH MANUFACTURING; PROTECTING SHIELD TO COVER 180DEG AND THE BANGLE 180DEG RADIUS TO FIT TIGHT AROUND THE APPLICABLE BOILER TUBE; BANGLES AND THE PROTECTION SHIELDS TO BE INCLUDED IN THE DELIVERY; AND BE CHARGED; BUT SUPPLIED AS SEPARATE ITEMS; QCP FOR PRESSING TO BE APPROVED BY ESKOM BEFORE COMMENCING WITH ANY MANIPULATION; PROCURING OF HP PIPEWORK SHOULD BE IN LINE WITH ESKOM STANDARD: 204-87733094; MATERIAL: SS 310; DIMENSIONS: OD 50.5 X WT 3MM; EACH BANGLE AND SHIELD SHOULD BE HARD STAMPED; HEAT NUMBER WITH LOW STRESS STAMPS; MATERIAL CERTIFICATE 3.1 I.A.W REQUIRED ON EVERY DELIVERY; STANDARD EN1024 3.1; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA
25	665727	SHIELD, TUBE: DIMENSIONS: DIA 45MM X LG 2.45M; STYLE: STRAIGHT; MATERIAL: SS GR310; DRAWING NO: 67.SH2.SD.08.11 REV 0; PROTECTION SHIELD: ID 38MM X WALL THICKNESS 3MM; VENDOR TO CONFIRM LATEST REVISION DRAWING BEFRE COMMENCING WITH MANUFACTURING; PROTECTING SHIELD TO COVER 180DEG AND THE BANGLE 180DEG	EA

		RADIUS TO FIT TIGHT AROUND THE APPLICABLE BOILER TUBE; BANGLES AND THE PROTECTION SHIELDS TO BE INCLUDED IN THE DELIVERY; AND BE CHARGED; BUT SUPPLIED AS SEPARATE ITEMS; QCP FOR PRESSING TO BE APPROVED BY ESKOM BEFORE COMMENCING WITH ANY MANIPULATION; PROCURING OF HP PIPEWORK SHOULD BE IN LINE WITH ESKOM STANDARD: 204-87733094; MATERIAL: SS 310; DIMENSIONS: OD 44 X WT 3MM; EACH BANGLE AND SHIELD SHOULD BE HARD STAMPED; HEAT NUMBER WITH LOW STRESS STAMPS; MATERIAL CERTIFICATE 3.1 I.A.W REQUIRED ON EVERY DELIVERY; STANDARD EN1024 3.1; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	
26	665728	SHIELD, TUBE: DIMENSIONS: DIA 50.5MM X LG 2.45M; STYLE: BIFURCATION; MATERIAL: SS GR310; DRAWING NO: TUT-PP-GEN-118 REV 0; 60.ST.SDBIF3PB.10.11 REV 0; TUT-PP-GEN-119 REV 0; 60.ST.SDBIF3PB.08.11 REV 0; PROTECTION SHIELD: ID 44.5MM X WALL THICKNESS 3MM; RH OFFSET; VENDOR TO CONFIRM LATEST REVISION DRAWING BEFORE COMMENCING WITH MANUFACTURING; PROTECTING SHIELD TO COVER 180DEG AND THE BANGLE 180DEG RADIUS TO FIT TIGHT AROUND THE APPLICABLE BOILER TUBE; BANGLES AND THE PROTECTION SHIELDS TO BE INCLUDED IN THE DELIVERY; AND BE CHARGED; BUT SUPPLIED AS SEPARATE ITEMS; QCP FOR PRESSING TO BE APPROVED BY ESKOM BEFORE COMMENCING WITH ANY MANIPULATION; PROCURING OF HP PIPEWORK SHOULD BE IN LINE WITH ESKOM STANDARD: 204-87733094; MATERIAL: SS 310; DIMENSIONS: OD 50.5 X WT 3MM; EACH BANGLE AND SHIELD SHOULD BE HARD STAMPED; HEAT NUMBER WITH LOW STRESS STAMPS; MATERIAL CERTIFICATE 3.1 I.A.W REQUIRED ON EVERY DELIVERY; STANDARD EN1024 3.1; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA
27	665729	SHIELD, TUBE: DIMENSIONS: DIA 57MM X LG 2.45M; STYLE: STRAIGHT; MATERIAL: SS GR310; DRAWING NO: 67.RH2.SD.08.11 REV 0; PROTECTION SHIELD: ID 51MM X WALL THICKNESS 3MM; RH OFFSET; VENDOR TO CONFIRM LATEST REVISION DRAWING BEFRE COMMENCING WITH MANUFACTURING; PROTECTING SHIELD TO COVER 180DEG AND THE BANGLE 180DEG RADIUS TO FIT TIGHT AROUND THE APPLICABLE BOILER TUBE; BANGLES AND THE PROTECTION SHIELDS TO BE INCLUDED IN THE DELIVERY; AND BE CHARGED; BUT SUPPLIED AS SEPARATE ITEMS; QCP FOR	EA

