



## NEC3 Term Service Contract (TSC3)

Between **ESKOM HOLDINGS SOC LIMITED**  
(Reg No. 2002/015527/06)

and Contractor \_\_\_\_\_  
(Reg No. \_\_\_\_\_ )

For **Auxiliary Cooling Open Cycle Chemical Supply and  
Service at Kusile Power Station for Five years**

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**CONTRACT No.**

**PART C1:      AGREEMENTS & CONTRACT DATA**

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# C1.1 Form of Offer & Acceptance

## Section 1.01 Offer

### Title of the Contract

#### Auxiliary Cooling Open Cycle Chemical Supply and Service at Kusile Power Station for Five Years

By the representative of the tenderer, deemed to be duly authorised, signing this part of this Form of Offer and Acceptance the tenderer offers to perform all of the obligations and liabilities of the *Contractor* under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the *conditions of contract* identified in the Contract Data.

Option A	The offered total of the Prices exclusive of VAT is	<b>R12 759 415.28</b>
	<b>Twelve Million Seven Hundred Fifty Nine Thousand and Four Hundred Fifteen Rand and Twenty Eight Cent.</b>	

This Offer may be accepted by the Employer by signing the Acceptance part of this Form of Offer and Acceptance and returning one copy of this document including the Schedule of Deviations (if any) to the tenderer before the end of the period of validity stated in the Tender Data, or other period as agreed, whereupon the tenderer becomes the party named as the *Contractor* in the *conditions of contract* identified in the Contract Data.

Signature(s)

Name(s)

Capacity

**For the  
tenderer:**

Name &  
signature of  
witness

Date

Tenderer's CIDB registration number:

N/A

## Section 1.02 Acceptance

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

The terms of the contract, are contained in:

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

and drawings and documents (or parts thereof), which may be incorporated by reference into the above listed Parts.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Returnable Schedules as well as any changes to the terms of the Offer agreed by the tenderer and the Employer during this process of offer and acceptance, are contained in the Schedule of Deviations attached to and forming part of this Form of Offer and Acceptance. No amendments to or deviations from said documents are valid unless contained in this Schedule.

The tenderer shall within two weeks of receiving a completed copy of this agreement, including the Schedule of Deviations (if any), contact the Employer's agent (whose details are given in the Contract Data) to arrange the delivery of any securities, bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the *conditions of contract* identified in the Contract Data at, or just after, the date this agreement comes into effect. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

Notwithstanding anything contained herein, this agreement comes into effect on the date when the tenderer receives one fully completed original copy of this document, including the Schedule of Deviations (if any).

Signature(s)

Name(s)

Capacity

for the  
Employer

**Eskom Holdings SOC Limited**  
Kusile Power Station  
R545 Kendal/Balmoral Rd  
Haartebeesfontein Farm  
Witbank

Name &  
signature of  
witness

Date

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

**Section 1.03 Schedule of Deviations to be completed by the *Employer* prior to contract award**

No.	Subject	Details
1		
2		
3		
4		
6		
7		
8		
9		

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

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

**(i) For the tenderer:**

**(ii) For the Employer**

Signature	_____	_____
Name	_____	_____
Capacity	_____	_____
On behalf of	_____	<b>Eskom Holdings SOC Limited</b>
		Kusile Power Station
		R545 Kendal/Balmoral Rd
		Haartebeesfontein Farm
		Witbank
Name & signature of witness	_____	_____
Date	_____	_____

## C1.2 TSC3 Contract Data

### Article II. Part one - Data provided by the *Employer*

Clause	Section 2.01 Statement	Section 2.02 Data
1	<b>Section 2.03 General</b>	<b>Section 2.04</b>
	The <i>conditions of contract</i> are the core clauses and the clauses for main Option:  [Redacted] dispute resolution Option and secondary Options  [Redacted]  [Redacted]  of the NEC3 Term Service Contract (June 2005) <sup>1</sup>	<b>A: Priced contract with price list</b> <b>W1: Dispute resolution procedure</b>  <b>X1: Price adjustment for inflation</b> <b>X2: Changes in the law</b> <b>X17: Low Service Damages</b> <b>X18: Limitation of liability</b> <b>X19: Task Order</b> <b>X20: Key performance indicators</b> <b>Z: Additional conditions of contract</b>
10.1	The <i>Employer</i> is (name):  Address  Tel No.  Fax No.	<b>Eskom Holdings SOC Limited (Reg No: 2002/015527/06), a juristic person incorporated in terms of the company laws of the Republic of South Africa</b>  <b>Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg</b>  <b>+27 11 800 8111</b>
10.1	The <i>Service Manager</i> is (name):  Address  Tel  Fax  e-mail	<b>Evans Ramabina</b>  <b>Kusile Power Station R545 Kendal/Balmoral Rd Haartebeesfontein Farm Witbank</b>  <b>+27 13 295 9033</b>

