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 to Matimba Power Station of HP bypass and RH safety system spares.

Contents:		**No of pages**
Part C1	**Agreements & Contract Data**	**[●]**
Part C2	**Pricing Data**	**[●]**
Part C3	**Scope of Work**	**[●]**

CONTRACT No. [Insert at award stage]

PART C1: AGREEMENTS & CONTRACT DATA

C1.1 Form of Offer & Acceptance

Offer

The Purchaser, identified in the Acceptance signature block, has solicited offers to enter a contract for the procurement of: **Supply of HP bypass and RH safety system spares.**

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

[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*.

Contract Data.

Signature(s)

Name(s) .....

Capacity .....

For the tenderer: .....

(Insert name and address of organisation)

Name & signature of witness .....

Date .....

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.

Note:

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

No.	Subject	Details
1	N/A	N/A

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*

Clause	Statement	Data
1	**General**	
	The *conditions of contract* are the core clauses and the clauses for Options	**W1: Dispute resolution procedure**
		X1: Price adjustment for inflation
		X2 Changes in the law
		X3 Multiple Currencies
		X7: Delay damages
		X17: Low Performance damages
		Z: All Z clauses as per NEC 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)

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

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):	**Pholosho Mphahlele**
	Address	**Matimba Power Station** **Nelson Mandela Drive** **Lephalale**
	Tel	**014 763 8843**
	Fax	
	e-mail	
11.2(13)	The *goods* are	**HP bypass and RH safety system spares**
11.2(14)	The following matters will be included in the Risk Register	

11.2(15)	The Goods Information is in	**Part 3: Scope of Work and all documents and drawings to which it makes reference.**		
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	**5 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.	**To be confirmed**		
30.1	The *delivery date* of the *goods* and *service*s is:	***goods and services***		***delivery date***
		1	**Supply and Delivery to Matimba Power Station of HP bypass and RH safety system spares**	**30 days after order placement.**

31.1	The *Supplier* is to submit a first programme for acceptance within	**Yes (Within 2 weeks after order placement)**
32.2	The *Supplier* submits revised programmes at intervals no longer than	**2 Weeks**
4	**Testing and defects**	
42	The *defects date* is	**5 working days after delivery.**
43.2	The *defect correction period* is	**15 working days**
42.2	The *defects access period* is	**07 working days**
5	**Payment**	
50.1	The *assessment interval* is	**2 weeks**
51.1	The *currency of this contract* is the	**South African Rand**
51.2	The period within which payments are made is	**Applicable as per Eskom payment terms as per Vendor registration**

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**	**N/A**
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:	**R0.00**
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	**R0.00**
88.5	The *end of liability date* is	**3 years after Delivery of the whole of the *goods* and *service*s.**

9	**Termination and dispute resolution**	

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	**Gauteng, South Africa**

	The person or organisation who will choose an arbitrator. 1. if the Parties cannot agree a choice or 2. 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	**One month prior to tender closing** The contract will escalate according to the SEIFSA indices, CPA will kick in 16 Months from the base date.		
	The proportions used to calculate the Price Adjustment Factor are:	**proportion**	**linked to index for**	**Index prepared by**
		80%	**Material**	**SEIFSA G-1 (Mechanical Engineering)**
		5%	**Transport**	**SEIFSA L-2(B)**
		15%	**Non-Adjustable**	**Fixed**
X2	**Changes in the law**			
X2.1	A change in the law of	**South Africa is a compensation event if it occurs after the Contract Date**		

X7	**Delay damages**		
X7.1	Delay damages for late deliveries, 40 days after formal purchasing order placed and acknowledged by suppliers	**Delivery of** **Manufacture, Supply and Deliver of HP bypass and RH safety system spares**	**amount per day** **1% per day up to 10% of the Purchase order affected**
		Goods per purchase order	
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*,	**Loss of or damage to property** *Purchaser*'s property

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	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. <u>Other property</u> The replacement cost. **<u>Death of or bodily injury</u>** 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	Minimum amount of cover or minimum limit of indemnity
Assets All Risk	Per the insurance policy document
Contract Works insurance	Per the insurance policy document
Environmental Liability	Per the insurance policy document
General and Public Liability	Per the insurance policy document
Transportation (Marine)	Per the insurance policy document
Motor Fleet and Mobile Plant	Per the insurance policy document
Terrorism	Per the insurance policy document
Cyber Liability	Per the insurance policy document
Nuclear Material Damage and Business Interruption	Per the insurance policy document
Nuclear Material Damage Terrorism	Per the insurance policy document

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.

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, normalized 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 affected 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

[Notes: The example given in the NEC3 Supply Contract Guidance Notes pages 15 to 20 inclusive is based on Incoterms 2000. However users will probably wish to use Incoterms 2010 which the details below are based on. Users may need to adjust the information to comply with actual requirements. First decide whether Incoterms will be used or not, then delete the arrangement below which does not apply and delete these notes]

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

The Supplier supplies the goods in accordance with INCOTERMS 20103 as follows:

[Select the group and then term within the group which applies and state the applicable delivery place. Delete all the other groups and this note]

Group	Category	Term	Delivery Place
E	departure	EXW	
F	main carriage unpaid	FCA, FAS, FOB	
C	main carriage paid	CFR, CIF, CPT, CIP	
D	arrival	DAT, DAP, DDP	DDP

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

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

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

[Should there be a need to amplify any of the published obligations listed above for the chosen INCOTERM, add them here.]

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

The Supply Requirements for this contract are as follows:

[Use these when INCOTERMS do not apply]. [Revise and complete as required]

1. The requirements for the supply are	[State the constraints on how the Supplier manufactures, prototypes, tests and stores the goods including order and timing]	
2. The requirements for transport are	[State the extent to which the Supplier transports the goods and the mode of transport]	
3. The delivery place is	[State the location where the goods are to be placed by the Supplier, such as whether it is a dispatch department at the Supplier's premises, the Purchaser is to collect or other location the Purchaser may require. If the delivery place for the services is different to the goods state it here]	
4. Actions of the Parties during supply	Action	Party which does it
	Giving notice of Delivery	
	Checking packing and marking before dispatch	
	Contracting for transport	
	Pay costs of transport	
	Arrange access to delivery place	
	Loading the goods	
	Unloading the goods	
For international procurement	Undertake export requirements	
	Undertake import requirements	

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.

Part two - Data provided by the *Supplier*

Whenever a cell is shaded in the left-hand column it denotes this data is optional and would be required in relation to the option selected. In the event that the option is not required select and delete the whole row.]

Notes to a tendering supplier:

1. Please read both the NEC3 Supply Contract (SC3)[4] and the relevant parts of its Guidance Notes (SC3-GN)[5] in order to understand the implications of this Data which the tenderer is required to complete.
2. The number of the clause which requires the data is shown in the left-hand column for each statement however other clauses may also use the same data
3. Where a form field like this [ ] appears, data is required to be inserted relevant to the option selected. Click on the form field ***once*** and type in the data. Otherwise, complete by hand and in ink.

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

Clause	Statement	Data
10.1	The *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)**

[4] Either April 2013 or December 2009 Edition as stated by *Purchaser* in Contract Data part 1.
[5] Available from Engineering Contract Strategies Tel 011 803 3008, Fax 086 539 1902, or www.ecs.co.za

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	No of pages
C2.1	Pricing assumptions	2
C2.2	The *price schedule*	**[●]**

C2.1 Pricing assumptions

1. 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.

2. 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.

3. 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

1. Read Pages 8, 11, 12 and Appendix 5 of the SC3 Guidance Notes before preparing the *price schedule;*
2. 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;
3. 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;
4. 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;

5. 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.

a. 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*

Note: The price must be inclusive of delivery to site.

Item No:	Material Description and Texts	UMC	Quantity	Rate	Price
1	FILTER, OIL: DIMENSIONS: DIA 128 X LG 340 MM; HIGH PRESSURE; TYPE PALL: HH9680 C16 DPRBD	EA	15		
2	FILTER, OIL: TYPE: CARTRIDGE; DIMENSIONS: DIA 80 X LG 110 MM; MATERIAL: FIBER; MICRON: 3 UM; APPLICATION: HP BYPASS VALVE; SUPPL P/N: 9680 C16 UP RBD; HC9600FDP4H; ULTRA LIFE B 200, SIZE: 4 IN LENGTH, 75.5MM OD AND CLOSED BOTTOM, ID 43MM (O-RING 42MM ID X 2.8MM THICK), PALL BRAND ONLY, FRF PARTICAL REMOVER MOBILE UNIT	EA	20		
3	FILTER, ELEMENT: TYPE: HYDRAULIC OIL CARTRIDGE; DIMENSIONS: ID 25 X LG 210 MM; MATERIAL: STL; FILTERING RETENTION: 3 UM; SPECIFICATION: BS 6275; ISO MULTI-PASS 4572; SUPPL P/N: HC9020FKP8H; FOR H.P OIL FILTER CODE NO: 85-105/101; ULTRA LIFE B=200; BETA=200; BOTTOM CLOSED; ELEMENT FILTER	EA	15		
4	STEM, VALVE: VALVE STYLE: RELIEF; DIAMETER: 245 MM; LENGTH: 800 MM; MATERIAL: STL; REFERENCE NO: MSV220-8/4015; REHEATER SAFETY, FOR MSV 220; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA	10		
5	ACCUMULATOR: TYPE: BLADDER; CAPACITY: 35 L; PRESSURE RATING: 330 BAR; SUPPL P/N: 0531-015-702; PERBUNAN, MATERIAL: 34CRMO4, 223 MM OD, 1320 MM LG, HOLE DIAMETER 50 MM, FINE THREAD 1,5 MM, 330BAR-37L-20/+80 DEG C; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA	5		
6	STEM, VALVE: VALVE STYLE: RELIEF; DIAMETER: 133 MM; LENGTH: 1.17 M; MATERIAL: STL; APPLICATION: BOILER; SUPPL P/N: 3-386.4047; REFERENCE NO: DRE125-4/2; FOR MAINTENANCE ON CODE NO DRE125-4/2 FOR TYPE DRE 125; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA	20		
7	SEAT, VALVE: VALVE STYLE: SAFETY; VALVE SIZE: 167 X 125 MM; DIMENSIONS: OD 225 X WD 121 MM; MATERIAL: CH826941; SUPPL P/N: LBF01204AA00; 3-386.4046; REFERENCE NO: EB7.01.2013; DRE125- 4/3; DRE 125/3	EA	10		

8	STEM, VALVE: VALVE STYLE: HP BY-PASS VALVE; VALVE SIZE: DN 250; DIAMETER: 49 MM; LENGTH: 625 MM; MATERIAL: 17-4PH; SUPPL P/N: 3-386.4046; FOR HP BY-PASS VALVE, TYPE E 45 S, DELIVER IN ACCORDANCE TO EN 10204 TYPE 3.2 TEST CERTIFICATE FOR MATERIAL MECHANICAL PROPERTIES; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA	40		
9	SEAT, VALVE: DIMENSIONS: ID 42 X OD 100 X THK 155 MM; MATERIAL: 43CRM044; SUPPL P/N: EB5-103.1003 AND EB6.02.1187; REFERENCE NO: E45 S/3; E45S; FOR HP BYPASS VALVE	EA	4		
10	STEM, VALVE: DIAMETER: 32 MM; LENGTH: 396 MM; MATERIAL: X19CRMO; REFERENCE NO: 3-386.4046; CODE NO HA 20 A21/2, FOR HP BYPASS TYPE HA 20 A2; 22MM MALE SCREWED M22 X 45MM; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA	20		
11	SEAT, VALVE: DIMENSIONS: ID 20 X OD 95 X THK 54 MM; MATERIAL: 15M03; REFERENCE NO: EB87031320; CH465060; HA20A23; CODE NO 20A2-1/3; FOR HP BYPASS VALVES TYPE HA 20 A2	EA	20		
12	COUPLING, SHAFT HALF: TYPE: FLEXIBLE; BORE: 37 MM; OUTSIDE DIAMETER: 136 MM; LENGTH: 57 MM; MATERIAL: STL; HOLE: 3; HOLE DIAMETER: 25 MM; ON OIL SUPPLY UNIT MOTOR; FOR REHEATER SAFETY VALVE MSV220; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA	30		
13	COUPLING, SHAFT HALF: TYPE: FLEXIBLE DRIVE; BORE: 20 X 16 MM; OUTSIDE DIAMETER: 135 MM; LENGTH: 40.5 MM; MATERIAL: STL; HOLE: 6; HOLE DIAMETER: 26 MM; OIL SUPPLY UNIT ON REHEAT SAFETY VALVES FOR MSV220 VALVE, COMPLETE WITH 3 X O/D X 42 DRIVE RUBBERS; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA	3		
14	VALVE, RELIEF: VALVE SIZE: 15 MM; CONNECTION: THD FEMALE; BODY MATERIAL: STL; TRIM: STL; OPERATED: SPRING; REFERENCE NO: RD4-350; PB4E1-1-200P; SAFETY; ON PULVERIZING PLANT; FOR REHEATER SAFETY VALVES MSV220; MATERIAL AND TEST CERTIFICATES TO DIN 50049/3.1B ARE TO BE SUPPLIED ON DELIVERY	EA	60		
15	SCREW, CAP: DIAMETER: M24; LENGTH: 120 MM; THREAD: 3 MM; HEAD: SOCKET HEX; MATERIAL: GR ENI GB; GRADE: 8.8; THREAD LENGTH: 68 MM; SUPPL P/N: L-ASM250-11-9/6209; LANTERN HOLDING SCREW; REHEAT SAFETY VALVES; FOR SULZER MSV 220 VALVE; O/A LENGTH: 144MM; 1 SET IS 16 SCREWS	EA	40		