		PRESSING TO BE APPROVED BY ESKOM BEFORE COMMENCING WITH ANY MANIPULATION; PROCURING OF HP PIPEWORK SHOULD BE IN LINE WITH ESKOM STANDARD: 204-87733094; MATERIAL: SS 310; DIMENSIONS: OD 57 X WT 3MM; EACH BANGLE AND SHIELD SHOULD BE HARD STAMPED; HEAT NUMBER WITH LOW STRESS STAMPS; MATERIAL CERTIFICATE 3.1 I.A.W REQUIRED ON EVERY DELIVERY; STANDARD EN1024 3.1; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	
28	665730	SHIELD, TUBE: DIMENSIONS: DIA 54.3MM X LG 2.45M; STYLE: STRAIGHT; MATERIAL: SS GR310; DRAWING NO: 71.RH1.SD48.08.11 REV 0; PROTECTION SHIELD: ID 48.3MM X WALL THICKNESS 3MM; RH OFFSET; VENDOR TO CONFIRM LATEST REVISION DRAWING BEFRE COMMENCING WITH MANUFACTURING; PROTECTING SHIELD TO COVER 180DEG AND THE BANGLE 180DEG RADIUS TO FIT TIGHT AROUND THE APPLICABLE BOILER TUBE; BANGLES AND THE PROTECTION SHIELDS TO BE INCLUDED IN THE DELIVERY; AND BE CHARGED; BUT SUPPLIED AS SEPARATE ITEMS; QCP FOR PRESSING TO BE APPROVED BY ESKOM BEFORE COMMENCING WITH ANY MANIPULATION; PROCURING OF HP PIPEWORK SHOULD BE IN LINE WITH ESKOM STANDARD: 204-87733094; MATERIAL: SS 310; DIMENSIONS: OD 52 X WT 3MM; EACH BANGLE AND SHIELD SHOULD BE HARD STAMPED; HEAT NUMBER WITH LOW STRESS STAMPS; MATERIAL CERTIFICATE 3.1 I.A.W REQUIRED ON EVERY DELIVERY; STANDARD EN1024 3.1; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA
29	665734	SHIELD, TUBE: DIMENSIONS: DIA 56 X LG 50 MM; STYLE: STRAIGHT; MATERIAL: SS GR310; DRAWING NO: TUT-PP-GEN-111 REV 0; PROTECTION SLOTTED SHIELD BANGLE; ID 51 X WALL THICKNESS 3MM; PROTECTING SHIELD TO COVER 180DEG AND THE BANGLE 180DEG + 10 DEG BOTH SIDES; RADIUS TO FIT TIGHT AROUND THE APPLICABLE BOILER TUBE; QCP FOR PRESSING TO BE APPROVED BY ESKOM BEFORE COMMENCING WITH ANY MANIPULATION; MATERIAL: SS 310; DIMENSIONS: OD 56 X WT 3MM; EACH BANGLE AND SHIELD SHOULD BE HARD STAMPED; HEAT NUMBER WITH LOW STRESS STAMPS; MATERIAL CERTIFICATE 3.1 I.A.W REQUIRED ON EVERY DELIVERY; STANDARD EN1024 3.1; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING	EA

		REVISION NUMBER (IF APPLICABLE).	
30	665736	SHIELD, TUBE: DIMENSIONS: DIA 57 X LG 50 MM; STYLE: STRAIGHT; MATERIAL: SS GR310; PROTECTION SHIELD BANGLE; ID 51 X WALL THICKNESS 3MM; PROTECTING SHIELD TO COVER 180DEG AND THE BANGLE 180DEG + 10 DEG BOTH SIDES; RADIUS TO FIT TIGHT AROUND THE APPLICABLE BOILER TUBE; QCP FOR PRESSING TO BE APPROVED BY ESKOM BEFORE COMMENCING WITH ANY MANIPULATION; MATERIAL: SS 310; DIMENSIONS: OD 57 X WT 3MM; EACH BANGLE AND SHIELD SHOULD BE HARD STAMPED; HEAT NUMBER WITH LOW STRESS STAMPS; MATERIAL CERTIFICATE 3.1 I.A.W REQUIRED ON EVERY DELIVERY; STANDARD EN1024 3.1; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA
31	665739	SHIELD, TUBE: DIMENSIONS: DIA 50.5 X LG 50 MM; STYLE: STRAIGHT; MATERIAL: SS GR310; PROTECTION SLOTTED SHIELD BANGLE; ID 44.5 X WALL THICKNESS 3MM; PROTECTING SHIELD TO COVER 180DEG AND THE BANGLE 180DEG + 10 DEG BOTH SIDES; RADIUS TO FIT TIGHT AROUND THE APPLICABLE BOILER TUBE; QCP FOR PRESSING TO BE APPROVED BY ESKOM BEFORE COMMENCING WITH ANY MANIPULATION; MATERIAL: SS 310; DIMENSIONS: OD 50.5 X WD 3MM; EACH BANGLE AND SHIELD SHOULD BE HARD STAMPED; HEAT NUMBER WITH LOW STRESS STAMPS; MATERIAL CERTIFICATE 3.1 I.A.W REQUIRED ON EVERY DELIVERY; STANDARD EN1024 3.1; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA
32	665740	BRACKET: TYPE: U-BEND; MATERIAL: INCOLOY 800; DIMENSIONS: WD 60 X LG 200 X THK 4 MM; SPECIFICATION: EN10216-2; APPLICATION: SUPERHEATER SUPPORT; 180DEG BEND AT 100MM (CENTRE); MATERIAL CERTIFICATE EN10204 3.1 REQUIRED ON EVERY DELIVERY; MATERIAL TO BE HARD STAMPED 'O' WITH LOW STRESS STAMPS	EA
33	665748	BRACKET: TYPE: ALIGNMENT; MATERIAL: INCOLOY 800; DIMENSIONS: DIA 20 X LG 940 MM; APPLICATION: SUPERHEATER 2 SUPPORT; RADIUS: 27.5; CONSIST OF ROD AND HOOK; MATERIAL CERTIFICATE 3.1 IS REQUIRED ON EVERY DELIVERY; STAMPED; ESKOM WELDING STANDARD REQUIRED 240-106628253; WPS I.A.W EN ISO 15609-6 REQUIRED; QCP/ITP TO BE APPROVED BY ESKOM BEFORE WORK COMMENCE BENDING METHOD AND QCP TO BE APPROVED	EA