<sup>1</sup> Available from Engineering Contract Strategies Tel 011 803 3008 Fax 011 803 3009

11.2(2)	The Affected Property is	Kusile Power Station
11.2(13)	The <i>service</i> is	For the provision of Auxiliary Cooling Open Cycle Chemical Supply and Service at Kusile Power Station
11.2(14)	The following matters will be included in the Risk Register	
11.2(15)	The Service Information is in	Part 3: Scope of Work and all documents and drawings to which it makes reference.
12.2	The <i>law of the contract</i> is the law of	the Republic of South Africa
13.1	The <i>language of this contract</i> is	English
13.3	The <i>period for reply</i> is	48 hours
Section 2	<b>Section 2.06 The Contractor's main responsibilities</b>	(If the optional statement for this section is not used, no data will be required for this section)
21.1	The <i>Contractor</i> submits a first plan for acceptance within	Two weeks of the Contract Date
Section 2	<b>Section 2.08 Time</b>	<b>Section 2.09</b>
30.1	The <i>starting date</i> is.	
30.1	The <i>service period</i> is	60 Months
Section 2	<b>Section 2.11 Testing and defects</b>	Section 2.12 No data is required for this section of the <i>conditions of contract</i> .
Section 2	<b>Section 2.14 Payment</b>	<b>Section 2.15</b>
50.1	The <i>assessment interval</i> is	25 <sup>th</sup> day of each successive month.
51.1	The <i>currency of this contract</i> is the	South African Rand
51.2	The period within which payments are made is	Four weeks after invoice received.
51.4	The <i>interest rate</i> is	<p>(i) zero percent above the publicly quoted prime rate of interest (calculated on a 365 day year) charged by from time to time by the Standard Bank of South Africa (as certified, in the event of any dispute, by any manager of such bank, whose appointment it shall not be necessary to prove) for amounts due in Rands and</p> <p>(ii) the LIBOR rate applicable at the time for amounts due in other currencies. LIBOR is the 6 month London Interbank Offered Rate quoted under the caption "Money Rates" in The Wall Street Journal for the applicable currency or if no rate is quoted for the currency in question then the rate for United States Dollars, and if no such rate appears in The Wall Street Journal then the rate as quoted by the Reuters Monitor Money Rates Service (or such service as may replace the Reuters Monitor Money Rates Service) on the due date for the payment in</p>

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.

Section 2 <b>Section 2.17 Compensation events</b>		
	These are additional compensation events:	Any work or task undertaken outside the agreed scope of work
Section 2	<b>Section 2.19 Use of Equipment Plant and Materials</b>	<b>Section 2.20 Contractor to provide their equipment and plant. Third party equipment and plant used at own risk</b>
Section 2 <b>Section 2.22 Risks and insurance</b> <b>Section 2.23</b>		
80.1	These are additional <i>Employer's</i> risks	
83.1	The <i>Employer</i> provides these insurances from the Insurance Table	<b>as stated for "Format TSC3" available on <a href="http://www.eskom.co.za/Tenders/InsurancePoliciesProcedures/Pages/EIMS_Policies_From_1_April_2014_To_31_March_2015.aspx">http://www.eskom.co.za/Tenders/InsurancePoliciesProcedures/Pages/EIMS_Policies_From_1_April_2014_To_31_March_2015.aspx</a> (See Annexure A for basic guidance).</b>
83.1	The <i>Employer</i> provides these additional insurances	<b>as stated for "Format TSC3" available on <a href="http://www.eskom.co.za/Tenders/InsurancePoliciesProcedures/Pages/EIMS_Policies_From_1_April_2014_To_31_March_2015.aspx">http://www.eskom.co.za/Tenders/InsurancePoliciesProcedures/Pages/EIMS_Policies_From_1_April_2014_To_31_March_2015.aspx</a> (See Annexure A for basic guidance)</b>
83.1	The minimum amount of cover for insurance against loss and damage caused by the <i>Contractor</i> to the <i>Employer's</i> property is	<b>the amount of the deductibles relevant to the event described in the "Format TSC3" insurance policy available on <a href="http://www.eskom.co.za/Tenders/InsurancePoliciesProcedures/Pages/EIMS_Policies_From_1_April_2014_To_31_March_2015.aspx">http://www.eskom.co.za/Tenders/InsurancePoliciesProcedures/Pages/EIMS_Policies_From_1_April_2014_To_31_March_2015.aspx</a></b>
83.1	The minimum amount of cover for loss of or damage to Plant and Materials provided by the <i>Employer</i> is:	
83.1	The minimum amount of cover for insurance in respect of loss of or damage to property (except the <i>Employer's</i> property, Plant and Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the <i>Contractor</i> ) arising from or in connection with the <i>Contractor's</i> Providing the Service for any one event is:	<b>whatever the <i>Contractor</i> deems necessary in addition to that provided by the <i>Employer</i>.</b>
83.1	The minimum limit of indemnity for insurance in respect of death of or bodily	<b>As prescribed by the Compensation for Occupational Injuries and Diseases Act No. 130</b>