16	WASHER, LOCK: INSIDE DIAMETER: 17 MM; OUTSIDE DIAMETER: 39 MM; THICKNESS: 4 MM; NOMINAL SIZE: M16; MATERIAL: SPRING STL ELECTROPLATED; TYPE: CONICAL SPRING DOME; GRADE: CK67; MECHANICALLY PLATED (12 MICRON ZINK) AND YELLOW PASSIVATED, HARDNESS: 454.496HV ON BOTH SIDES, TEST CERTIFICATE TO BE SUPPLIED WITH EVERY DELIVERY, NOTE: QC TO BE DONE BY SYSTEM ENG. OR RELEVANT EMF SUPERVISOR ONLY	EA	100		
17	GASKET, PRE CUT: DIMENSIONS: ID 241.5 X OD 259 X THK 4.5 MM; TYPE: SAFETY VALVE; MATERIAL: GRAPHITE STL LINED; SHAPE: RD; REHEATER, MATERIAL: PURE GRAPHITE AND INNER AND OUTER METAL RINGS	EA	60		
18	KIT, ACTUATOR REPAIR: TYPE: SEAL; APPLICATION: HYDRAULIC; COMPRISING: PACKING SET; FOR USE ON ASM 250-11/12 HYDRAULIC	EA	80		
19	GASKET, SPIRAL WOUND: INNER RING INSIDE DIAMETER: 343 MM; OUTER RING OUTSIDE DIAMETER: 368 MM; FILLER MATERIAL: GRAPHITE; WINDING MATERIAL: STAINLESS STEEL; SHAPE: ROUND; REFERENCE NO: DRE 125-6/013; FOR HP BYPASS VALVE; SIZE: 4.5MM THK	EA	40		
20	GASKET, PRE CUT: DIMENSIONS: ID 258 X OD 282 X THK 5 MM; TYPE: VALVE; MATERIAL: GRAPHITE/SS; SHAPE: RD; REFERENCE NO: 3-386-4046; DRE125-32A; FOR HP- BYPASS VALVES, FOR VALVE TYPE DRE 125, 86, MATERIAL: COMPRESSED GRAPHITE STRIP IN METAL CASING	EA	40		
21	PACKING, PREFORMED: INSIDE DIAMETER: 60 MM; OUTSIDE DIAMETER: 85 MM; THICKNESS: 12.5 MM; TYPE: RING; MATERIAL: GRAPHITE; REFERENCE NO: DRE125-44; 000-003-158-424; CODE NO DRE 125/44, FOR USE ON SULZER HP BYPASS VALVES, VALVE TYPE DRE125, 4 SEALS PER SET; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA	320		
22	GASKET, SPIRAL WOUND: INNER RING INSIDE DIAMETER: 73 MM; OUTER RING OUTSIDE DIAMETER: 88.5 MM; FILLER MATERIAL: GRAPHITE; WINDING MATERIAL: STAINLESS STEEL; SHAPE: ROUND; MODEL NO: DRE125-66; REFERENCE NO: 733-0001 SULZER; FOR USE ON HP BY-PASS VALVES, VALVE TYPE: DRE 125; SIZE 4.5MM THK	EA	40		
23	PACKING, PREFORMED: INSIDE DIAMETER: 22 MM; OUTSIDE DIAMETER: 38 MM; THICKNESS: 8 MM; TYPE: SPLIT RING; MATERIAL: GRAPHITE IMPREGNATED; REFERENCE NO: 000-003-158-426; CODE NO E45 S/44 AND HA20A2-1/44, USED ON SULZER HP BYPASS VALVES TYPE E 45 S, 8 RINGS PER SET; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA	400		

24	KIT, ACTUATOR REPAIR: TYPE: SEAL; APPLICATION: HYDRAULIC; COMPRISING: PACKING SET; REFERENCE NO: 103-152-130-250; FOR USE ON ASM 250-11/4 HYDRAULIC	EA	80		
25	KIT, ACTUATOR REPAIR: TYPE: PACKING SET; APPLICATION: BYPASS INJECTION WATER CONTROL VALVE; SPECIFICATION: 103 151 312 250; SUPPL P/N: ASM100-10; REFERENCE NO: 103-151-312-250; PACKING SET, FOR ASM 100-10 REFER TO KIT 103 151 312 250; COMPRISING: ONE PISTON ROD SEAL: 43X30X20MM, PART NO ASM100-10-0/6021; TWO GUIDE RINGS 34X30X9.6MM, PART NO: ASM10-10/6022, ONE SCRAPER RING: 42X30X 8.8MM, PART NO: ASM100-10-0/6023, ONE O-RING: 94.84X3.53MM, PART NO ASM100-10-0/6027; ONE O-RING 40.87X3.53M, PART NO ASM100-10-0/6080; ONE O RING 47.22X3.53MM, PART NO ASM100-10-0/6028; ONE PISTON SEAL 100X92X29MM, PART NO ASM100-10-0/6078; COMPRISING: ONE PISTON ROD SEAL: 43X30X20MM, PART NO ASM100-10-0/6021; TWO GUIDE RINGS 34X30X9.6MM, PART NO: ASM10-10/6022, ONE SCRAPER RING: 42X30X 8.8MM, PART NO: ASM100-10-0/6023, ONE O-RING: 94.84X3.53MM, PART NO ASM100-10-0/6027; ONE O-RING 40.87X3.53M, PART NO ASM100-10-0/6080; ONE O RING 47.22X3.53MM, PART NO ASM100-10-0/6028; ONE PISTON SEAL 100X92X29MM, PART NO ASM100-10-0/6078	EA	80		
26	SEAL, RING: OUTSIDE DIAMETER: 25 MM; THICKNESS: 42 MM; MATERIAL: RUBBER; APPLICATION: SAFETY VALVE; OIL SUPPLY UNIT, REHEATER, FOR MSV220 VALVE	EA	60		
27	GASKET, PRE CUT: DIMENSIONS: ID 115 X OD 160 X THK 3 MM; TYPE: FLANGE; MATERIAL: MONTANIT W/STL INNER; SHAPE: RD; OEM P/N: 2880-008; SEALING, FITTED WITH INNER RING, MATERIAL: IT400, FOR TURBINE NO 10860 - 10865; SUPPLIERS TO PROVIDE EXPIRY/MANUFACTURING DATE OF THE ITEM	EA	60		
28	SEAL, RING: TYPE: VALVE; INSIDE DIAMETER: 94 MM; OUTSIDE DIAMETER: 114 MM; THICKNESS: 12 MM; MATERIAL: GRAPHITE PURE 98 PCT; SUPPL P/N: HA20-A2-1/022; PRESSURE, FOR SULZER SPRAYWATER ISOLATING VALVE TYPE: HA20 A2, SIZE: O/DIAMETER (114-113.95MM), I/DIAMETER (94-94.05MM), MELTING POINT: 3650DEG C, ASH CONTENT: NOT MORE THAN 2PCT, DIMENSION TOLERANCE: 0.05MM TO BE CERTIFIED, LEACHABLE CHLORIDE/ION CONTENT: NOT MORE THAN 50PPM LEACHABLE FLUORIDE/ION CONTENT: NOT MORE THAN 50PPM, DESITY: 1.6G/CM	EA	160		
29	SEAL, RING: TYPE: PRESSURE; INSIDE DIAMETER: 88 MM; OUTSIDE DIAMETER: 112 MM; THICKNESS: 12 MM; MATERIAL: GRAPHITE PURE 98 PCT; FOR SULZER SPRAYWATER REGULATING VALVE - PT E 45 S/022, SIZE: OD (112-111.95MM), ID (88-88.05MM), MELTING POINT: 3650 DEG C, ASH CONTENT: NOT MORE THAN 2PCT, DIMENTION TOLERANCE: 0.05MM TO BE CERTIFIED, LEACHABLE	EA	160		

	CHLORIDE/ION CONTENT: NOT MORE THAN 50PPM, LEACHABLE FLUORIDE/ION CONTENT: NOT MORE THAN 50PPM, DENSITY: 1.6G/CM3				
30	SET: APPLICATION: ACTUATOR; COMPRISING: SEAL; SUPPL P/N: ASM63-10; REFERENCE NO: ASM63-10-103151189290; 2 OFF GUIDE RINGS - PART NO: ASM63-10-0/6022 - SIZE: 24X20X9.6MM, 1 SCRAPER RING - PART NO: ASM63-10-0/6023 - SIZE: 30X20X7MM, 1 PISTON ROD SEAL - PART NO: ASM63-10-0/6021 - SIZE: 33X20X20MM, 1 PISTON SEAL - PART NO: ASM63-10-0/6078 SIZE: 63X47X26MM, 2 O-RINGS - PART NO: ASM63-10-0/6026 AND 6027 - SIZE: 56.75X3X53MM	EA	40		
31	CLIP: TYPE: MOUNTING; DIMENSIONS: WD 31 X LG 36 MM; MATERIAL: STL; SUPPL P/N: V23154; REFERENCE NO: Z1034	EA	60		
32	CONTROL: TYPE: BOILER; SUPPL P/N: APL10; REFERENCE NO: 103.152.394.201; COMPLETE STEP CONTROL UNIT, CONSIST OF: 4/3 - WAY V/V, ELECTROMAGNET CHECK V/V SANDWICH PLATE, DOUBLE THROTTLE/CHECK V/V, CONNECTION BLOCK	EA	60		
33	CAGE, VALVE: VALVE STYLE: STEAM REDUCING; VALVE SIZE: DN 125 MM; DIMENSIONS: ID 280 X OD 330 X HT 400 MM; MATERIAL: 10CR0910; SUPPL P/N: DRE125-9; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA	6		
34	WASHER, LOCK: INSIDE DIAMETER: 26 MM; OUTSIDE DIAMETER: 39 MM; THICKNESS: 1.3 MM; NOMINAL SIZE: M24; MATERIAL: STAINLESS STEEL; TYPE: SPRING DOME; REHEAT SAFETY VALVES, 1 SET = 16	EA	40		
35	O RING SET: TYPE: SEALING; APPLICATION: CONTROL UNIT PV4; QUANTITY: 2; MATERIAL: VITON; REFERENCE NO: 5427001-20-1; 000.101.000.782, 110; QUANTITY 2; FOR HP BYPASS SPRAY WATER CONTROL VALVE, 2 O-RING:2; KKS:LAE51AA002-LAE54AA002; SIZE: 5.07 X 2.62 MM; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA	80		
36	O RING SET: TYPE: HP BYPASS SPRAYWATER ISOLATING VALVE; APPLICATION: STEPPING CONTROL UNIT APL6; QUANTITY: 16; MATERIAL: VITON; REFERENCE NO: 006-009-022, 10 3.193.540.290; FOR HP BYPASS SPRAY WATER ISOLATING VALV E, 2 O-RING:21.82 X 3.53MM, 12 O-RING 9.25 X 1.78MM, 2 O-RING:17.12 X 2.62, KKS:LAE51AA001-LAE54AA001; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA	6		