34	665749	BRACKET: TYPE: ALIGNMENT; MATERIAL: INCOLOY 800; DIMENSIONS: DIA 20 X LG 70 MM; APPLICATION: REHEATER 2 SUPPORT; RADIUS: 22.5; CONSIST OF ROD AND HOOK; MATERIAL CERTIFICATE 3.1 IS REQUIRED ON EVERY DELIVERY; STAMPED; ESKOM WELDING STANDARD REQUIRED 240-106628253; WPS I.A.W EN ISO 15609-6 REQUIRED; QCP/ITP TO BE APPROVED BY ESKOM BEFORE WORK COMMENCE BENDING METHOD AND QCP TO BE APPROVED	EA
35	665750	BRACKET: TYPE: RETAINING; MATERIAL: INCOLOY 800; DIMENSIONS: WD 30 X LG 69 X THK 6 MM; SPECIFICATION: EN10216-2; APPLICATION: REHEATER LUG SUPPORT; MATERIAL CERTIFICATE 3.1A IS REQUIRED ON EVERY DELIVERY; I.A.W STANDARD EN1024 3.1; HARD STAMPED WITH LOW STRESS STAMPS; HEAT NUMBERS	EA
36	665751	BRACKET: TYPE: RETAINING; MATERIAL: INCOLOY 800; DIMENSIONS: WD 45 X LG 82 X THK 6 MM; SPECIFICATION: EN10216-2; APPLICATION: REHEATER LUG SUPPORT; MATERIAL CERTIFICATE 3.1A IS REQUIRED ON EVERY DELIVERY; I.A.W STANDARD EN1024 3.1; HARD STAMPED WITH LOW STRESS STAMPS; HEAT NUMBERS	EA
37	665752	LUG: TYPE: CASTLE; DIMENSIONS: WD 35 X HT 25 MM; MATERIAL: INCOLOY 800; RADIUS 24 MM; WALL THICKNESS: 12 MM; SMALL CASTLE LUG WITH 40 MM BASE SUPERHEATER 4; MATERIAL CERITIFICATE EN10204 3.1 IS REQUIRED; STANDARD EN10216-2	EA
38	56212	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 38 MM; WALL THICKNESS: MIN 4.5 MM; MATERIAL: X20CRMOV12-1/X20CRMOV11-1; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN FLAT SQ CUT; TYPE: FLOW 101; GRADE: 3; SPECIFICATION: EN10216-2; TEST CERTIFICATE TO BE SUPPLIED ACCORDING TO BS EN 10204: 2004 TYPE3.2; ALL TUBING TO BE STAMPED, EVERY 500M AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH OF THE TUBE END CAPS TO BE FITTED; HEAT NUMBERS MUST BE PRESENT ON EACH TUBE; COLOUR CODE BLUE; ADHERE TO ESKOM GOODS INFORMATION REQUIREMENTS AND THE SUPPLIER WILL COMPLY TO THE FOLLOWING STANDARD (SEE PROCUREMENT OF HIGH PRESSURE PIPEWORK AND BOILER TUBING MATERIAL STANDARD IN THE GENERATION DIVISION 240-87733094 LATEST REVISION); MATERIAL CERTIFICATION TO EN10204/3.2; CONDUCT A MATERIAL ANALYSIS (SPECTROMETER TEST) ON EACH BATCH OF	EA

		MATERIAL AT THE SUPPLIER'S PREMISES PRIOR DELIVERY TO THE POWER STATION; THE POWER STATION AIA WILL BE PRESENT TO REVIEW AND VERIFIED THE SPECTROMETER RESULTS. MATERIAL NOT MEETING THE REQUIREMENTS WILL BE REJECTED; THE SPECTROMETER RESULTS MUST CORRESPOND WITH THE MATERIAL CERTIFICATE; ALL THE DOCUMENTATION WILL BE EVALUATED BY ENGINEERING INCLUDING THE SPECTROMETER TEST RESULTS SIGNED BY POWER STATION AIA UPON DELIVERY BEFORE ACCEPTANCE OF THE MATERIAL; NOTE MATERIAL WILL NOT BE ACCEPTED WITHOUT THE MATERIAL CERTIFICATES AND THE SPECTROMETER TEST CERTIFICATE SIGNED AND VERIFIED BY POWER STATION AIA	
39	225683	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 51 MM; WALL THICKNESS: 5.6 MM; MATERIAL: STL ALLOY 15MO3 HOT DRAWN; LENGTH: 8 M; STRUCTURE: SMLS; ENDS: CAPS PLASTIC ENDS; TYPE: TEST CATEGORY 2 (TC2); SPECIFICATION: EN10216-2; MATERIAL TO COMPLY WITH ESKOM STANDARD 240-240-87733094 REV 3; 15MO3; RESISTANCE WELDING TO TUBES AT 20MM CENTRES (DRAWING AVAILABLE); SEAMLESS ACCORDING TO EN 10216-2; RED OXIDE CORROSION PROCTECTION LAYER ON TUBE AND FINS. 3.2 CERTIFICATION IAW EN 10204:2004 ; MATERIAL SUPPLIED WITH H FIN SIZE 120MM X 3MMTHK; FIN GAP 20MM CENTRE TO CENTRE APART; ALL TUBING TO BE STENCILED AND VERIFIED BY THIRD PARTY AND COLOUR CODED RED PLASTIC END CAPS TO BE FITTED; ALL WELDING DONE MUST BE ACCORDING TO ESKOM STANDARD 240-106628253; CONTROL OF REPAIR AND MACHINE WELDING CERTIFICATES AND QUALITY CERTIFICATE ACCORDING TO EN ISO 15609-1; MUST BE USED FOR WELDING THE FIN TO WELDS AND A QCP MUST BE APPROVED AND THE WELDING MUST BE TO ESKOM STANDARD AND BOILER DEPT MUST APPROVE AND QC BEFORE ACCEPTING DELIVERY; ESKOM STANDARD WELDING SPECIFICATION MUST BE COMPLIED TO SANS 3834 CERTIFICATION AND SANS ISO 9606; WELDER QUALIFICATIONS AND SANS AND BS EN 15614 AND WELDING PROCEDURE; EN 3.2 DOCUMENTATION IAW EN 10204:2004 MUST BE INCLUDED ON EVERY DELIVERY; DELIVERY COST TO TUTUKA POWER STATION INCLUDE	EA
40	51088	BEND, PIPE:15M03 HOT DRAWN;180 DEG;3; U bends, OD 51 WT 5.6	EA