	injury to employees of the <i>Contractor</i> arising out of and in the course of their employment in connection with this contract for any one event is:	of 1993 and the <i>Contractor's</i> common law liability for people falling outside the scope of the Act with a limit of Indemnity of not less than R500 000 (Five hundred thousand Rands)..
<b>Section 2.25</b>	<b>Termination</b>	There is no Contract Data required for this section of the <i>conditions of contract</i> .
<b>Section 2.27</b>	<b>Data for main Option clause</b>	<b>Section 2.28</b>
<b>A</b>	<b>Priced contract with price list</b>	
20.5	The <i>Contractor</i> prepares forecasts of the final total of the Prices for the whole of the <i>service</i> at intervals no longer than	Four weeks / one months
<b>Section 2.30</b>	<b>Data for Option W1</b>	
W1.1	The <i>Adjudicator</i> is (Name)	the person selected from the ICE-SA Division (or its successor body) of the South African Institution of Civil Engineering Panel of Adjudicators by the Party intending to refer a dispute to him. (see <a href="http://www.ice-sa.org.za">www.ice-sa.org.za</a> ). If the Parties do not agree on an Adjudicator the Adjudicator will be appointed by the Arbitration Foundation of Southern Africa (AFSA).
W1.2(3)	The <i>Adjudicator nominating body</i> is:	the Chairman of ICE-SA a joint Division of the South African Institution of Civil Engineering and the Institution of Civil Engineers (London) (see <a href="http://www.ice-sa.org.za">www.ice-sa.org.za</a> ) or its successor body.
W1.4(2)	The <i>tribunal</i> is:	Arbitration
W1.4(5)	The <i>arbitration procedure</i> is	The latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.
	The place where arbitration is to be held is	South Africa
	The person or organisation who will choose an arbitrator	
	- if the Parties cannot agree a choice or	the Chairman for the time being or his nominee
	- if the arbitration procedure does not state who selects an arbitrator, is	of the Association of Arbitrators (Southern Africa) or its successor body.
<b>Section 2.32</b>	<b>Data for secondary Option clauses</b>	<b>Section 2.33</b>
<b>X2</b>	<b>Changes in the law</b>	No data is required for this Option
<b>X17</b>	<b>Low service damages</b>	No data is required for this Option
X17.1	The <i>service level table</i> is in	No data is required for this Option
<b>X18</b>	<b>Limitation of liability</b>	
X18.1	The <i>Contractor's</i> liability to the <i>Employer</i> for indirect or consequential loss is limited	