37	O RING SET: APPLICATION: STEPPING CONTROL UNIT APL10; QUANTITY: 19; MATERIAL: VITON; REFERENCE NO: 006-009-022, 103.154.183.290; FOR RE-HEAT SAFETY VALVE, 15 O-RING:12 X 2MM, 2 O-RING 25.07 X 2.62MM, 2 O-RING 27 X 2.5MM, KKS:LBB01AA001-LBB04AA001; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA	80		
38	O RING SET: TYPE: SEALING; QUANTITY: 12; MATERIAL: VITON; SUPPL P/N: KSS:LBB23AA001-LBB23AA004; REFERENCE NO: SBE 116; 103.223.531.290; 001-002-012 -013; FOR REHEAT SAFETY VALVE AND HP BYPASS VALVE, (2) O-RING 25.07 X 2.62MM, (4) O-RING 5.28 X 1.78MM, (40) O-RING 8.5 X 1.5MM, (2) O-RING 7.65 X 1.78MM; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA	48		
39	FILTER, ELEMENT: TYPE: OIL; MATERIAL: BN4HC/-V; FILTERING RETENTION: 0.05 UM; SUPPL P/N: 000101007795; REFERENCE NO: 1262996; DESIGNATION 0330 R005, HP BYPASS AND REHEAT SAFETY VA LVES	EA	10		
40	BREATHER: TYPE: FILTER AIR; MATERIAL: PAPER; DIMENSIONS: DIA 75.5 X LG 81.5 MM; CONNECTION: G3/4 IN; REFERENCE NO: 306336-21/10; MICRON 3; APPLICATION: OIL TANK; SHAPE ROUND, USED AT H P BYPASS AND REHEAT SAFETY VALVES; DESIGNATION BFP G10W, THREAD 150228; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA	10		
41	VALVE, SOLENOID: STYLE: 2/2; POTENTIAL: 24 VDC; CURRENT: 600 MA; APPLICATION: HP BYPASS SPRAY WATER; DRAWING NO: 721/12.07 AV REV 0; REFERENCE NO: 103215281001; COMPLETE PROPORTIONAL VALVE CONTROL UNIT TYPE PV4; USED ON THE HP BYPASS SPRAY WATER REGULATING VALVES; TYPE ASM100 CCI AG/SULZER HYDRAULIC ACTUATORS; TUV CERTIFICATION STATUARY CERTIFICATION IS ESSENTIAL FOR THIS BOILER SAFETY SYSTEMS (OEM) CCI	EA	40		
42	VALVE, SOLENOID: STYLE: 2/2; POTENTIAL: 24 VDC; CURRENT: 600 MA; APPLICATION: CONTROL UNIT PV 6; DRAWING NO: 721/12.07 AV REV 0; REFERENCE NO: 103215282001; COMPLETE PROPORTIONAL VALVE CONTROL UNIT TYPE PV6; USED ON THE HP BYPASS REGULATING VALVES; TYPE ASM250 CCI AG/SULZER HYDRAULIC ACTUATORS; TUV CERTIFICATION STATUARY CERTIFICATION IS ESSENTIAL FOR THIS BOILER SAFETY SYSTEMS (OEM)CCI	EA	60		

43	VALVE, SOLENOID: STYLE: 3/2 WAY; POTENTIAL: 24 VDC; OPERATED: AV6 CONTROL; ENCLOSURE RATING: OPEN; CURRENT: 600 MA; APPLICATION: CONTROL UNIT PV 4; DRAWING NO: 721/12.07 AV REV 0; REFERENCE NO: 000003186210; TYPE: WANDFLUH BM32041A-S1494-D1 ITEM; 79108270 07;07; TUV CERTIFICATION STATUARY CERTIFICATION IS ESSENTIAL FOR THE BOILER SAFETY SYSTEMS; REGISTER 4-5; FIGURE 4-4; ITEM 40 (OEM)CCI	EA	60		
44	VALVE, SOLENOID: STYLE: 3/2 WAY; POTENTIAL: 24 VDC; CURRENT: 600 MA; APPLICATION: SBE 16 SAFETY VALVE; USED ON HP BYPASS & REHEAT SAFETY VALVES SBE16 SAFETY BYPASS UNIT; TYPE WANDFLUH BM32041A-S1494-D1 ITEM; 79108270 07; 07; TUV CERTIFICATION IS ESSENTIAL FOR THIS BOILER SAFETY SYSTEMS; (OEM)CCI	EA	60		
45	VALVE, SOLENOID: POTENTIAL: 24 VDC; BODY MATERIAL: STEEL; OPERATED: HYDRAULIC ACTUATORS; APPLICATION: HP BYPASS REGULATING; DRAWING NO: 721/12.07 AV REV 0 ITEM 50; PROPORTIONAL VALVE FOR CCI PV6 PROPORTIONAL CONTROLLER; ASM250 CCI AG/SULZER HYDRAULIC ACTUATORS; TUV CERTIFICATION STATUARY CERTIFICATION IS ESSENTIAL FOR THIS BOILER SAFETY SYSTEMS	EA	120		
46	HOSE, NON METALLIC: INSIDE DIAMETER: 16 MM; OUTSIDE DIAMETER: 26.2 MM; LENGTH: 600 MM; CONNECTION: SWIVEL; MATERIAL: RUBBER; MAXIMUM OPERATING PRESSURE: 25.0 MPA; TEMPERATURE RATING: -40 TO 125 DEG C; EXTERIOR COLOR: BLACK; SPECIFICATION: EN853/25N/16/01N; ACCUMULATOR TO DISTRIBUTING BLOCK MANIFOLD; SAE100 RAT-10 FOR END CONNECTION SWIVEL 90DEG ELBOW & STRAIGHT SWIVEL M30X2; HIGH PRESSURE HOSE; PRESSURE TEST CERTIFICATE TO BE SUPPLIED ON DELIVERY	EA	50		
47	HOSE, NON METALLIC: INSIDE DIAMETER: 19 MM; OUTSIDE DIAMETER: 30.1 MM; LENGTH: 1.5 M; CONNECTION: SWIVEL; MATERIAL: RUBBER; MAXIMUM OPERATING PRESSURE: 21.5 MPA; TEMPERATURE RATING: -40 TO 120 DEG C; MINIMUM INSIDE BENDING RADIUS: 240 MM; EXTERIOR COLOR: BLACK; SPECIFICATION: EN853/25N/20/01N; HPU TO PIPE SYSTEM HOSE; CONNECTION 45DEG & STRAIGHT SWIVEL; M36X2 TO SAE100R2AT-12; HIGH PRESSURE HOSE; PRESSURE TEST CERTIFICATE TO BE SUPPLIED ON DELIVERY	EA	40		
48	HOSE, NON METALLIC: INSIDE DIAMETER: 12 MM; OUTSIDE DIAMETER: 24 MM; LENGTH: 1.5 M; CONNECTION: SWIVEL; MATERIAL: RUBBER; MAXIMUM OPERATING PRESSURE: 27.5 MPA; TEMPERATURE RATING: -40 TO 120 DEG C; MINIMUM INSIDE BENDING RADIUS: 180 MM; EXTERIOR COLOR: BLUE; SPECIFICATION: EN853/25N/12/DIN; HP BYPASS HOSE 45DEG C & STRAIGHT SWIVEL; CONNECTION M24X15 TO	EA	48		

	SAE100R2A2-8; HIGH PRESSURE HOSE; PRESSURE TEST CERTIFICATE TO BE SUPPLIED ON DELIVERY				
49	ACCUMULATOR: TYPE: BLADDER; CAPACITY: 50 L; PRESSURE RATING: 330 BAR; REFERENCE NO: EHV 50-330/90; 000003168600; SIZE: OD 222MM LG INCLUDING END CONNECTIONS (1.939M) TO BE SUPPLIED FULLY ASSEMBLED; HP BYPASS & REHEAT VALVE; 124KG ACCUMULATOR; FLOW 900L/MIN; TEMPERATURE RANGE: -15DEG C TO +80DEG C; GAS RECHARGE PRESSURE: 90BAR; MATERIAL: FORGED STEEL SEAMLESS; GAS INLET VALVE SIZE: 22MM; INSTALLATION: HORIZONTAL; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA	4		
50	HOSE, NON METALLIC: INSIDE DIAMETER: 12.5 MM; OUTSIDE DIAMETER: 23.0 MM; LENGTH: 900 MM; CONNECTION: SWIVEL 90DEG & STRAIGHT; MATERIAL: RUBBER; MAXIMUM OPERATING PRESSURE: 27.5 MPA; TEMPERATURE RATING: -40 TO 120 DEG C; EXTERIOR COLOR: BLACK; SPECIFICATION: EN853/25N/01N; PUMP HOSE FOR HP BYPASS & REHEAT SAFETY VALVES TO SAE1002AT-8; METRIC M24X1.5; END CONNECTIONS SWIVEL 90DEG ELBOW & STRAIGHT SWIVEL; HIGH PRESSURE HOSE; PRESSURE TEST CERTIFICATE TO BE SUPPLIED ON DELIVERY	EA	60		
51	HOSE, NON METALLIC: INSIDE DIAMETER: DN16; OUTSIDE DIAMETER: 26.2 MM; LENGTH: 1.5 M; CONNECTION: CRIMP; MATERIAL: NBR; MAXIMUM OPERATING PRESSURE: 28 MPA; TEMPERATURE RATING: -40 TO 120 DEG C; MINIMUM INSIDE BENDING RADIUS: 200 MM; EXTERIOR COLOR: BLACK; REFERENCE NO: 00010100371; 0001010031570; HYDRAULIC HOSES FOR REHEAT SAFETY VALVE; PRESSURE TEST CERTIFICATE TO BE SUPPLIED ON DELIVERY	EA	60		
52	HOSE, NON METALLIC: INSIDE DIAMETER: DN16; OUTSIDE DIAMETER: 26.2 MM; LENGTH: 600 MM; CONNECTION: SWIVEL; MATERIAL: RUBBER; MAXIMUM OPERATING PRESSURE: 25 MPA; TEMPERATURE RATING: -40 TO 120 DEG C; MINIMUM INSIDE BENDING RADIUS: 200 MM; EXTERIOR COLOR: BLACK; FILTER TO COOLING UNIT HOSE TO AT-10 END CONNECTION 90DEG SWIVEL ELBOW & STRAIGHT SWIVEL TO M26; HIGH PRESSURE HOSE; PRESSURE TEST CERTIFICATE TO BE SUPPLIED ON DELIVERY	EA	60		

53	HOSE, NON METALLIC: INSIDE DIAMETER: 10 MM; OUTSIDE DIAMETER: 19.7 MM; LENGTH: 1.2 M; CONNECTION: SWIVEL; MATERIAL: RUBBER; MAXIMUM OPERATING PRESSURE: 33 MPA; TEMPERATURE RATING: -40 TO 120 DEG C; EXTERIOR COLOR: BLUE; SPECIFICATION: EN 853/25N/10/01N; FOR SPRAY WATER ISOLATING & CONTROL VALVES ON HP BYPASS TO SAE/100 RAT-6; END CONNECTIONS 45 DEG & STRAIGHT ELBOW SWIVELS; HIGH PRESSURE HOSE; PRESSURE TEST CERTIFICATE TO BE SUPPLIED ON DELIVERY	EA	60		
54	BLADDER: TYPE: HYDRAULIC ACTUATOR; CAPACITY: 50 L; REFERENCE NO: 000003106017; USED ON HP BYPASS & REHEAT SAFETY VALVES ACCUMULATOR TYPE IHV50-330/2; MATERIAL: NBR; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA	6		
55	POPPET, VALVE: VALVE STYLE: PRESSURE REDUCING CARTRIDGE; VALVE SIZE: 10 MM; MATERIAL: STAINLESS STEEL; REFERENCE NO: 000003106102; DVPS-1-10-SN-3; FOR USE ON HP BYPASS & REHEAT SAFETY VALVES; PRESSURE RELIEF VALVE 0-65BAR; MAXIMUM PRESSURE=350BAR AT 140L/MIN; CAVITY TYPE DC MASS 0.23; SCREW IN TYPE M24X1.5; TEMPERATURE -20 TO 60DEG C; NITRILE SEALS; HYDRAULIC OIL TO DIN51524; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA	10		
56	POPPET, VALVE: VALVE STYLE: PRESSURE REDUCING CARTRIDGE; VALVE SIZE: 10 MM; MATERIAL: STAINLESS STEEL; REFERENCE NO: DRPA-5-10-SN-3; 000003186105; FOR USE ON HP BYPASS & REHEAT SAFETY VALVES; PRESSURE REDUCING VALVE; DESIGN RATED PRESSURE=350BAR; TEMPERATURE -20 TO 60DEG C WITH NITRILE O-RINGS; MODEL CODE KEY; SCREW IN TYPE M24 X 1.5 TIGHTENING TORQUE 27NM; CAVITY TYPE DD; MAXIMUM FLOW 120L/MIN; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA	10		
57	POPPET, VALVE: VALVE STYLE: PRESSURE REDUCING CARTRIDGE; VALVE SIZE: 16 MM; MATERIAL: CHROMITE; REFERENCE NO: DRPB-5-16-35-SV-1; 000103007951; USED ON HP BYPASS & REHEAT SAFETY VALVES; PRESSURE REDUCING CARTRIDGE; CAVITY TYPE EB; PRESSURE 350BAR; TEMPERATURE -25 TO 80DEG C; OIL TO DIN51524; SCREW-IN CARTRIDGE M42 X 2; WEIGHT 0.78KG; TIGHTENNING TORQUE=210 NM; NITRILE SEALS;FLOW 120L/MIN; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA	10		