Standards, Specification and Procedures

All material and equipment shall be new and of the standard and quality specified. The design and manufacture of equipment and the complete installation shall be carried out and tested in accordance with the latest issue or amendments of the following Standards and Regulations, as applicable:

Document Number	Title
Eskom Standards	
240-28463367	SHE Organization
240-30008949	Safety, Health and Environmental Specifications for Contractors
240-49230111	Hazard and Operability Analysis (HAZOP) Guideline (Rev 1)
240-55944466	Supplier Contract Quality Requirement's Specification
32-421	Cardinal Rules
36-681	Generation Plant Safety Regulations
OPS 0158	AKZ Power Plant Classification System
QM 58	Supplier Contract Quality Requirements
General Standards	
Document Number	**Title**
ISO 9001	Quality Management Systems.
OSH Act 85 of 1993	Occupational Health and Safety Act and Regulations Act 85 of 1993.

2.1 *Purchaser*'s design

Purchaser has no Design. As per OEM. The *Supplier* must supply the *Purchaser* with warrantee certificates, test certificates and the complete data book of Boiler Tubes at the time of delivery which shall be uploaded into the SAP system Goods Receipt document as per Work Instruction, Receive Materials - 240-54820279 with delivery by the *Supplier.*

Data Pack must consist of the following but not limited to:

(a) Warrantee certificates

(b) Safety data sheets
(c) Signed quality control documentation
(d) Data sheets
(e) Type 3.2 certification documentation IAW EN 10204:2004

2.2 Procedure for submission and acceptance of *Supplier*'s design

Before the *Supplier* can deliver must ensure that it's the correct Boiler tubes according to the Technical Specifications on this contract. The *Supplier* will still be liable to supply the correct Boiler tubes that will precisely be applicable to the Boiler plant.

2.3 Other requirements of the *Supplier*'s design

As per OEM and *Purchaser's* specifications (Data pack as specified in section 2.1 of the works information)

2.4 Use of *Supplier*'s design

Not Applicable

2.5 Manufacture & fabrication

QC to be done with the end user before delivery to site. *Supplier* will be required to provide data Pack for all manufactured and assembled components where applicable.

Each spare is identifiable by means of an Eskom SAP Material number (as is used in the Power Station), part description, OEM and/or OEM part number.

2.6 Factory acceptance testing (FAT)

1. Comply to material standard in the generation division 240-87733094 Rev 3 and material certification to EN 10204 3.2 specification.
2. Conduct a material analysis (spectrometer test) on each batch of material at the supplier's premises prior delivery to the power station; the power station AIA will be present to review and verified the spectrometer results.
3. Material not meeting the requirements will be rejected; the spectrometer results must correspond with the material certificate.
4. All the documentation will be evaluated by engineering including the spectrometer test results signed by power station AIA upon delivery before acceptance of the material note material will not be accepted without the material certificates and the spectrometer test certificate signed and verified by power station AIA

2.7 Other tests and inspections and commissioning in place of use

The installation and commissioning will be done by the *Purchaser.*

2.8 Operating manuals and maintenance schedules

Not Applicable

3 Supply Requirements

a) The supply of various boiler tubes is on an as and when require basis.
b) Requests for delivery will be made on a contract release order starting with an Order number.
c) All equipment / spares must be on time of required order date.
d) Transported by road on *Supplier's* costs and transport.
e) End user to be informed when delivery will be done at least 2 days upfront.
f) No deliveries to be done on a Weekend or public holiday except on an emergency basis indicated by the *Purchaser.*
g) The *Supplier* must deliver the components between 08:30 to 15:30 Mondays to Thursdays and 8:30 to 11:30 on Fridays. No deliveries to be done on weekends unless prior arrangements done with the *Supplier*, *Purchaser* and stores.
h) Pallets to convey the batch must be strong enough to carry and transport load at any time.
i) The *Supplier* will ensure proper handling of the various greases (from procurement of equipment, storage and transportation).
j) The *Supplier* shall supply preservation and storage procedure/s.
k) Batches to be clearly marked and packed according to the required specifications.
l) The *Supplier* must ensure that the supply and preservation of various boiler tubes is done in compliance with preservation specifications and good engineering practice.
m) The *Supplier* to advise the *Purchasers* warehouse/stores on effective storage of spares and preservation.