	to	<b>R0.0 (Zero Rand)</b>
X18.2	For any one event, the <i>Contractor's</i> liability to the <i>Employer</i> for loss of or damage to the <i>Employer's</i> property is limited to	<p><b>the amount of the deductibles relevant to the event described in the "Format TSC3" insurance policy available on</b>  <a href="http://www.eskom.co.za/Tenders/InsurancePolicies/Procedures/Pages/EIMS_Policies_From_1_April_2014_To_31_March_2015.aspx">http://www.eskom.co.za/Tenders/InsurancePolicies/Procedures/Pages/EIMS_Policies_From_1_April_2014_To_31_March_2015.aspx</a></p>
X18.3	The <i>Contractor's</i> liability for Defects due to his design of an item of Equipment is limited to	<p><b>The greater of</b></p> <ul style="list-style-type: none"> <li>• the total of the Prices at the Contract Date and</li> <li>• the amounts excluded and unrecoverable from the <i>Employer's</i> insurance (other than the resulting physical damage to the <i>Employer's</i> property which is not excluded) plus the applicable deductibles in the <i>Employer's</i> assets and works / maintenance policies available on  <a href="http://www.eskom.co.za/live/content.php?ItemID=9248">http://www.eskom.co.za/live/content.php?ItemID=9248</a></li> </ul>
X18.4	The <i>Contractor's</i> total liability to the <i>Employer</i> , for all matters arising under or in connection with this contract, other than the excluded matters, is limited to	<p><b>the total of the Prices other than for the additional excluded matters.</b></p> <p><b>The <i>Contractor's</i> total liability for the additional excluded matters is not limited.</b></p> <p><b>The additional excluded matters are amounts for which the <i>Contractor</i> is liable under this contract for</b></p> <ul style="list-style-type: none"> <li>• Defects due to his design, plan and specification,</li> <li>• Defects due to manufacture and fabrication outside the Affected Property,</li> <li>• loss of or damage to property (other than the <i>Employer's</i> property, Plant and Materials),</li> <li>• death of or injury to a person and</li> <li>• infringement of an intellectual property right.</li> </ul>
X18.5	The <i>end of liability date</i> is	<b>12 months after the end of the <i>service period</i>.</b>
<b>X19</b>	<b>Task Order</b>	
X19.5	The <i>Contractor</i> submits a Task Order programme to the <i>Service Manager</i> within	<b>Five (5) days of receiving the Task Order</b>
<b>X20</b>	<b>Key Performance Indicators (not used when Option X12 applies)</b>	
X20.1	The <i>incentive schedule</i> for Key Performance Indicators is in	
X20.2	A report of performance against each Key Performance Indicator is provided at intervals of	<b>One month</b>

<b>Z</b>	<b>The <i>additional conditions of contract</i> are</b>	<b>Z1 to Z11 always apply</b>
<b>Z1</b>	<b>Cession delegation and assignment</b>	
Z1.1	The <i>Contractor</i> does not cede, delegate or assign any of its rights or obligations to any person without the written consent of the <i>Employer</i> .	
Z1.2	Notwithstanding the above, the <i>Employer</i> may on written notice to the <i>Contractor</i> 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 and the Electricity Distribution Industry.	
<b>Z2</b>	<b>Joint ventures</b>	
Z2.1	If the <i>Contractor</i> 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 <i>Employer</i> for the performance of this contract.	
Z2.2	Unless already notified to the <i>Employer</i> , the persons or organisations notify the <i>Service Manager</i> within two weeks of the Contract Date of the key person who has the authority to bind the <i>Contractor</i> on their behalf.	
Z2.3	The <i>Contractor</i> does not substantially alter the composition of the joint venture, consortium or other unincorporated grouping of two or more persons without the consent of the <i>Employer</i> having been given to the <i>Contractor</i> in writing.	
<b>Z3</b>	<b>Change of Broad Based Black Economic Empowerment (B-BBEE) status</b>	
Z3.1	Where a change in the <i>Contractor's</i> legal status, ownership or any other change to his business composition or business dealings results in a change to the <i>Contractor's</i> B-BBEE status, the <i>Contractor</i> notifies the <i>Employer</i> within seven days of the change.	
Z3.2	The <i>Contractor</i> is required to submit an updated verification certificate and necessary supporting documentation confirming the change in his B-BBEE status to the <i>Service Manager</i> within thirty days of the notification or as otherwise instructed by the <i>Service Manager</i> .	
Z3.3	Where, as a result, the <i>Contractor's</i> B-BBEE status has decreased since the Contract Date the <i>Employer</i> may either re-negotiate this contract or alternatively, terminate the <i>Contractor's</i> obligation to Provide the Works.	
Z3.4	Failure by the <i>Contractor</i> to notify the <i>Employer</i> of a change in its B-BBEE status may constitute a reason for termination. If the <i>Employer</i> terminates in terms of this clause, the procedures on termination are P1, P2 and P4 as stated in clause 92, and the amount due is A1 and A3 as stated in clause 93.	
<b>Z4</b>	<b>Ethics</b>	
Z4.1	Any offer, payment, consideration, or benefit of any kind made by the <i>Contractor</i> , which constitutes or could be construed either directly or indirectly as an illegal or corrupt practice, as an inducement or reward for the award or in execution of this contract constitutes grounds for terminating the <i>Contractor's</i> obligation to Provide the Service or taking any other action as appropriate against the <i>Contractor</i> (including civil or criminal action).	
Z4.2	The <i>Employer</i> may terminate the <i>Contractor's</i> obligation to Provide the Service if the <i>Contractor</i> (or any member of the <i>Contractor</i> where the <i>Contractor</i> constitutes a joint venture, consortium or other unincorporated grouping of two or more persons or organisations) is found guilty by a	