58	STUD, DOUBLE ENDED: LENGTH: 325 MM; DIAMETER-A: 31 MM; DIAMETER-B: 28 MM; MATERIAL: STL; THREADS-A: 4 TPI; THREADS-B: 4 TPI; THREAD LENGTH-A: 46 MM; THREAD LENGTH-B: 83 MM; TYPE: HP BYPASS VALVE; SPECIFICATION: DIN 2510; GRADE: 8.8; PROTECTIVE COATING: HEAT RESISTENT; REFERENCE NO: DRE125-6/016; DRE125-6/017; 016 - 12 STUD BOLTS M39-T X 325 / SW 24 - HEAT RESESISTANT; THREADS A & B = M39; EACH STUD & NUT TO BE NUMBERED ACCORDINGLY; SHANK LENGTH=170MM; SHANK DIA=31MM; BOLT MATERIAL: 21CRMOV57; NUTS MATERIAL: 24CRMO5; DIN SPEC 17240; MATERIAL NUMBER 17709 & 17258; 60MM ACCROS FLATS; MATERIAL CERTIFICATE TO BE SUPPLIED ON DELIVERY	EA	120		

PART 3: SCOPE OF WORK

	Total number of pages	

C3.1: PURCHASER'S GOODS INFORMATION

Contents

Item No:	MATERIAL NUMBER	Material Description and Texts	UMC
1	24710	FILTER, OIL: DIMENSIONS: DIA 128 X LG 340 MM; HIGH PRESSURE; TYPE PALL: HH9680 C16 DPRBD	EA
2	0024736	FILTER, OIL: TYPE: CARTRIDGE; DIMENSIONS: DIA 80 X LG 110 MM; MATERIAL: FIBER; MICRON: 3 UM; APPLICATION: HP BYPASS VALVE; SUPPL P/N: 9680 C16 UP RBD; HC9600FDP4H; ULTRA LIFE B 200, SIZE: 4 IN LENGTH, 75.5MM OD AND CLOSED BOTTOM, ID 43MM (O-RING 42MM ID X 2.8MM THICK), PALL BRAND ONLY, FRF PARTICAL REMOVER MOBILE UNIT	EA
3	0024737	FILTER, ELEMENT: TYPE: HYDRAULIC OIL CARTRIDGE; DIMENSIONS: ID 25 X LG 210 MM; MATERIAL: STL; FILTERING RETENTION: 3 UM; SPECIFICATION: BS 6275; ISO MULTI-PASS 4572; SUPPL P/N: HC9020FKP8H; FOR H.P OIL FILTER CODE NO: 85-105/101; ULTRA LIFE B=200; BETA=200; BOTTOM CLOSED; ELEMENT FILTER	EA
4	0067962	STEM, VALVE: VALVE STYLE: RELIEF; DIAMETER: 245 MM; LENGTH: 800 MM; MATERIAL: STL; REFERENCE NO: MSV220-8/4015; REHEATER SAFETY, FOR MSV 220; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA
5	0067977	ACCUMULATOR: TYPE: BLADDER; CAPACITY: 35 L; PRESSURE RATING: 330 BAR; SUPPL P/N: 0531-015-702; PERBUNAN, MATERIAL: 34CRMO4, 223 MM OD, 1320 MM LG, HOLE DIAMETER 50 MM, FINE THREAD 1,5 MM, 330BAR-37L-20/+80 DEG C; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA
6	0068875	STEM, VALVE: VALVE STYLE: RELIEF; DIAMETER: 133 MM; LENGTH: 1.17 M; MATERIAL: STL; APPLICATION: BOILER; SUPPL P/N: 3-386.4047; REFERENCE NO: DRE125-4/2; FOR MAINTENANCE ON CODE NO DRE125-4/2 FOR TYPE DRE 125; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA
7	0068876	SEAT, VALVE: VALVE STYLE: SAFETY; VALVE SIZE: 167 X 125 MM; DIMENSIONS: OD 225 X WD 121 MM; MATERIAL: CH826941; SUPPL P/N: LBF01204AA00; 3-386.4046; REFERENCE NO: EB7.01.2013; DRE125- 4/3; DRE 125/3	EA

8	0068878	STEM, VALVE: VALVE STYLE: HP BY-PASS VALVE; VALVE SIZE: DN 250; DIAMETER: 49 MM; LENGTH: 625 MM; MATERIAL: 17-4PH; SUPPL P/N: 3-386.4046; FOR HP BY-PASS VALVE, TYPE E 45 S, DELIVER IN ACCORDANCE TO EN 10204 TYPE 3.2 TEST CERTIFICATE FOR MATERIAL MECHANICAL PROPERTIES; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA
9	0068879	SEAT, VALVE: DIMENSIONS: ID 42 X OD 100 X THK 155 MM; MATERIAL: 43CRM044; SUPPL P/N: EB5-103.1003 AND EB6.02.1187; REFERENCE NO: E45 S/3; E45S; FOR HP BYPASS VALVE	EA
10	0068880	STEM, VALVE: DIAMETER: 32 MM; LENGTH: 396 MM; MATERIAL: X19CRMO; REFERENCE NO: 3-386.4046; CODE NO HA 20 A21/2, FOR HP BYPASS TYPE HA 20 A2; 22MM MALE SCREWED M22 X 45MM; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA
11	0068881	SEAT, VALVE: DIMENSIONS: ID 20 X OD 95 X THK 54 MM; MATERIAL: 15M03; REFERENCE NO: EB87031320; CH465060; HA20A23; CODE NO 20A2-1/3; FOR HP BYPASS VALVES TYPE HA 20 A2	EA
12	0069031	COUPLING, SHAFT HALF: TYPE: FLEXIBLE; BORE: 37 MM; OUTSIDE DIAMETER: 136 MM; LENGTH: 57 MM; MATERIAL: STL; HOLE: 3; HOLE DIAMETER: 25 MM; ON OIL SUPPLY UNIT MOTOR; FOR REHEATER SAFETY VALVE MSV220; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA
13	0069032	COUPLING, SHAFT HALF: TYPE: FLEXIBLE DRIVE; BORE: 20 X 16 MM; OUTSIDE DIAMETER: 135 MM; LENGTH: 40.5 MM; MATERIAL: STL; HOLE: 6; HOLE DIAMETER: 26 MM; OIL SUPPLY UNIT ON REHEAT SAFETY VALVES FOR MSV220 VALVE, COMPLETE WITH 3 X O/D X 42 DRIVE RUBBERS; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA
14	0069034	VALVE, RELIEF: VALVE SIZE: 15 MM; CONNECTION: THD FEMALE; BODY MATERIAL: STL; TRIM: STL; OPERATED: SPRING; REFERENCE NO: RD4-350; PB4E1-1-200P; SAFETY; ON PULVERIZING PLANT; FOR REHEATER SAFETY VALVES MSV220; MATERIAL AND TEST CERTIFICATES TO DIN 50049/3.1B ARE TO BE SUPPLIED ON DELIVERY	EA
15	0084076	SCREW, CAP: DIAMETER: M24; LENGTH: 120 MM; THREAD: 3 MM; HEAD: SOCKET HEX; MATERIAL: GR ENI GB; GRADE: 8.8; THREAD LENGTH: 68 MM; SUPPL P/N: L-ASM250-11-9/6209; LANTERN HOLDING SCREW; REHEAT SAFETY VALVES; FOR SULZER MSV 220 VALVE; O/A LENGTH: 144MM; 1 SET IS 16 SCREWS	EA

16	0089244	WASHER, LOCK: INSIDE DIAMETER: 17 MM; OUTSIDE DIAMETER: 39 MM; THICKNESS: 4 MM; NOMINAL SIZE: M16; MATERIAL: SPRING STL ELECTROPLATED; TYPE: CONICAL SPRING DOME; GRADE: CK67; MECHANICALLY PLATED (12 MICRON ZINK) AND YELLOW PASSIVATED, HARDNESS: 454.496HV ON BOTH SIDES, TEST CERTIFICATE TO BE SUPPLIED WITH EVERY DELIVERY, NOTE: QC TO BE DONE BY SYSTEM ENG. OR RELEVANT EMF SUPERVISOR ONLY	EA
17	0098836	GASKET, PRE CUT: DIMENSIONS: ID 241.5 X OD 259 X THK 4.5 MM; TYPE: SAFETY VALVE; MATERIAL: GRAPHITE STL LINED; SHAPE: RD; REHEATER, MATERIAL: PURE GRAPHITE AND INNER AND OUTER METAL RINGS	EA
18	0098837	KIT, ACTUATOR REPAIR: TYPE: SEAL; APPLICATION: HYDRAULIC; COMPRISING: PACKING SET; FOR USE ON ASM 250-11/12 HYDRAULIC	EA
19	0099517	GASKET, SPIRAL WOUND: INNER RING INSIDE DIAMETER: 343 MM; OUTER RING OUTSIDE DIAMETER: 368 MM; FILLER MATERIAL: GRAPHITE; WINDING MATERIAL: STAINLESS STEEL; SHAPE: ROUND; REFERENCE NO: DRE 125-6/013; FOR HP BYPASS VALVE; SIZE: 4.5MM THK	EA
20	0099518	GASKET, PRE CUT: DIMENSIONS: ID 258 X OD 282 X THK 5 MM; TYPE: VALVE; MATERIAL: GRAPHITE/SS; SHAPE: RD; REFERENCE NO: 3-386-4046; DRE125-32A; FOR HP- BYPASS VALVES, FOR VALVE TYPE DRE 125, 86, MATERIAL: COMPRESSED GRAPHITE STRIP IN METAL CASING	EA
21	0099519	PACKING, PREFORMED: INSIDE DIAMETER: 60 MM; OUTSIDE DIAMETER: 85 MM; THICKNESS: 12.5 MM; TYPE: RING; MATERIAL: GRAPHITE; REFERENCE NO: DRE125-44; 000-003-158-424; CODE NO DRE 125/44, FOR USE ON SULZER HP BYPASS VALVES, VALVE TYPE DRE125, 4 SEALS PER SET; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA
22	0099520	GASKET, SPIRAL WOUND: INNER RING INSIDE DIAMETER: 73 MM; OUTER RING OUTSIDE DIAMETER: 88.5 MM; FILLER MATERIAL: GRAPHITE; WINDING MATERIAL: STAINLESS STEEL; SHAPE: ROUND; MODEL NO: DRE125-66; REFERENCE NO: 733-0001 SULZER; FOR USE ON HP BY-PASS VALVES, VALVE TYPE: DRE 125; SIZE 4.5MM THK	EA
23	0099521	PACKING, PREFORMED: INSIDE DIAMETER: 22 MM; OUTSIDE DIAMETER: 38 MM; THICKNESS: 8 MM; TYPE: SPLIT RING; MATERIAL: GRAPHITE IMPREGNATED; REFERENCE NO: 000-003-158-426; CODE NO E45 S/44 AND HA20A2-1/44, USED ON SULZER HP BYPASS VALVES TYPE E 45 S, 8 RINGS PER SET; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA

24	0099522	KIT, ACTUATOR REPAIR: TYPE: SEAL; APPLICATION: HYDRAULIC; COMPRISING: PACKING SET; REFERENCE NO: 103-152-130-250; FOR USE ON ASM 250-11/4 HYDRAULIC	EA
25	0099523	KIT, ACTUATOR REPAIR: TYPE: PACKING SET; APPLICATION: BYPASS INJECTION WATER CONTROL VALVE; SPECIFICATION: 103 151 312 250; SUPPL P/N: ASM100-10; REFERENCE NO: 103-151-312-250; PACKING SET, FOR ASM 100-10 REFER TO KIT 103 151 312 250; COMPRISING: ONE PISTON ROD SEAL: 43X30X20MM, PART NO ASM100-10-0/6021; TWO GUIDE RINGS 34X30X9.6MM, PART NO: ASM10-10/6022, ONE SCRAPER RING: 42X30X 8.8MM, PART NO: ASM100-10-0/6023, ONE O-RING: 94.84X3.53MM, PART NO ASM100-10-0/6027; ONE O-RING 40.87X3.53M, PART NO ASM100-10-0/6080; ONE O RING 47.22X3.53MM, PART NO ASM100-10-0/6028; ONE PISTON SEAL 100X92X29MM, PART NO ASM100-10-0/6078; COMPRISING: ONE PISTON ROD SEAL: 43X30X20MM, PART NO ASM100-10-0/6021; TWO GUIDE RINGS 34X30X9.6MM, PART NO: ASM10-10/6022, ONE SCRAPER RING: 42X30X 8.8MM, PART NO: ASM100-10-0/6023, ONE O-RING: 94.84X3.53MM, PART NO ASM100-10-0/6027; ONE O-RING 40.87X3.53M, PART NO ASM100-10-0/6080; ONE O RING 47.22X3.53MM, PART NO ASM100-10-0/6028; ONE PISTON SEAL 100X92X29MM, PART NO ASM100-10-0/6078	EA
26	0099608	SEAL, RING: OUTSIDE DIAMETER: 25 MM; THICKNESS: 42 MM; MATERIAL: RUBBER; APPLICATION: SAFETY VALVE; OIL SUPPLY UNIT, REHEATER, FOR MSV220 VALVE	EA
27	0099676	GASKET, PRE CUT: DIMENSIONS: ID 115 X OD 160 X THK 3 MM; TYPE: FLANGE; MATERIAL: MONTANIT W/STL INNER; SHAPE: RD; OEM P/N: 2880-008; SEALING, FITTED WITH INNER RING, MATERIAL: IT400, FOR TURBINE NO 10860 - 10865; SUPPLIERS TO PROVIDE EXPIRY/MANUFACTURING DATE OF THE ITEM	EA
28	0101688	SEAL, RING: TYPE: VALVE; INSIDE DIAMETER: 94 MM; OUTSIDE DIAMETER: 114 MM; THICKNESS: 12 MM; MATERIAL: GRAPHITE PURE 98 PCT; SUPPL P/N: HA20-A2-1/022; PRESSURE, FOR SULZER SPRAYWATER ISOLATING VALVE TYPE: HA20 A2, SIZE: O/DIAMETER (114-113.95MM), I/DIAMETER (94-94.05MM), MELTING POINT: 3650DEG C, ASH CONTENT: NOT MORE THAN 2PCT, DIMENSION TOLERANCE: 0.05MM TO BE CERTIFIED, LEACHABLE CHLORIDE/ION CONTENT: NOT MORE THAN 50PPM LEACHABLE FLUORIDE/ION CONTENT: NOT MORE THAN 50PPM, DESITY: 1.6G/CM	EA
29	0101689	SEAL, RING: TYPE: PRESSURE; INSIDE DIAMETER: 88 MM; OUTSIDE DIAMETER: 112 MM; THICKNESS: 12 MM; MATERIAL: GRAPHITE PURE 98 PCT; FOR SULZER SPRAYWATER REGULATING VALVE - PT E 45 S/022, SIZE: OD (112-111.95MM), ID (88-88.05MM), MELTING POINT: 3650 DEG C, ASH CONTENT: NOT MORE THAN 2PCT, DIMENTION TOLERANCE: 0.05MM TO BE CERTIFIED, LEACHABLE	EA

		CHLORIDE/ION CONTENT: NOT MORE THAN 50PPM, LEACHABLE FLUORIDE/ION CONTENT: NOT MORE THAN 50PPM, DENSITY: 1.6G/CM3	
30	0101691	SET: APPLICATION: ACTUATOR; COMPRISING: SEAL; SUPPL P/N: ASM63-10; REFERENCE NO: ASM63-10-103151189290; 2 OFF GUIDE RINGS - PART NO: ASM63-10-0/6022 - SIZE: 24X20X9.6MM, 1 SCRAPER RING - PART NO: ASM63-10-0/6023 - SIZE: 30X20X7MM, 1 PISTON ROD SEAL - PART NO: ASM63-10-0/6021 - SIZE: 33X20X20MM, 1 PISTON SEAL - PART NO: ASM63-10-0/6078 SIZE: 63X47X26MM, 2 O-RINGS - PART NO: ASM63-10-0/6026 AND 6027 - SIZE: 56.75X3X53MM	EA
31	0138197	CLIP: TYPE: MOUNTING; DIMENSIONS: WD 31 X LG 36 MM; MATERIAL: STL; SUPPL P/N: V23154; REFERENCE NO: Z1034	EA
32	0148635	CONTROL: TYPE: BOILER; SUPPL P/N: APL10; REFERENCE NO: 103.152.394.201; COMPLETE STEP CONTROL UNIT, CONSIST OF: 4/3 - WAY V/V, ELECTROMAGNET CHECK V/V SANDWICH PLATE, DOUBLE THROTTLE/CHECK V/V, CONNECTION BLOCK	EA
33	0178207	CAGE, VALVE: VALVE STYLE: STEAM REDUCING; VALVE SIZE: DN 125 MM; DIMENSIONS: ID 280 X OD 330 X HT 400 MM; MATERIAL: 10CR0910; SUPPL P/N: DRE125-9; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA
34	0185706	WASHER, LOCK: INSIDE DIAMETER: 26 MM; OUTSIDE DIAMETER: 39 MM; THICKNESS: 1.3 MM; NOMINAL SIZE: M24; MATERIAL: STAINLESS STEEL; TYPE: SPRING DOME; REHEAT SAFETY VALVES, 1 SET = 16	EA
35	0253205	O RING SET: TYPE: SEALING; APPLICATION: CONTROL UNIT PV4; QUANTITY: 2; MATERIAL: VITON; REFERENCE NO: 5427001-20-1; 000.101.000.782, 110; QUANTITY 2; FOR HP BYPASS SPRAY WATER CONTROL VALVE, 2 O-RING:2; KKS:LAE51AA002-LAE54AA002; SIZE: 5.07 X 2.62 MM; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA
36	0253207	O RING SET: TYPE: HP BYPASS SPRAYWATER ISOLATING VALVE; APPLICATION: STEPPING CONTROL UNIT APL6; QUANTITY: 16; MATERIAL: VITON; REFERENCE NO: 006-009-022, 10 3.193.540.290; FOR HP BYPASS SPRAY WATER ISOLATING VALV E, 2 O-RING:21.82 X 3.53MM, 12 O-RING 9.25 X 1.78MM, 2 O-RING:17.12 X 2.62, KKS:LAE51AA001-LAE54AA001; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA

37	0253208	O RING SET: APPLICATION: STEPPING CONTROL UNIT APL10; QUANTITY: 19; MATERIAL: VITON; REFERENCE NO: 006-009-022, 103.154.183.290; FOR RE-HEAT SAFETY VALVE, 15 O-RING:12 X 2MM, 2 O-RING 25.07 X 2.62MM, 2 O-RING 27 X 2.5MM, KKS:LBB01AA001-LBB04AA001; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA
38	0253209	O RING SET: TYPE: SEALING; QUANTITY: 12; MATERIAL: VITON; SUPPL P/N: KSS:LBB23AA001-LBB23AA004; REFERENCE NO: SBE 116; 103.223.531.290; 001-002-012 -013; FOR REHEAT SAFETY VALVE AND HP BYPASS VALVE, (2) O-RING 25.07 X 2.62MM, (4) O-RING 5.28 X 1.78MM, (40) O-RING 8.5 X 1.5MM, (2) O-RING 7.65 X 1.78MM; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA
39	0256671	FILTER, ELEMENT: TYPE: OIL; MATERIAL: BN4HC/-V; FILTERING RETENTION: 0.05 UM; SUPPL P/N: 000101007795; REFERENCE NO: 1262996; DESIGNATION 0330 R005, HP BYPASS AND REHEAT SAFETY VA LVES	EA
40	0256672	BREATHER: TYPE: FILTER AIR; MATERIAL: PAPER; DIMENSIONS: DIA 75.5 X LG 81.5 MM; CONNECTION: G3/4 IN; REFERENCE NO: 306336-21/10; MICRON 3; APPLICATION: OIL TANK; SHAPE ROUND, USED AT H P BYPASS AND REHEAT SAFETY VALVES; DESIGNATION BFP G10W, THREAD 150228; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA
41	0554621	VALVE, SOLENOID: STYLE: 2/2; POTENTIAL: 24 VDC; CURRENT: 600 MA; APPLICATION: HP BYPASS SPRAY WATER; DRAWING NO: 721/12.07 AV REV 0; REFERENCE NO: 103215281001; COMPLETE PROPORTIONAL VALVE CONTROL UNIT TYPE PV4; USED ON THE HP BYPASS SPRAY WATER REGULATING VALVES; TYPE ASM100 CCI AG/SULZER HYDRAULIC ACTUATORS; TUV CERTIFICATION STATUARY CERTIFICATION IS ESSENTIAL FOR THIS BOILER SAFETY SYSTEMS (OEM) CCI	EA
42	0554622	VALVE, SOLENOID: STYLE: 2/2; POTENTIAL: 24 VDC; CURRENT: 600 MA; APPLICATION: CONTROL UNIT PV 6; DRAWING NO: 721/12.07 AV REV 0; REFERENCE NO: 103215282001; COMPLETE PROPORTIONAL VALVE CONTROL UNIT TYPE PV6; USED ON THE HP BYPASS REGULATING VALVES; TYPE ASM250 CCI AG/SULZER HYDRAULIC ACTUATORS; TUV CERTIFICATION STATUARY CERTIFICATION IS ESSENTIAL FOR THIS BOILER SAFETY SYSTEMS (OEM)CCI	EA

43	0554624	VALVE, SOLENOID: STYLE: 3/2 WAY; POTENTIAL: 24 VDC; OPERATED: AV6 CONTROL; ENCLOSURE RATING: OPEN; CURRENT: 600 MA; APPLICATION: CONTROL UNIT PV 4; DRAWING NO: 721/12.07 AV REV 0; REFERENCE NO: 000003186210; TYPE: WANDFLUH BM32041A-S1494-D1 ITEM; 79108270 07;07; TUV CERTIFICATION STATUARY CERTIFICATION IS ESSENTIAL FOR THE BOILER SAFETY SYSTEMS; REGISTER 4-5; FIGURE 4-4; ITEM 40 (OEM)CCI	EA
44	0554625	VALVE, SOLENOID: STYLE: 3/2 WAY; POTENTIAL: 24 VDC; CURRENT: 600 MA; APPLICATION: SBE 16 SAFETY VALVE; USED ON HP BYPASS & REHEAT SAFETY VALVES SBE16 SAFETY BYPASS UNIT; TYPE WANDFLUH BM32041A-S1494-D1 ITEM; 79108270 07; 07; TUV CERTIFICATION IS ESSENTIAL FOR THIS BOILER SAFETY SYSTEMS; (OEM)CCI	EA
45	0554934	VALVE, SOLENOID: POTENTIAL: 24 VDC; BODY MATERIAL: STEEL; OPERATED: HYDRAULIC ACTUATORS; APPLICATION: HP BYPASS REGULATING; DRAWING NO: 721/12.07 AV REV 0 ITEM 50; PROPORTIONAL VALVE FOR CCI PV6 PROPORTIONAL CONTROLLER; ASM250 CCI AG/SULZER HYDRAULIC ACTUATORS; TUV CERTIFICATION STATUARY CERTIFICATION IS ESSENTIAL FOR THIS BOILER SAFETY SYSTEMS	EA
46	0564063	HOSE, NON METALLIC: INSIDE DIAMETER: 16 MM; OUTSIDE DIAMETER: 26.2 MM; LENGTH: 600 MM; CONNECTION: SWIVEL; MATERIAL: RUBBER; MAXIMUM OPERATING PRESSURE: 25.0 MPA; TEMPERATURE RATING: -40 TO 125 DEG C; EXTERIOR COLOR: BLACK; SPECIFICATION: EN853/25N/16/01N; ACCUMULATOR TO DISTRIBUTING BLOCK MANIFOLD; SAE100 RAT-10 FOR END CONNECTION SWIVEL 90DEG ELBOW & STRAIGHT SWIVEL M30X2; HIGH PRESSURE HOSE; PRESSURE TEST CERTIFICATE TO BE SUPPLIED ON DELIVERY	EA
47	0564064	HOSE, NON METALLIC: INSIDE DIAMETER: 19 MM; OUTSIDE DIAMETER: 30.1 MM; LENGTH: 1.5 M; CONNECTION: SWIVEL; MATERIAL: RUBBER; MAXIMUM OPERATING PRESSURE: 21.5 MPA; TEMPERATURE RATING: -40 TO 120 DEG C; MINIMUM INSIDE BENDING RADIUS: 240 MM; EXTERIOR COLOR: BLACK; SPECIFICATION: EN853/25N/20/01N; HPU TO PIPE SYSTEM HOSE; CONNECTION 45DEG & STRAIGHT SWIVEL; M36X2 TO SAE100R2AT-12; HIGH PRESSURE HOSE; PRESSURE TEST CERTIFICATE TO BE SUPPLIED ON DELIVERY	EA
48	0564065	HOSE, NON METALLIC: INSIDE DIAMETER: 12 MM; OUTSIDE DIAMETER: 24 MM; LENGTH: 1.5 M; CONNECTION: SWIVEL; MATERIAL: RUBBER; MAXIMUM OPERATING PRESSURE: 27.5 MPA; TEMPERATURE RATING: -40 TO 120 DEG C; MINIMUM INSIDE BENDING RADIUS: 180 MM; EXTERIOR COLOR: BLUE; SPECIFICATION: EN853/25N/12/DIN; HP BYPASS HOSE 45DEG C & STRAIGHT SWIVEL; CONNECTION M24X15 TO	EA