n) *Contractor* on site must supply a SAPS clearance certificate to the *Employer* before contract start and every 12 months thereafter for all *Contractor's* employees to ensure continued access to site. This will also be handed in to security for *Contractor* to obtain access permits.

o) Acceptance of this tender is subject to the condition that both the contracting company's management and its employees will provide Eskom with a clear criminal record not older than thirty (30) days from a reputable screening company. If the principal *Contractor* appoints a subcontractor, the same provisions and measures will apply to the subcontractor. Acceptance of the tender is also subject to the condition that the *Contractor* will implement all such security measures for the safe performance of the work as required in the scope of the contract.

p) *Contractors* are to submit proof of verification record(s) (Security clearance) from SAPS or accredited supplier linked to SAPS AFIS system not older than thirty (30) days, as part of Risk Management process in order to curb any threats against the Installation. It is compulsory for these documents to be submitted to Security for verification before access to site is granted. Only individuals with clear criminal records will be considered.

q) *Contractors* are required to submit the SAPS Clearance Certificate obtained by the employee along with a copy of his/her Identity Document or Passport to the site Security Manager. The Security Manager is required to verify the authenticity of the CRC Certificate with SAPS and to cross reference the employee seeking access against known HR databases and site databases to determine if the employee in question has in the past participated in disruptive labor actions and if the individual was dismissed from Eskom and the reason for such dismissal. Every employee applying for access must be evaluated as an individual and subsequent finding recorded. A risk analysis of the employee profile indicating whether the employee is a risk to the installation must be completed. Any risk rating allocated above a level III will be deemed unsuitable.

r) The process shall be repeated every 12 months for low-risk employees (Risk Rating 5, 4) and every 6 months for medium to high-risk employees.

Packaging / Crating

a) All supplied boiler tubes shall be packaged in such a manner that they will be transported and stored without damage. This includes preventing damage due to moisture ingress, dust and foreign objects. The *Supplier's* procedure shall be used Transportation and Storage.

b) Where possible, packaging to be such that procured boiler tubes can be positively identified through the packaging. Where this is not possible, the packaging to be such that it allows opening and closing of packaging and still maintain the packaging integrity thereafter.

4 Specification of the *service*s to be provided.

a) Access to site to be arranged before delivery date.
b) No Delivery will be accepted without an official contract release order.
c) *Supplier* delivery note must indicate partial delivery if partial delivery is made.
d) The stock number, quantity and material short description must be stated on the delivery note.
e) Each delivery to be recorded on receiving register and each delivery note must have unique number.
f) Boiler Tubes must be well packaged and safely transported.

5 Constraints on how the *Supplier* Provides the Goods

5.1 Programming constraints

a) The *Supplier* submits a program to the *Supply Manager as per the agreed timelines*
b) The *Supplier* shares the program two (3) Three days after placement of each order to the *Supply Manager* for acceptance
c) The early warning as per clause 16.1 is used to communicate the changes on agreed delivery schedule/ programme
d) All the boiler tubes must be on time of required order date.
e) End user to be informed when delivery will be done at least 2 days upfront.

5.2 Work to be done by the Delivery Date

a) The *Purchaser* to acknowledge receipt of the boiler tubes by stamping and signing the delivery note of the *Supplier* upon delivery, rejected items to be communicated after the official quality inspection is done on site by the end user of the spares
b) Rejected boiler tubes must be collected and the correct goods to be supplied within 7. days
c) Only spares specified will be accepted. Any boiler tubes that do not meet the specifications will be rejected.
d) QC to be conducted prior to acceptance of the boiler tubes, no incorrect, damaged, or faulty spares will be accepted
e) Ensure that the delivered boiler tubes are signed for.
f) All the boiler tubes will be inspected and accepted by Purchaser QC and / or Engineering before payment could be processed.

5.3 Marking the *goods*

Supplier shall mark and package goods in a manner that the information for each spare will be easily identifiable.
Batches to be clearly mark and packed according to the required specifications as follows:

a) Purchase Order Number

b) Part Description

c) Part number

d) Eskom SAP Material number

e) Drawing number, where applicable

f) Physical address of Tutuka Power Station and the Supplier

g) Contact details of the Supplier

h) Delivery note number

i) Certificates according to EN 10204 including all detailed results for destructive, mechanical and non-destructive testing

5.4 Constraints at the delivery place and place of use

- The *Purchaser* will determine the offloading point at time.
- All deliveries shall be arranged within Tutuka Power Station during normal working hours
- The *Supplier* applies for temporary access permits (Contractor's Permit) at the Security gate, prior to the Possession Date.
- The *Supplier's* personnel are required to be always in possession of Permit.
- All *Supplier's* personnel are issued with a temporary access permit which contains the following information:

- Name
- ID Number
- Company
- Validity date

- No unauthorised vehicles are allowed on site.
- Forklift / crane with driver will be supplied for offloading.
- Pallets to convey the batch must be strong enough to carry and transport load at any time.
- *Supplier* might not be the only supplier delivering on that day and has to wait for assistance.
- *Supply Manager*/ Supervisor to be informed when delivery will be done at least 2 days upfront and arrange access control permit at the gate.
- *Supply Manager* / Supervisor to be informed when delivery will be done at least 2 days upfront to allow the service manager enough time to arrange driver for offloading
- All the boiler tubes will be inspected and accepted by Engineering and/or OEM Technician before payment could be processed.