competent court, administrative or regulatory body of participating in illegal or corrupt practices.

Such practices include making of offers, payments, considerations, or benefits of any kind or otherwise, whether in connection with any procurement process or contract with the *Employer* or other people or organisations and including in circumstances where the *Contractor* or any such member is removed from the an approved vendor data base of the *Employer* as a consequence of such practice.

- Z4.3 Notwithstanding the provisions of core clause 90.2, the procedures on termination in terms of this clause are P1, P2 and P4 as stated in the core clause 92 and the amount due is A1 and A3 as stated in core clause 93.

## **Z5 Confidentiality**

- Z5.1 The *Contractor* does not disclose or make any information arising from or in connection with this contract available to Others. This undertaking does not, however, apply to information which at the time of disclosure or thereafter, without default on the part of the *Contractor*, enters the public domain or to information which was already in the possession of the *Contractor* at the time of disclosure (evidenced by written records in existence at that time). Should the *Contractor* disclose information to Others in terms of clause 25.1, the *Contractor* ensures that the provisions of this clause are complied with by the recipient.
- Z5.2 If the *Contractor* is uncertain about whether any such information is confidential, it is to be regarded as such until notified otherwise by the *Service Manager*.
- Z5.3 In the event that the *Contractor* is, at any time, required by law to disclose any such information which is required to be kept confidential, the *Contractor*, to the extent permitted by law prior to disclosure, notifies the *Employer* so that an appropriate protection order and/or any other action can be taken if possible, prior to any disclosure. In the event that such protective order is not, or cannot, be obtained, then the *Contractor* may disclose that portion of the information which it is required to be disclosed by law and uses reasonable efforts to obtain assurances that confidential treatment will be afforded to the information so disclosed.
- Z5.4 The taking of images (whether photographs, video footage or otherwise) of the Affected Property or any portion thereof, in the course of Providing the Service and after the end of the *service period*, requires the prior written consent of the *Service Manager*. All rights in and to all such images vests exclusively in the *Employer*.
- Z5.5 The *Contractor* ensures that all his subcontractors abide by the undertakings in this clause.

## **Z6 Waiver and estoppel: Add to core clause 12.3:**

- Z6.1 Any extension, concession, waiver or relaxation of any action stated in this contract by the Parties, the *Service Manager* or the *Adjudicator* does not constitute a waiver of rights, and does not give rise to an estoppel unless the Parties agree otherwise and confirm such agreement in writing.

## **Z7 Health, safety and the environment: Add to core clause 27.4**

- Z7.1 The *Contractor* undertakes to take all reasonable precautions to maintain the health and safety of persons in and about the execution of the *service*. Without limitation the *Contractor*:
- accepts that the *Employer* may appoint him as the "Principal Contractor" (as defined and provided for under the Construction Regulations 2003 (promulgated under the Occupational Health & Safety Act 85 of 1993) ("the Construction Regulations") for the Affected Property;
  - warrants that the total of the Prices as at the Contract Date includes a sufficient amount for proper compliance with the Construction Regulations, all applicable health & safety laws and regulations and the health and safety rules, guidelines and procedures provided for in

this contract and generally for the proper maintenance of health & safety in and about the execution of the *service*; and

- undertakes, in and about the execution of the *service*, to comply with the Construction Regulations and with all applicable health & safety laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the *Contractor's* direction and control, likewise observe and comply with the foregoing.

Z7.2 The *Contractor*, in and about the execution of the *service*, complies with all applicable environmental laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the *Contractor's* direction and control, likewise observe and comply with the foregoing.