		SAE100R2A2-8; HIGH PRESSURE HOSE; PRESSURE TEST CERTIFICATE TO BE SUPPLIED ON DELIVERY	
49	0564066	ACCUMULATOR: TYPE: BLADDER; CAPACITY: 50 L; PRESSURE RATING: 330 BAR; REFERENCE NO: EHV 50-330/90; 000003168600; SIZE: OD 222MM LG INCLUDING END CONNECTIONS (1.939M) TO BE SUPPLIED FULLY ASSEMBLED; HP BYPASS & REHEAT VALVE; 124KG ACCUMULATOR; FLOW 900L/MIN; TEMPERATURE RANGE: -15DEG C TO +80DEG C; GAS RECHARGE PRESSURE: 90BAR; MATERIAL: FORGED STEEL SEAMLESS; GAS INLET VALVE SIZE: 22MM; INSTALLATION: HORIZONTAL; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA
50	0564067	HOSE, NON METALLIC: INSIDE DIAMETER: 12.5 MM; OUTSIDE DIAMETER: 23.0 MM; LENGTH: 900 MM; CONNECTION: SWIVEL 90DEG & STRAIGHT; MATERIAL: RUBBER; MAXIMUM OPERATING PRESSURE: 27.5 MPA; TEMPERATURE RATING: -40 TO 120 DEG C; EXTERIOR COLOR: BLACK; SPECIFICATION: EN853/25N/01N; PUMP HOSE FOR HP BYPASS & REHEAT SAFETY VALVES TO SAE1002AT-8; METRIC M24X1.5; END CONNECTIONS SWIVEL 90DEG ELBOW & STRAIGHT SWIVEL; HIGH PRESSURE HOSE; PRESSURE TEST CERTIFICATE TO BE SUPPLIED ON DELIVERY	EA
51	0564068	HOSE, NON METALLIC: INSIDE DIAMETER: DN16; OUTSIDE DIAMETER: 26.2 MM; LENGTH: 1.5 M; CONNECTION: CRIMP; MATERIAL: NBR; MAXIMUM OPERATING PRESSURE: 28 MPA; TEMPERATURE RATING: -40 TO 120 DEG C; MINIMUM INSIDE BENDING RADIUS: 200 MM; EXTERIOR COLOR: BLACK; REFERENCE NO: 00010100371; 0001010031570; HYDRAULIC HOSES FOR REHEAT SAFETY VALVE; PRESSURE TEST CERTIFICATE TO BE SUPPLIED ON DELIVERY	EA
52	0564074	HOSE, NON METALLIC: INSIDE DIAMETER: DN16; OUTSIDE DIAMETER: 26.2 MM; LENGTH: 600 MM; CONNECTION: SWIVEL; MATERIAL: RUBBER; MAXIMUM OPERATING PRESSURE: 25 MPA; TEMPERATURE RATING: -40 TO 120 DEG C; MINIMUM INSIDE BENDING RADIUS: 200 MM; EXTERIOR COLOR: BLACK; FILTER TO COOLING UNIT HOSE TO AT-10 END CONNECTION 90DEG SWIVEL ELBOW & STRAIGHT SWIVEL TO M26; HIGH PRESSURE HOSE; PRESSURE TEST CERTIFICATE TO BE SUPPLIED ON DELIVERY	EA

53	0564076	HOSE, NON METALLIC: INSIDE DIAMETER: 10 MM; OUTSIDE DIAMETER: 19.7 MM; LENGTH: 1.2 M; CONNECTION: SWIVEL; MATERIAL: RUBBER; MAXIMUM OPERATING PRESSURE: 33 MPA; TEMPERATURE RATING: -40 TO 120 DEG C; EXTERIOR COLOR: BLUE; SPECIFICATION: EN 853/25N/10/01N; FOR SPRAY WATER ISOLATING & CONTROL VALVES ON HP BYPASS TO SAE/100 RAT-6; END CONNECTIONS 45 DEG & STRAIGHT ELBOW SWIVELS; HIGH PRESSURE HOSE; PRESSURE TEST CERTIFICATE TO BE SUPPLIED ON DELIVERY	EA
54	0564378	BLADDER: TYPE: HYDRAULIC ACTUATOR; CAPACITY: 50 L; REFERENCE NO: 000003106017; USED ON HP BYPASS & REHEAT SAFETY VALVES ACCUMULATOR TYPE IHV50-330/2; MATERIAL: NBR; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA
55	0565986	POPPET, VALVE: VALVE STYLE: PRESSURE REDUCING CARTRIDGE; VALVE SIZE: 10 MM; MATERIAL: STAINLESS STEEL; REFERENCE NO: 000003106102; DVPS-1-10-SN-3; FOR USE ON HP BYPASS & REHEAT SAFETY VALVES; PRESSURE RELIEF VALVE 0-65BAR; MAXIMUM PRESSURE=350BAR AT 140L/MIN; CAVITY TYPE DC MASS 0.23; SCREW IN TYPE M24X1.5; TEMPERATURE -20 TO 60DEG C; NITRILE SEALS; HYDRAULIC OIL TO DIN51524; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA
56	0565987	POPPET, VALVE: VALVE STYLE: PRESSURE REDUCING CARTRIDGE; VALVE SIZE: 10 MM; MATERIAL: STAINLESS STEEL; REFERENCE NO: DRPA-5-10-SN-3; 000003186105; FOR USE ON HP BYPASS & REHEAT SAFETY VALVES; PRESSURE REDUCING VALVE; DESIGN RATED PRESSURE=350BAR; TEMPERATURE -20 TO 60DEG C WITH NITRILE O-RINGS; MODEL CODE KEY; SCREW IN TYPE M24 X 1.5 TIGHTENING TORQUE 27NM; CAVITY TYPE DD; MAXIMUM FLOW 120L/MIN; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA
57	0565988	POPPET, VALVE: VALVE STYLE: PRESSURE REDUCING CARTRIDGE; VALVE SIZE: 16 MM; MATERIAL: CHROMITE; REFERENCE NO: DRPB-5-16-35-SV-1; 000103007951; USED ON HP BYPASS & REHEAT SAFETY VALVES; PRESSURE REDUCING CARTRIDGE; CAVITY TYPE EB; PRESSURE 350BAR; TEMPERATURE -25 TO 80DEG C; OIL TO DIN51524; SCREW-IN CARTRIDGE M42 X 2; WEIGHT 0.78KG; TIGHTENNING TORQUE=210 NM; NITRILE SEALS;FLOW 120L/MIN; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	EA

58	0607154	STUD, DOUBLE ENDED: LENGTH: 325 MM; DIAMETER-A: 31 MM; DIAMETER-B: 28 MM; MATERIAL: STL; THREADS-A: 4 TPI; THREADS-B: 4 TPI; THREAD LENGTH-A: 46 MM; THREAD LENGTH-B: 83 MM; TYPE: HP BYPASS VALVE; SPECIFICATION: DIN 2510; GRADE: 8.8; PROTECTIVE COATING: HEAT RESISTENT; REFERENCE NO: DRE125-6/016; DRE125-6/017; 016 - 12 STUD BOLTS M39-T X 325 / SW 24 - HEAT RESESISTANT; THREADS A & B = M39; EACH STUD & NUT TO BE NUMBERED ACCORDINGLY; SHANK LENGTH=170MM; SHANK DIA=31MM; BOLT MATERIAL: 21CRMOV57; NUTS MATERIAL: 24CRMO5; DIN SPEC 17240; MATERIAL NUMBER 17709 & 17258; 60MM ACCROS FLATS; MATERIAL CERTIFICATE TO BE SUPPLIED ON DELIVERY	EA

1. Constraints on how the *Supplier* Provides the Goods

a. Management meetings

Meetings are held monthly between the Project Manager and the Contractor (and any other co-opted members). The Contractor is represented, at each meeting, by the appropriate members of the staff.

The venue for these meetings is as determined by the Project Manager. The Project Manager writes the minutes of meetings.

Any action of the Project Manager or Contractor implied in the minutes of meetings with contractual implications is confirmed by means of a separate communication given in accordance with this Works Information and NEC.

The Contractor reports the overall progress and as a minimum requirement, the following is

addressed:

1. Contractor’s current activity progress and planned finish dates;
2. Contractor’s programme agenda compared for delays and milestone targets
3. Health, safety and quality Management;
4. The progress of any other relevant activities;
5. To discuss any technical or commercial issues;

6. Problem areas or concerns.

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

Title and purpose	**Approximate time & interval**	**Location**	**Attendance by:**
Project Kick-Off Meeting	Once, before contract start	Matimba Power Station	**Contractor's** Project Manager, Project Supervisor and other attendees at the discretion of the contractor. **Employer's** Project Team
Progress Report and Assessment Meeting	Monthly	Matimba Power Station	**Contractor's** Project Manager, Project Supervisor and other attendees at the discretion of the contractor. **Employer's** Project Team

Title and purpose	Approximate time & interval	Location	Attendance by:
Risk Management Review	Monthly	Matimba Power Station	**Contractor's** Project Manager, Project Supervisor and other attendees at the discretion of the contractor. **Employer's** Project Team

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

All meetings shall be recorded using minutes or 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.

b. Health and safety risk management

i. General

In carrying out its obligations to the Employer in terms of this contract, which obligations include, amongst others, to Provide the Works; using Plant, Materials and Equipment; and whilst at the site for any reason, the Contractor is the “Employer” in terms of the Occupational Health and Safety Act, No. 85 of 1993, in respect of its activities and in relation to its employees, agents, Subcontractor/s and mandatories.

The Contractor does not consider itself under the supervision or management of the Employer with regard to compliance with the Safety Health and Environmental requirements.

Furthermore, the Contractor does not consider himself to be a subordinate or under the supervision of the Project Manager in respect of these matters. The Contractor is responsible for the supervision of its employees, agents, Subcontractors and mandatories and takes full responsibility and accountability for ensuring that they are competent, aware of the Safety Health and Environmental requirements, whilst executing the works in accordance with the Safety Health and Environmental requirements.

The Contractor ensures compliance with, amongst others:

7. The provisions of the Occupational Health and Safety Act, No. 85 of 1993 and all applicable regulations (as amended), binding in terms thereof;
8. The latest versions of standards, procedures, specifications, rules, systems of work and requirements of the Employer, copies of which are provided to the Contractor on request.
9. The Health and Safety Plan prepared by the Contractor in accordance with the Employer’s Safety Health and Environmental Specification – 240-149136837 and requirements.

10. The provisions of the National Environmental Management Act (as amended) and all regulations in force from time to time in terms of that Act,

The Contractor ensures that its employees, agents, Subcontractors and mandatories comply with the provisions of the Occupational Health and Safety Act, No. 85 of 1993, and all applicable regulations binding in terms thereof as well as the Employer's Safety Health and Environmental Specification - 240-149136837 whilst making use of plant, materials and equipment and whilst at the Site for any reason whatsoever.

The Contractor implements a comprehensive health and safety management system, based on

the OHSAS 18001 requirements for utilisation at the project.

The Contractor appoints a person, qualified and competent in accordance with the safety health and environmental requirements, as the liaison with the Employer's Project Safety, Health and Environment Manager/Officer or delegated person for all such matters as pertaining related to safety, health and the environment. The Contractor ensures that such a person is contactable 24 hours a day and is registered with a registered professional council approved by the Principal Director of the Department of Labour, as per the requirements of the latest Construction Regulations, inclusive of all exemptions and amendments pertaining thereto.

The Contractor hereby indemnifies the Employer and holds the Employer harmless in respect of any and all loss, costs, claims, demands, liabilities, damage, penalties or expenses that may be made against the Employer and/or suffered or incurred by the Employer (as the case may be) as a result of, any failure of the Contractor, its employees, agents, Subcontractors and mandatories to comply with their obligations, and/or the failure of the Employer to procure the compliance by the Contractor, its employees, agents, Subcontractors and/or mandatories with their responsibilities

and/or obligations in terms of or arising from the Occupational Health and Safety Act, No. 85 of 1993.