Roles and Responsibilities

5.4.1.1 Supplier

a) To Supply and Delivery of various boiler tubes for Tutuka Power Station in accordance with specifications and technical requirements on this document.

b) *Supplier* shall submit all documentation as requested by the *Purchaser* during manufacturing and before delivery from manufacturer.

c) *Supplier* to provide schedule on deliveries of boiler tubes.

d) Material certification shall be in accordance with EN 10204 in all case.

5.4.1.2 Purchaser

a) Compiles and submit scope of work with technical specifications and technical drawings where required.

b) Performs Quality Control of all boiler tubes on delivery at the *Purchaser* premises.

5.5 Cooperating with Others

A) The *Supplier* cooperates with the store's personnel during Delivery.
b) The *Supplier* co-operates with the *Purchaser's* team in ensuring that the goods are delivered in accordance with all requirements.

5.6 Services & other things to be provided by the *Purchaser* or *Supplier*

a) The *Purchaser* will determine the offloading point at time.
b) The *Purchaser* will provide resources to offload the various boiler tubes being delivered (Forklift and cranes)

5.7 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:
Kick-off meeting	1 week after contract date	Tutuka Power Station	*Supply Manager* and *Supplier*
Risk Register and Compensation Events	As and when required	Tutuka Power Station	Supply Manager and Supplier
Overall contract progress and feedback	Monthly	Tutuka Power Station	Supply Manager and Supplier

Meetings of a specialist nature may be convened as specified elsewhere in this Goods Information or if not so specified by persons and at times and locations to suit the Parties, the nature and the progress of the manufacture of the *goods*. Records of these meetings shall be submitted to the *Supply 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.

Attendance of meetings as required by *Purchaser* Such as: -
a) Any meeting requested by the *Purchaser* or *Supplier*

5.8 Documentation control

a) All contractual communications will be in the form of properly compiled letters or forms attached to e-mails and not as a message in the e mail itself.

b) The *Supplier* will supply any additional information such as brochure, general arrangement drawing, certificates, detailed specification, data sheet, Settings Document for programmable electronic cards etc. Check sheets or drawings for quality inspections

c) The *Supplier* shall supply preservation and storage procedure/s, where applicable.

d) Each instruction, certificate, submission, proposal, record, acceptance, notification, reply and other communication which this contract requires is communicated in a form which can be read,

copied and recorded.

e) Writing is in the Language of this contract.

f) All reports to be discussed, compiled, and handed in to the *Purchaser*.

g) All communications must be printed and filed in the *Purchaser* file.

5.9 Health and safety risk management

The *Supplier* shall comply with the health and safety requirements contained in Annexure SHE Specification 14RISK SRM – 084 to this Service Information.

a) All The *Purchaser's* health and safety procedures and regulations to be adhered to by the *Supplie*r.
b) A SHEQ file to be handed in at the SHEQ department for approval prior to wok commencement and kept up to date for the duration of the contract.

SHEQ Policy

Eskom SHEQ Policy

The *Purchaser* has made a commitment to conduct business with respect and care for people, the environment and assets and that no operating condition or urgency of service justifies exposing anyone to negative risks arising from the *Purchaser* business.

Compliance with the *Purchaser's* SHEQ Policy and applicable regulations is the responsibility of every employee and *Supplier.*

***Supplier's* SHEQ Policy**

All *Contractors* shall have an OHS policy signed by the CEO of the *Supplier* and prominently displayed where employees normally report for duty.
Signed copy of the OHS policy shall form part of the SHEQ file.

SHE PLAN REQUIREMENTS: -

a) Principal *Contractors* shall develop a suitable and sufficiently documented site specific SHE plans, based on the scope of work and client SHEQ specification.
b) The SHE plans must be pre-approved by the client for implementation. The principal *Supplier*/ *Supplier* has a responsibility to send the SHE plans to the client for approval prior to commencement of work.
c) The SHE plans must be applied from the commencement of and for the duration the construction work, which must be updated / reviewed as the work progresses / changes.

When a principal *Supplier* intends appointing *Contractor*, the principal *Supplier* shall ensure that the *Supplier* provides and demonstrate a suitable, sufficiently documented and coherent site-specific health and safety plan, based on the client's SHEQ specifications and scope of work.

Health and Safety Arrangements

The *Supplier* ensures that all his personnel attend a Health and Safety Induction Course prior to contract starting date, and annual re- induction. The Induction Course is presented by the *Employer's* Safety Risk Department at the *Employer*. Arrangements are made with Safety Risk Management, by the *Contractor.*

The *Employer's* Safety Risk Manager visits and inspects the *Contractor's* workplace or site yard and the working areas to ensure that tools; machinery and Equipment comply with the minimum safety requirements.

The *Supply Manager* may instruct the *Supplier* to stop work, where the *Contractor's* personnel fail to conform to safety standards or contravene health and safety regulations. Such stop-work order is not a compensation event. The *Supply Manager* may instruct the *Supplier* to discipline his employees and to submit a disciplinary action report to the *Supply Manager*. The *Supplier* implements additional health and safety precautions where necessary.