## **Z8 Provision of a Tax Invoice and interest. Add to core clause 51**

Z8.1 Within one week of receiving a payment certificate from the *Service Manager* in terms of core clause 51.1, the *Contractor* provides the *Employer* with a tax invoice in accordance with the *Employer's* procedures stated in the Service Information, showing the amount due for payment equal to that stated in the payment certificate.

Z8.2 If the *Contractor* does not provide a tax invoice in the form and by the time required by this contract, the time by when the *Employer* is to make a payment is extended by a period equal in time to the delayed submission of the correct tax invoice. Interest due by the *Employer* in terms of core clause 51.2 is then calculated from the delayed date by when payment is to be made.

Z8.3 The *Contractor* (if registered in South Africa in terms of the companies Act) is required to comply with the requirements of the Value Added Tax Act, no 89 of 1991 (as amended) and to include the *Employer's* VAT number 4740101508 on each invoice he submits for payment.

## **Z9 Notifying compensation events**

Z9.1 Delete from the last sentence in core clause 61.3, "unless the *Service Manager* should have notified the event to the *Contractor* but did not".

## **Z10 Employer's limitation of liability**

Z10.1 The *Employer's* liability to the *Contractor* for the *Contractor's* indirect or consequential loss is limited to R0.00 (zero Rand)

Z10.2 The *Contractor's* entitlement under the indemnity in 82.1 is provided for in 60.1(12) and the *Employer's* liability under the indemnity is limited to compensation as provided for under the compensation events stated in this contract.

## **Z11 Termination: Add to core clause 91.1, at the second main bullet point, fourth sub-bullet point, after the words "against it":**

Z11.1 or had a judicial management order granted against it.

## **Z12 Supplier Development and Localisation**

### **Article III. Annexure A: Insurance provided by the Employer**

*These notes are provided as guidance to tendering contractors and the Contractor about the insurance provided by the Employer. Details of the insurance itself are available from the internet web link given below.*

1. Services provided in a TSC3 contract could include some element of construction or refurbishment as well as a continuous maintenance or operational service activity. If an event occurs which causes loss or damage, a claim could be made either against the *Employer's* "works" type policy which may be in place for the *Employer's* portion of the Affected Property concerned or against the *Employer's* assets policy which may be in place for the *Employer's* portion of the Affected Property concerned, or both.
2. The cover provided and the deductibles under the works policy are different to those under the assets policy. Each policy has a range of applicable deductibles depending on the location of the Affected Property and the nature of the insurable event.
3. The *Contractor* is required in terms of Contract Data for clause 83 to provide cover for the deductibles in the insurance provided by the *Employer*. This can be provided from his own resources on a 'self insured' basis or obtained by him from his own insurers. In order to assess the extent of this cover, tendering contractors and their brokers should consult the internet web link given below and scroll to '**Format TSC3**' to establish both the cover and the deductibles in relation to the *service* provided in terms of this contract.
4. Tendering contractors should note that cover provided by the *Employer* is only per the policies available on the internet web link listed below and may not be the cover required by the tendering contractor or as intended by each of the listed insurances in the left hand column of the Insurance Table in clause 83.2. In terms of clause 83.1 "the *Contractor* provides the insurances stated in the Insurance Table except any insurance which the *Employer* is to provide". Hence the *Contractor* provides insurance which the *Employer* does not provide and in cases where the *Employer* does provide insurance the *Contractor* insures for the difference between what the Insurance Table requires and what the *Employer* provides.
5. If Marine Insurance is required the *Contractor* needs to obtain a copy of the latest edition of Eskom's Marine Policies Procedures found at internet website given below.
6. **Further information and full details of all Eskom provided policies and procedures may be obtained from:**

**[http://www.eskom.co.za/live/content.php?Item\\_ID=9248](http://www.eskom.co.za/live/content.php?Item_ID=9248)**

## C1.2 Contract Data

### Article IV. Part two - Data provided by the *Contractor*

Section Clause	Section 4.02 Statement	Section 4.03 Data
10.1	The <i>Contractor</i> is (Name): Address Tel No. Fax No.	
11.2(8)	The <i>direct fee percentage</i> is The <i>subcontracted fee percentage</i> is	
11.2(14)	The following matters will be included in the Risk Register	
11.2(15)	The Service Information for the <i>Contractor's</i> plan is in:	
21.1	The plan identified in the Contract Data is contained in:	
24.1	The key persons are: 1 Name: Job: Responsibilities: Qualifications: Experience: 2 Name: Job: Responsibilities: Qualifications: Experience:	
		CV's (and further key person's data including CVs) are in the Contract data.
<b>A</b>	<b>Priced contract with price list</b>	
11.2(12)	The <i>price list</i> is in	
11.2(19)	The tendered total of the Prices is	<b>R</b>