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

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

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

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

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

13. Do safety audits at the Contractor's premises, its workplaces and on its Employees.

14. Refuse any Employees, sub-Contractor or agent of the Contractor access to its premises if such person are found to commit any unlawful act or any unsafe working practice or is found to be not authorised or qualified in terms of the Act.
15. Issue the Contractor with a work stop order or a compliance order should Employer become aware of any unsafe working procedures or conditions or any non-compliance with the Act, Regulations and Procedures by the Contractor or any of its Employees, sub-Contractors or agents. Stoppages of this nature will not constitute a compensation event.

ii. Mandatory Agreements

The Contractor confirms that:

16. In terms of sections 37(1) and 37(2) of the OHSA, the Employer is relieved of any and all of its responsibilities and liabilities pertaining to the activities performed by the Contractor (and its employees, agents, Subcontractors and mandatories) relating to the works; the use of plant, materials and equipment; and whilst at the Site for whatsoever reason.
17. b) The Contractor confirms that, in terms of the Construction Regulations, Regulation 6, it is hereby mandated as the designer and must perform all duties required of a designer. (This will be applicable only where the Contractor is required to do design work as part of their Scope).

The Contractor confirms that he has been provided with sufficient information regarding the health and safety arrangements applicable to the works; the use of Plant, Materials and Equipment, as well as at the Site.

In addition, the Contractor ensures that:

18. Prior to the Contractor commencing with any operations/ activities relating to the works and/or prior to gaining access to the Site, the Contractor concludes a written mandatory agreement with the Employer in terms of Section 37(2) of the OHSA and 5(1)(k) under the construction regulations. The aforementioned agreement

constitutes a record of the written arrangements and procedures between the Contractor and Employer regarding health and safety.

19. As far as is reasonably practicable, the safety and absence of risks to health in connection with the production, processing, use, handling, storage or transport of articles or substances is maintained;
20. As far as is reasonably practicable, all hazards pertaining to the health and safety of persons and harm to the environment that are attached to any work which is performed, any article or substance which is produced, processed, used, handled, stored or transported and any plant or machinery which is used in its business, is clearly identified and, as far as is reasonably practicable, further establishes what precautionary measures should be taken with respect to such work, article, substance, plant or machinery in order to protect the health and safety of persons and or harm to the environment, and provides the necessary means to apply such precautionary measures;
21. Such information, instructions, training and supervision as may be necessary to ensure, as far as is reasonably practicable, the health and safety at work of its employees, agents, Subcontractors and mandatories is provided;
22. As far as is reasonably practicable, no employee, agent, Subcontractor and transports any article or substance or operates any plant or machinery, unless the precautionary measures contemplated in paragraph 2.3.3, or any other precautionary measures which may be prescribed have been taken;
23. Such measures as may be necessary in the interest of health and safety and the environment are enforced;
24. Work is performed and that plant, materials or equipment is used under the direct supervision of a person trained to understand the hazards associated with it and who has the authority to ensure that precautionary measures required by the Employer are implemented; and
25. All employees are informed of the scope of their authority as contemplated in OHSA.

iii. Health and Safety Obligations

In addition to the mandatory agreements, the Contractor:

26. Ensures that all statutory appointments (as required in terms of the Occupational Health and Safety Act, No. 85 of 1993 and all applicable regulations binding in terms thereof, as amended) and other appointments required in terms of the Employer's Safety Health and Environmental Specification – 240-149136837 and SHE Requirements Procedure (32-726) are in place and that all appointees are cognisant of their duties and responsibilities in terms of such appointments;
27. Ensures that such appointees execute their duties and responsibilities as required by such an appointment.
28. Ensures that all personnel brought by itself onto site (including employees of Contractors and Subcontractors) are suitably qualified and trained for the performance of the task, duties and functions, which are allocated to them;
29. Immediately reports any occupational or other injuries, near miss events, property damage, environmental related incidents as well as any potential threat to the health and safety of individuals at the works or on the site, as soon as he becomes aware thereof, to the Project Manager; Complies with the Employer's Occupational Health and Safety Incident Management Procedure – 32-95 and Environmental Incident Management Procedure – 240-133087117 relating to the reporting and investigation of incidents. The classification of incidents contained in such document are considered final and are applied by the Contractor relating to any incidents/ injuries relating to its employees, agents, Contractors, Subcontractors and mandatories whilst on Site;
30. Conducts a risk assessment regarding the utilisation of PPE and thereafter ensure that PPE of good quality is issued (at its own cost) to its employees, agents, Contractors, Subcontractors and mandatories prior to such individuals accessing the site, alternatively performing activities related to the works at the site, as specified in the Eskom PPE Specification - 240-44175132.

iv. Eskom Life Saving Rules (240-62196227)

RULE 1: OPEN, ISOLATE, TEST, EARTH, BOND, AND/OR INSULATE BEFORE TOUCH

With the aim to ensure a safe electrical work environment, no person may work/operate on, around or near any electrical network, line or apparatus, electrically connected to the power system and/or electrically charged and/or not electrically charged unless:

a) He/she is trained and authorised as competent for the task to be done;

b) There is a valid permit to work, where required;

c) A pre-task risk assessment to identify all risks and hazards has been conducted prior to any work commencing;

d) He/she follows the requirements on OPEN, ISOLATE, TEST, EARTH, BOND and/or INSULATE BEFORE TOUCH, correctly based on applicable/related standards, procedures and outcome of risk assessment fit for the type of work or task to be performed;

e) The authorised person (team leader) has certified and physically shown all team members that the apparatus is safe to work on;

f) He/she makes the specific electrical environment safe prior to performing the work; and

g) All the appropriate PPE (including face shield and insulated gloves for low voltage work) are worn.

RULE 2: HOOK UP AT HEIGHTS

Working at height is a significant part of work in Eskom Holdings and is regarded as a high-risk activity, and as a result all precautions must be taken to prevent incidents while working at height. Wherever reasonably practicable, preference must be given to the performance of work at ground level as opposed to work in an elevated position. Where work in an elevated position is necessary, the requirements in this document shall apply.

No person may work at height where there is a risk of falling unless:

a) He/she is medically fit to work at height;

b) A pre-task risk assessment to identify all risks and hazards has been conducted prior to commencing any work of this nature;

c) He/she is appropriately trained as determined by the risk assessment;

d) He/she is appropriately secured during ascending and descending; and

e) He/she is using an Eskom approved fall arrest system where applicable.

RULE 3: BUCKLE UP

Where required, the proper wearing of seat belts for any driver, operator and passenger is mandatory in all vehicles/equipment when driving and/or travelling for Eskom business purposes. The driver is obligated to ensure that he/she as well as all passengers are properly always seated and wearing their seatbelts while being transported in the vehicle, as per Eskom specifications.

Note: This rule is applicable on any road or parking lot, irrespective of the speed, and when the vehicle moves in a forward or backward direction.

RULE 4: BE SOBER

No person who is under the influence or who appears to be under the influence of intoxicating liquor or drugs will be permitted to enter, or remain on an Eskom site or conduct Eskom business or drive/operate a vehicle/equipment for Eskom business purposes.

This includes any level of alcohol or the presence of any drugs, controlled substances, and/or illegal substances in the body that impairs or could impair mental and physical functioning, irrespective of when the substance was used.

RULE 5: ENSURE THAT YOU HAVE A PERMIT TO WORK

Where an authorisation limitation exists, no person shall work without the required Permit to Work (PTW), which is governed by for example the:

a) Plant Safety Regulations; or

b) Operating Regulations for High Voltage Systems (ORHVS); or

c) Any other activity where a permit is required.

No plant is to be returned to service without the cancellation of all permits on that plant in accordance with procedure, unless permission is granted for a particular plant to be returned to service with permits still open, like in the case of redundant systems.

NOTE: In the case of live work, a “live work declaration form” is to be completed by the authorised person, who is the person responsible for the safe execution of work according to relevant standards and procedures. Outline the key principles or rules to support the implementation of the standard statement.

c. Environmental constraints and management

The Contractor shall adhere to all requirements as set out in 240-146112716: Environmental management

requirements for contractors.

The Contractor provides an Environmental Management Plan applicable during the execution of the Works. The plan provides a guideline on the environmental management of the handling of the works. All waste is handled in an environmentally

friendly manner. The Contractor conforms to the “polluter pays principle”, duty of care and other NEMA principles.

The Contractor conforms to all requirements dictated in the document as well as the National Environmental Management Act (NEMA, Act No. 107 of 1998) and the National Environmental Management Waste Act (NEMWA, Act No. 59 of 2008). This is achieved by undertaking inspections, audits, monitoring and reviews, conducted internally by the Contractor and externally by the Project Manager.

The Contractor ensures that all environmental authorization obligations, applicable legislative requirements and Employer’s specific requirements are fulfilled. This includes all national, provincial and local environmental legislation and requirements.

The Contractor issues on a monthly basis, Environmental Management Performance and Expenditure Reports to the Project Manager.

The Contractor conducts their environmental management based on the ISO 14001 requirements and implement their environmental management practices accordingly.

The Contractor develops and implements as a minimum the following procedures:

31. Environmental Management Plan,
32. Waste Management Work Instruction,
33. Spill Management Procedure,
34. Hazardous Chemical Substances Management and Storage Procedure,
35. Stockpile and Erosion Management Procedure,
36. Clear-and-Grub Procedure,
37. Environmental Rehabilitation Procedure.

All environmental procedures, as listed above, are site-specific and submitted to the Employer for acceptance by the Project Manager before the commencement of

construction activities. The Employer provides a copy of the environmental authorisation and Environmental Management Plan to the contractor for the drafting of the above procedures.

i. Waste Management

All waste management activities, which includes procurement of control measures, handling and disposal or processing of all waste forms generated on the Contractor's site, are conducted according to Matimba Power Station Waste Management Procedure – PS/244/001, and all requirements of the Employer as per the Environmental Management Programme All costs associated with waste management are the responsibility of the Contractor.

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

ii. Rehabilitation

The Contractor rehabilitates both its lay-down and construction site including all disturbed areas under their jurisdiction and or as directed by Supervisor at the end of the project. The Contractor submits to the Project Manager a rehabilitation plan and schedule at least 2 weeks before finalisation of the works for acceptance by the Project Manager. All rehabilitation costs are the responsibility of the Contractor.

iii. Hazardous Waste

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

No hazardous waste may be stored for a period of more than 90 days on the Matimba premises.

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

iv. Environmental Management

Matimba has an Environmental Policy, PP/240/001, to which the *Contractor* and his employees must adhere. It is the responsibility of the *Contractor* to ensure that he obtains copies of the Matimba Environmental Policy, the legal register applicable to his area of responsibility, the aspect register and the Matimba procedures (applicable to the *Contractor's* area of responsibility) and to familiarize themselves on such procedures, within 30 days from the date of commencement of work at Matimba, to assist the *Contractor* and his/her employees to prevent pollution and to comply with legislative requirements. Copies of the above-mentioned documents shall be obtained from the *Project Manager* or Environmental Officer on the first day prior to commencement of work at Matimba. The *Contractor* shall submit proof to the Environmental Officer of Matimba that he and his employees has done all the necessary training on procedures and Policies supplied to them and that they do understand the contents of the procedures, registers and policies and will adhere to them at all times.

The non-adherence to the Matimba Environmental policy and rules could result in the termination of this contract.

d. Quality assurance requirements

i. Quality Management System

The *Contractor* shall implement and maintain a quality management system that as a minimum meets the requirements of 240-105658000 - Supplier Quality Management: Specification. If the *Contractor* is registered, the appropriate ISO 9001:2015 Registration certificate of compliance must be supplied with the tender.

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

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

ii. Quality Documents Submitted with the Tender

The Contractor submits a copy of his quality policy and quality system procedures relevant to the Works.

The Contractor also submits a draft of quality control plan.

The Project Manager evaluates the Contractor's capabilities with regards to quality assurance and quality control based on these submissions and the performance history of the Contractor. The Project Manager performs pre-award assessments where necessary, giving further information to aid the selection process.

iii. Quality Documents Submitted after the Contract Date

Contractor submits a fully detailed Quality Assurance Programme (QAP) for acceptance by the Project Manager within four weeks of the Contract Date.

The documents submitted by the Contractor shall include the following:

38. Copy of the Quality Manual
39. Copy of the Quality System Procedure
40. Copy of the Contract Quality Management Plan
41. Copy of Quality Control Plans
42. Copy of the proposed index of the QA/QC, inspection and test records

The Contractor will further submit the following documents during the course of the contract:

43. Non-conformance reports (NCR's) raised by the Contractor

44. Notification of any planned changes to the Contractor's quality manual, quality system procedures, contract quality management plan or quality plan for acceptance by the Project Manager prior to implementation
45. Concession/production permit applications and supporting documentation
46. Data books and/or data packages

iv. Contract Quality Management Plan Requirement

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

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

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

v. Quality Control Plan

The Contractor quality control plans cover inspection and test proposals for items or activities to be supplied as part of the works.