Health and safety

The *Supplier* complies with the Occupational Health and Safety Act 85 of 1993, as well as per the *Employer's* procedure as stipulated below:

d) SHEQ Policy 32-727
e) The *Purchaser's* Procurement and Supply Chain Management Procedure 32-1034
f) SHE Requirements for the *Purchaser's* Commercial Process 32-726
g) *Supplier* Health and Safety Requirements 32-136
h) Integrated SHE Organization, Roles and Responsibilities and Statutory Appointments 32- 296
i) Live-saving Rules 240-62196227
j) Working at Heights 32-418
k) The *Purchaser's* Vehicle Safety Specifications 32-345
l) the *PuchaserSupplier* SHEQ Specifications 14RISK SRM - 084

Site Regulations and Procedures

Site Regulations

The latest revision the *Puchaser's Site* Regulations form part of this contract.
Copies of these procedures are available on request.
(Any additional site regulations implemented will be applicable)
Safety risk management

"Standard for health and safety at Tutuka Power Station - requirements to be met by *Contractors*".

Vehicle and driver safety

All drivers, passengers and pedestrians must obey vehicle safety requirements in terms of the National Road Traffic Act, Act No 93 of 1996, as amended, including other relevant provincial or local requirements.

Speed Limit

All vehicles must be driven with due consideration for personnel and property. All speed limits will be adhered to on the premises at all times.

Transportation of passengers: open LDV's:

With effect from 31 May 2006 no *purchaser's* employee or *Supplier* would be allowed to transport passengers on the back of open light delivery vehicles (LDV's). It is a legal requirement to provide safe transportation of the *purchasers* and *Supplier* employees – therefore the following will be enforced:

The *Employer's* Life Saving Rules:

Five Life Saving Rules have been developed that will apply to all the *Employer's* employees, agents, Consultants and Contractors.

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

b) Rule 2: Hook up at heights - no person may work at height where there is a risk of falling.
c) Rule 3: Buckle up – no person may drive any vehicle for the *Employer's* business and/or on the *Employer's* premises: unless the driver and all passengers are wearing seat belts.

   The *Purchaser* takes a "ZERO TOLERANCE" attitude to drivers and passengers who do not wear safety belts when driving in a vehicle for the *Employer's* Business and / or on the *Employer's* premises. The violation of this very important safety rule as well as any safety rule while performing work for or on behalf of the *Purchaser* may result in the *Purchaser* terminating your obligation to perform work in terms of your contract with the *Employer.*

   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 buckle-up at all times for the sake of themselves and their families.

d) Rule 4: Be sober (no person is allowed to work under the influence of drugs and Alcohol.
e) Rule 5: Use a permit to work – where an authorization limitation exists, no person shall work without the required permit to work.

The *Supplier* acknowledges that it 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 *Supplier* 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 *Supplier* shall appoint a person who will liaise with the *Purchaser's* Safety Officer responsible for the premises relevant to this contract.

Do safety audits at the *Contractor's* premises, its workplaces and on its employees.

Refuse any employee, sub-*Supplier* or agent of the *Supplier* 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 qualifies in terms of the OHSACT.

Issue the *Supplier* with a work stop order or a compliance order should *Purchaser* become aware of any unsafe working procedures or conditions or any non-compliance with the Act, Regulations and Procedures by the *Supplier* or any of its employees, sub-Contractors or agents.

The *Contractors* Health and safety file is to be submitted for approval to the *Purchase*r's Safety Officer before contract commencement.

All work stoppages called by the *Purchaser* to be adhered to

Supplier's Responsible to ensure that his Letter of Good standing is valid at all times as stipulated in the construction regulations point 7 (C) (iv) and she specifications 2.5.2 (iv) and 3.10 *Supplier* will not be allowed on site if his letter of good standing is not valid.

Security, fire protection and safety

The *Supplier* shall be responsible for ensuring the security of the works, and of his plant, equipment and materials. To that end he shall make adequate provision for access control, lighting and watchman to the works where required.

Fire protection

The provision of the *Employer's* standard NWS 1494 "Fire Prevention and Protection of *Contractor's* premises at New Works sites" shall be applicable.

Safety and incident prevention

The *Supplier* shall implement and maintain an active Site Safety and Accident Prevention Programme in accordance with the the *Puchaser's SHEQ* Specifications. The overriding regulations will however be the Occupational Health and Safety Act.

Incident Management, Corrective & Prevention Action Procedure to be adhered to – 14Risk IM PC-019

Reporting of accidents

The *Purchaser* follows an accident prevention policy that includes the investigation of all accidents involving personnel and property. This is done with the intention of introducing control measures to prevent a recurrence of the same incidents. The *Supplier*'s expected to fully co-operate to achieve this objective. The *Supply Manager* must be informed immediately of any incidents. A written report to be submitted to the *Purchaser within 24 Hours* of incidents and any damage to property or equipment.

NOTE! This report does not relieve the *Supplier* of his legal obligations to report certain 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.

Occupational Health and Safety Act 85 0f 1993 – SECTION 37

In accordance with Section 37 (2) of the Act, the *Supplier*'s appointed by the *Purchase*r's mandatory to assume Health and Safety duties and responsibilities. The *Supplier* ensures compliance with all requirements of the Act and any instruction or notification that enhances those requirements.

The *Supplier* acknowledges that he is fully aware of all the requirements of the Occupational Health and Safety Act and undertakes to employ only staff who have been duly authorised in terms thereof and who receive sufficient safety training to ensure that they can comply therewith.

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

5.10 Environmental constraints and management

The Supplier shall comply with Tutuka Power Station's Environmental Management System and all related environmental procedures. This includes the identification, collection, storage, transportation, and disposal of waste. Hazardous waste shall be disposed of in line with the applicable environmental legislation. It is important to note that all spillages must be cleaned immediately and reported to the *Supply Manager* as soon as possible. It is the responsibility of the polluter to clean all spillages and for the rehabilitation of the polluted land. The clean-up cost is for the *Contractor's* account.