## C1.3 Forms of Securities

### Pro formas for Bonds & Guarantees

For use with the NEC3 Supply Contract (December 2009)

***[Note to contract compiler:***

***Once it has been decided which securities are required for this contract delete from this file the ones not required, revise the notes below accordingly and delete this note.]***

The *conditions of contract* stated in the Contract Data Part 1 may include the following Options:

- Option X4: Parent company guarantee
- Option X13: Performance bond
- Option X14 Advanced payment to the *Supplier*

These Options require a bond or guarantee “in the form set out in the Goods Information”.

Pro forma documents for these bonds and guarantees are provided here for convenience but are to be treated as part of the Goods Information.

The organisation providing the bond / guarantee does so by copying the pro forma document onto its letterhead without any change to the text or format and completing the required details. The completed document is then given to the *Purchaser* within the time stated in the contract.



**PART 2: PRICING DATA**  
**NEC3 Supply Contract**

<b>Document reference</b>	<b>Title</b>	<b>No of pages</b>
C2.1	Pricing assumptions	2
C2.2	The <i>price schedule</i>	1

## C2.1 Pricing assumptions

### Article V. The *conditions of contract*

#### How *goods* and *services* are priced and assessed for payment

Clause 11 in NEC3 Supply Contract, December 2009 (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 <i>price schedule</i> unless later changed in accordance with this contract.
Assessing the amount due	50.2	<p>The amount due is</p> <ul style="list-style-type: none"><li>• the Price for each lump sum item in the Price Schedule which the <i>Supplier</i> has completed,</li><li>• where a quantity is stated for an item in the Price Schedule, an amount calculated by multiplying the quantity which the <i>Supplier</i> has completed by the rate,</li><li>• plus other amounts to be paid to the <i>Supplier</i>,</li><li>• less amounts to be paid by or retained from the <i>Supplier</i>.</li></ul> <p>Any tax which the law requires the <i>Purchaser</i> to pay to the <i>Supplier</i> is included in the amount due.</p>

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

#### Function of the Price Schedule

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

#### Preparing the *price schedule*

It will be assumed that the tendering supplier has read Pages 11 and 12 and Appendix 5 of the SC3 Guidance Notes before 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.

1 As the *Supplier* has an obligation to correct Defects (core clause 43.1) and there is no compensation event for this unless the Defect was due to a *Supplier's* risk, the lump sum Prices and rates must also include for the correction of Defects.

2 If the *Supplier* has decided not to identify a particular item in the *price schedule* at the time of tender the cost to the *Supplier* of doing the work is assumed to be included in, or spread across, the other Prices and rates in the *price schedule* in order to fulfil the obligation to Provide the Goods and Services for the tendered total of the Prices.

3 There is no adjustment to lump sum prices in the *price schedule* if the amount, or quantity, of work within that lump sum item of *goods* or *services* 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. See Clause 60.1.

4 Hence the Prices and rates tendered by the *Supplier* in the *price schedule* are inclusive of everything necessary and incidental to Providing the Goods and Services in accordance with the Goods Information, as it was at the time of tender, as well as correct any Defects not caused by a *Purchaser's* risk.

5 The *Supplier* does not have to allow in his Prices and rates for matters that may arise as a result of a compensation event. It should be noted that the list of compensation events includes those arising as a result of a *Purchaser's* risk event listed in core clause 80.1.