The quality control plan indicates the following as appropriate:

56. The identification of the item
57. The material
58. A list of the sequence of operations including inspections and tests
59. The identification of the specification, drawings or procedures for each operation
60. The acceptance criteria with reference to the appropriate technical specification, in-house, national or international standard and relevant clause number
61. The inspections and tests the Contractor has nominated for hold and witness points
62. Provision for inspections and tests nominated by the Project Manager
63. Provision for inspection status indication
64. Inspection and test records that are generated by the Contractor

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

vi. Inspection and Testing

All Plant and Materials are comprehensively tested in accordance with the agreed QCPs prior to commencement of work. The Employer reserves the right to appoint others to inspect all parts during manufacturing, erection and commissioning to be present at any of the tests specified. The witnessing of tests by the Supervisor or Others, and if the Supervisor chooses to waive the witnessing of any tests, it does not relieve the Contractor of his responsibilities to Provide the Works.

All tests which the Employer requires are carried out by the Contractor during manufacturing, erection and commissioning to prove compliance with the specification independently of any tests which may have been carried out at the Contractor's premises.

The Supervisor inspects parts of the Plant at his discretion during manufacturing stages and before shipment as per the agreed QCP;

65. The Contractor is responsible for the inspection of all the works performed and the Supervisor only verifies that such work is conducted as per the Works Information.
66. The Contractor conducts all inspections in accordance with the accepted QCP.
67. The Contractor provides suitably qualified personnel to conduct on-and-off site inspections.
68. The Contractor ensures that all parts of the works are inspected and accepted before the
69. Supervisor is invited for verification.
70. The Contractor allows for a minimum of five (5) working days' notice for local off-site inspections, 24 hours for local on-site inspection, and 21 working days' notice for foreign inspections. The notice strictly contains copies of the Contractor's inspection reports and particulars of work which the inspection notice/request entail.

vii. Quality Records

The Contractor prepares and submits to the Project Manager an Index of QA/QC and inspection and test records prior to the commencement of work.

The Project Manager determines which documents are to be submitted during the performance of work and reviews the index and request changes if required. The Contractor conforms to the Index approved by the Project Manager

The Contractor ensures all records identify the items, equipment and/or activities to which they pertain and collates indexes and securely stores the records in such a manner that they are readily retrievable.

The Contractor implements appropriate administrative controls to limit access to prevent inadvertent loss of or damage to records.

The Contractor stores all quality records. The Contractor only destroys or discards quality records with the approval of the Project Manager.

The Contractor presents on completion of the works all quality records in the form of a data package. The package is indexed and shows the entire contents.

viii. Quality Reporting

The Contractor submits monthly quality reports, on the last working day of the month. The report

includes, but is not limited to the following:

71. A register of NCRs and defects
72. Updated QCP / ITP register
73. QA monthly report summary
74. Planned and completed local and foreign inspection dates
75. Completed and outstanding Inspections
76. Audit findings report
77. Risks with Mitigation plan

ix. Preservation, shipping and transportation

The Contractor develops and implements a comprehensive preservation, shipping and transportation programme consisting of plans, processes, procedures, and actions undertaken for the purpose of planning for, and maintenance of, material deliverables quality. The Contractor and Subcontractor complies with the Employer's Quality Requirements: Specifications 240-105658000.

e. Programming constraints

i. General

The Contractor submits a single integrated Level 3 programme that incorporates all the work to be performed including that of his Subcontractors. The interfaces between Subcontractors as well as the interfaces between Subcontractors and the Contractor are clearly identified. Project key dates are incorporated into the programme.

ii. Computerised Planning

MSProjects is the only planning tool which the Employer accepts for this project; therefore the plan submitted to the Employer must be converted or submitted in this format. The Project Manager does not intend duplicating the Contractor's planning and scheduling, however, the Accepted Programme is used in the Employer's internal integrated and Master project programmes for project control purposes, updating and monitoring. The Project Manager requires one project programme to be used and updated during the execution of the Works This insures that any changes, deviations to the Programme can be carried out on the agreed programme and monitored. The initial programme supplied to the Employer after Contract award is fully resource loaded.

Any changes that are required to be made to the Project/Programme i.e. scope changes, delays and the like, are recorded through the Employer's change process and documentation, where all parties agree to the changes and sign.

The Contractor and Project Manager agree on the format of how the updates are done, and the frequency of the updates i.e. such as on a weekly basis, or at any other time as required by the Contractor, or as instructed by the Project Manager.

iii. Planning and Scheduling Levels

All planning and scheduling is done based on the Critical Path Method (CPM). The Contractor uses activity codes to define interfaces to be agreed upon between Project Manager and Contractor. The Contractor's programme shows the actual critical path clearly.

The schedule layout takes into account the accepted WBS, reflecting the manner the works are to be performed as per the Contractor's Method Statement and how activities are to be summarised, reported and monitored.

The programme includes:

a) Major milestones, interface dates, access dates and key dates (for the new plant, existing plant and between Subcontractors)

b) The duration of major activities and their relationship to one another.

c) Identified long-lead material items.

d) Responsibility assignments for accomplishing project objectives end product is a time scaled bar-chart programme developed using logic network.

This programme is separated by unit, by plant area, by phase, by WBS. The work within each plant area is broken down by engineering discipline, procurement, delivery, construction by the Contractor, start-up and commissioning. The programme is resource-loaded, and it forms the basis for progress measurement, progress curves and histograms for each discipline within a plant area. This is used for Evaluations and for the accepted programme after contract award. This is saved and used as the original.

The Contractor's Forecasted Rate of Invoicing (FRI) also aligns with the resource loading on the programme.

iv. Planning Programmes

The Contractor develops a contract programme which includes a bar chart conforming to the project master programme dates included and sufficient detail to indicate the Contractor's intention for executing the works. This programme covers major items relating to design, procurement, manufacture, delivery, erection, start-up and commissioning. The critical path is clearly shown.

Key milestones, access dates, interface dates and commissioning key dates are clearly identified in the contract programme, including access dates and release of terminal points that involve the Employer or Others.

The programme makes provision for site related preparation such as site establishment, safety induction and medical clearance of the entire Contractor's staff that will be working on site.

f. Invoicing and payment

There are no additional requirements to the invoicing and payment clauses in Section 5 of the core clauses.

At each assessment interval, the Contractor submits to the Project Manager a forecast rate of invoicing that includes all the expected payments by the Employer to the Contractor on a month-by-month basis.

The Contractor addresses the tax invoice to Eskom Holdings SOC Ltd and include on each invoice the following information:

78. The registered name of the Contractor
79. The VAT registration number of the Contractor

80. The address of the Contractor
81. The Employer's contract number
82. The VAT registration number of the Employer
83. The value of the invoice split into payments as per the activity schedule as indicated in the Price Lists.
84. Any retention monies to be deducted from the invoice.
85. Any interest payable
86. Escalation formula used where applicable

All invoices in PDF format are emailed straight from your system to an Eskom email address.

87. Email addresses for invoice submission: Invoiceseskomlocal@eskom.co.za. The Project Manager is copied when submitting invoices.
88. All queries and follow up on invoice payments are made by contacting the FSS Contact Centre: Tel: 011 800 5060 or e-mail: fss@eskom.co.za
89. For Foreign invoices, the Contractor is required to physically deliver hard copies of original documents to the Project Manager even though the Contractor has e-mailed those invoices.
90. The Contractor ensures compliance with the tax Requirement for submitting invoices electronically.
91. If there is Cost Price Adjustment (CPA) on your invoice, the Employer recommends that the Contractor issue a separate invoice for CPA so that if there are any issues on the CPA the rest of the invoice can be paid while resolving CPA issues.
92. The base invoice number needs to be mentioned on the CPA invoice.
93. Electronic invoicing does not guarantee payment but ensures visibility of all invoices and ensures that no invoices get lost. If the Goods Receipt (GR) is not done the invoice is parked and the system automatically sends an e-mail to the Project Manager to do the goods receipt. This is also tracked by the Employer through the parked invoice report.

94. The Contractor can request a parked invoice report from the Finance Shared Services (FSS) Contact Centre which can then be followed up and corrected. The Contractor is allowed to forward the details of invoices corrected to the FSS Contact Centre.

g. Insurance provided by the *Purchaser*

There are no additional requirements to the risk and insurance clause in Section 8 of the core clauses and Z13 of the A*dditional conditions of contract*.

h. Contract change management

There are no additional requirements to the compensation event clauses in Section 6 of the core clauses.

i. Provision of bonds and guarantees

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

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

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

There are no additional requirements to the compensation event clauses in Section **Error! Reference source not found.** of the core clauses.

2. Procurement

BBBEE and preferencing scheme

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

Local Content and Production

This tender concerns a service that has material and commodities that are part of the designated sector as per regulation 13 of the Preferential Procurement Regulations, 2017 and Local Production and Content applicable as pre-qualification criteria. Therefore, only locally produced goods or services with a stipulated minimum threshold for Local Production and Content will be considered. Therefore, SBD 6.2 and supporting annexures WILL form part of tender returnable.

Skills Development (not weighted criteria)

Eskom intends to improve Skills Development by ensuring that technical support is directed towards enhancing supply capacity and capability within the industry or sector of operation. By doing this the capacity and competitiveness of the local supply base will be increased and the goals of shared growth, employment creation, poverty reduction and skills development will be achieved.

The gearbox manufacturer shall train at least 10 people (supplied by the purchaser) how to effectively refurbish the supplied gearboxes to ensure the highest quality is achieved. The training shall include classroom training that shall focus on the basic design of the gearbox, the importance of adequate lubrication and maintaining good oil cleanliness and what methods can be applied during gearbox repairs to ensure good oil cleanliness is achieved. It is also required that attention be given to the importance of ensuring gear misalignment is prevented and what actions could result in gear misalignment. Practical training shall also be given to demonstrate how these

gearboxes are refurbished and shall include a step-by-step work instruction with photos.

National Industrialisation Participation Programme

NIPP is a programme that seeks to leverage economic benefits and support the development of South African industry by effectively utilizing the instrument of government procurement. The NIPP programme is mandatory on all government and parastatal purchases or lease contracts (goods and services) with an imported content equal to or exceeding US$5 million.

The programme is targeted at the South African and foreign industries, enterprises, and suppliers of goods and services to government / parastatals, where the imported content of such goods and services equals to or exceeds US$5 million. The first customer of NIPP is the South African industry that benefits through the NIPP business plans which, when implemented generate new or additional business activities through one or more of the following: investment, export opportunities, job creation, increased local sales, SMME and BEE promotion, R & D and technology transfer.

Companies with a NIPP obligation are required to sign this obligation agreement with The Department of Trade, Industry and Competition (the dtic) before the contract with Eskom Holdings SOC Ltd, as a purchasing entity, is signed. The obligation agreement governs the relationship between the dtic and supplier. It defines the NIPP obligation value/s, requirements to fulfil the NIPP obligation, performance milestones, performance monitoring processes and the NIPP credit allocation criteria.

All tenders with an import content that is equal to or exceeds the threshold of US$5 million, compels the winning bidder to negotiate and enter into a NIPP obligation agreement with the dtic before signing the contract with Eskom."

Retention

1. Eskom shall be permitted to retain 2.5% (two and half percent) of the invoices (excluding VAT) as security for the fulfilment by the tenderers of their SD&L obligations.

2. Once Eskom has verified that tenderers have fulfilled their SD & L obligations, the 2.5% retained shall be approved for reimbursement by Eskom to suppliers within 90 (ninety) days of verification by Eskom.

Reporting

1. The tenderers shall on a monthly /quarterly basis submit a report to Eskom in accordance with Data Collection Template on their compliance with the SD& L obligations described above.
2. Eskom shall review the quarterly reports submitted by the tenderers within 60 (sixty) days of receipt of the reports and notify the tenderers in writing if their SD&L obligations have not been met.
3. Upon notification by Eskom that the tenderers have not met their SD&L obligations, the tenderers shall be required to implement corrective measures to meet those SD&L obligations before the commencement of the following quarter, failing which retention clauses shall be invoked.
4. Every contract shall be accompanied by the SD&L implementation schedule which must be completed by the tenderers and returned to SD&L representative for acceptance **before** contract award. This will be used as a reference document for monitoring, measuring, and reporting on the tenderer's progress in delivering on their stated SD&L commitments.

a. Subcontracting

i. Limitations on subcontracting

No more than 15% of the contract may be subcontracted.