5.11 Quality

The Supplier will work according to the Purchaser's standards, specifications, guidelines and procedures. Where no standards, specifications, guidelines, and procedures are available, the Supplier will work according to the Generation Quality manual and professional guidelines.

a) The Supplier compiles the baseline Quality Control plan
b) Quality Control Plan (QCP) must be approved by both the *Supplier*s, Eskom engineer and QC inspector before commencing with any deliveries at the beginning of the contract
c) Material certificates, mechanical testing certificate and NDT certificates should be part of the data package accompanying the QCPs.
d) All delivered goods will be subjected to QC verification by an Employer's Quality personnel at receiving
e) The *Supplier* must comply with Eskom's Supply Quality Management Specification (Document No: 240-105658000) and ISO 9001:2015 requirements.

f) The *Employer* will on frequent basis conduct the *Supplier's* performance/ compliance in accordance with QM 58 and ISO 9001 and NCR will be raised for non-compliance

5.12 Invoicing and payment

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

The *Supplier* shall address the tax invoice to *Purchaser* and include on each invoice the following information:

a) Name and address of the *Supplier* and the *Supply Manager.*
b) The contract number and title.
c) *Contractor*'s VAT registration number.
d) The *Purchaser's* VAT registration number 4740101508.
e) Description of service provided for each item invoiced based on the Price List.
f) Total amount invoiced excluding VAT, the VAT and the invoiced amount including VAT.
g) Purchase order number
h) CPA calculation sheet
i) CPA calculation sheet and the Invoice for CPA on the Invoice to be send to the financial department as per the *Employer's* Invoicing procedure / instruction.

5.13 Insurance provided by the *Purchaser.*

Refer to NEC3 SC3 Core Clause 84.1. and Clause Z13

5.14 Contract change management.

- All changes to the contract scope, price, or schedule shall be managed through the Contract Change Management process. The supplier shall notify the supply Manager in writing of any proposed changes as soon as they are identified. The supply Manager will assess the change and issue a Change Instruction if approved.
- No work related to a change shall commence until a formal Change Instruction has been issued. All changes will be priced on the basis of agreed rates or quotations and adjustments to the contract sum and programme will be documented accordingly."

5.15 Provision of bonds and guarantees.

Not Applicable

5.16 Records of Defined Cost, payments & assessments of compensation events to be kept by the *Supplier.*

- Early warning to be given by any of the parties as soon either becomes aware of matters that could increase the total of total prices, delay completion etc. All the compensation events will be implemented through the raising of an early warning. See NEC Core clause 16.1 and 63.1 and 63.2

- Payments and assessments Will be done as per the *Employer's* invoicing and payment procedure and requirements.

6 Procurement

6.1 Subcontracting

6.1.1 Preferred subcontractors

As per SDL&I Requirements

6.1.2 Limitations on subcontracting

As per SDL&I Requirements

6.1.3 Spares and consumables.

The Supplier must supply his own consumables to satisfy the requirements for scope.

6.1.4 Other requirements related to procurement.

To be negotiated

6.1.5 Cataloguing requirements by the *Supplier*

Not Applicable

7 List of drawings

7.1 Drawings issued by the *Purchaser.*

None

C3.2 *SUPPLIER*'S GOODS INFORMATION

a) As per OEM specifications
b) All relevant documentation to be handed in as requested from *Purchaser / Supply Manager*

Annexure A: Risk Register

Description of the risk		Action to avoid or reduce the risk
Risk event	**Cause & possible outcome**	**Action to be taken and who in terms of the contract is responsible for taking it**
Delay in manufacturing of boiler tubes	Load and production loss	Supplier to Confirm lead times and supply manager to monitor supplier progress regularly
Delivery of boiler tubes not in accordance with the purchaser's specification	Load and production loss	QC, tests and inspections to be done by *Purchaser* on day of delivery
Delay in delivery of the boiler tubes	Production loss	Supplier to Confirm delivery date and supply manager to monitor supplier progress regularly
Damage during offloading at site	Cost implications in cases of severe damage to boiler tubes	Use of proper handling equipment and supply manager to ensure that the site staff is trained on lifting equipment
Non submission of data Pack	Supplier non-compliant to contractual requirements	Service manager to ensure that each delivery is accompanied by data packs
Incorrect quantity delivered	Delays in installation resulting in production loss	Supply manager to Cross-check delivery with PO and packing list

Annexure A: Key Performance Indicators

item	KPA	Objective	Weight	Poor	Good	Excellent
				2	3	5
1	**Programme /delivery schedule submission after contract award**	Submission of delivery schedule on time	20%	**Submitted after 3 days**	**Submitted in 3 days**	**Early submission**
2	**On time delivery**	deliveries made on or before agreed dates.	20%	**Delivery Behind schedule**	**On time delivery**	**Early delivery of boiler tubes**
3	**Documentation Completeness: Data pack submission**	deliveries accompanied by full and accurate documentation	20%	**No submission of required documentation**	**Documents submitted with the delivery**	**Early submission of documentation**
4	**Early warnings**	Number of early warnings issued to the supplier in 6 months	10%	**More than 1 early warning issued**	**1 early warning issued**	**No early warning issued**
5.	**Quality compliance**	boiler tubes meeting technical specifications and standards.	20%	**Non-compliant with quality requirements**	**Complies with quality requirements**	**Exceeding quality expectations**
6	**Customer satisfaction**	To ensure *Contractor* area is clean and housekeeping is always maintained	10%	**Customer not satisfied with service**	**Customers satisfied with service**	**Exceeding Expectations**