### **Format of the *price schedule***

(From Appendix 5 on page 78 of the SC3 Guidance Notes)

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 *services* 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*

### PRICING DATA

Description	Unit	Quantity Year 1	Quantity Year 2	Quantity Year 3	Quantity Year 4	Quantity Year 5	Price/unit	Price Year 1	Price Year 2	Price Year 3	Price Year 4	Price Year 5	Total
Oxidising Biocide – supply, delivery, offloading, dosing, monitoring and control	Kg	12000	12000	12000	12000	12000							
Non-Oxidising Biocide – supply, delivery, offloading, dosing, monitoring and control	Kg	12000	12000	12000	12000	12000							
Bio-dispersant-supply, delivery, offloading, dosing, monitoring and control	Kg	24000	24000	24000	24000	24000							
Scale/Corrosion inhibitor- supply, delivery, offloading, dosing, monitoring and control	Kg	18000	18000	18000	18000	18000							
Chemical dosing equipment – weekly inspections and maintenance	Sum	8	8	8	8	8							

**Auxiliary Cooling Open Cycle Chemical Supply and Service at Kusile Power Station**

Weekly cooling water analysis - report compilation and submittal	Sum	96	96	96	96	96							
Monthly cooling water microbiological analysis – total aerobic/anaerobic bacteria and H2S producers	Sum	24	24	24	24	24							
Monthly corrosion rate analysis – report compilation and submittal	Sum	24	24	24	24	24							
Quarterly cooling water Legionella sampling and analysis-Report compilation and submittal	Sum	8	8	8	8	8							
Six monthly cooling water microbiological analysis – report compilation and submittal	Sum	4	4	4	4	4							
<b>Grand Total</b>													

## PART 3: SCOPE OF WORK

Document reference	Title	No of pages
	This cover page	3
C3.1	<i>Employer's Service Information</i>	22

## C3.1: EMPLOYER'S SERVICE INFORMATION

### Content

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**Auxiliary Cooling Open Cycle Chemical Supply and Service at Kusile Power Station for Five years****1. Description of the service****1.1. Introduction**

Kusile Power Station utilizes two open cycle induced draft-cooling systems and two closed cycle cooling systems, namely West and East cooling plants. The closed circuit cooling system consists of conditioned demineralised water, which serves as a cooling medium to various auxiliary components in the power plant, whilst the open cycle cooling system uses filtered water as a cooling medium to the closed circuit cooling system. The West cooling plants serve units 1-3 and a common plant system and the East cooling plant serve units 4-6 and common plant system respectively. Potable water supply is provided as a stand-by (emergency) to the filtered water make-up. Each water type is supplied via different storage tanks and pumping systems.

**2. Supporting Clauses****2.1. Scope****2.1.1. Purpose**

This document aims at specifying Kusile power station chemistry function requirements for the proper running of Auxiliary Open Cycle Cooling System, in order to achieve excellent chemical control during the life time of the station.

**2.1.2. Applicability**

This document is applicable to:

- a) Kusile power station Chemical Services Department, Contractor and Subcontractors.
- b) Kusile Auxiliary Open Cycle Cooling System

**2.1.3. Effective date**

This document shall be effective from the date of authorisation.

**2.2. Normative/Informative References**

N/A

**2.2.1. Normative**

- [1] ISO 9001 Quality Management Systems
- [2] Occupational Health and Safety Act 85 of 1993

**2.2.2. Informative**

- [3] Chemistry Manual for Auxiliary and Ancillary cooling water systems - 240-1061921
- [4] Matimba Chemical Supply for Auxiliary Cooling and Water Treatment Plant Systems Contract (2010/05/13 – 2013/04/25)

**Auxiliary Cooling Open Cycle Chemical Supply and Service at Kusile Power Station for Five years**

- [5] Safety health and environment Specifications for Contractors - GVLIR 0007
- [6] Eskom Generation Asset Management Policy - GGPP 0975 Rev 0
- [7] Eskom Generation Asset Management Directive - GGD 1447 Rev 0
- [8] Power Station Classification Guideline - GGG 1099 Rev 0
- [9] Construction, Safety, Health and Environment Management in Eskom - 32/136 Rev 0 –
- [10] Eskom Generation Plant Safety Regulations - GGR 0992 Rev 2
- [11] Eskom Operating Regulations for High Voltage Systems - ESKPVAEY6
- [12] Eskom Information Security Policy - 32-85 Rev 0
- [13] Eskom Vehicle and Driver Safety Management Procedure - 32-93 Rev 0
- [14] 3 Integrated Business improvement – prevention and improvement Standard - 6-366 Rev 0
- [15] Smoking policy - 32-36 Rev 0
- [16] Lifting Machine procedure - 32-255 Rev 0
- [17] Mandatory SHE requirements for the Eskom procurement and supply chain management process - 32-726 Rev 0
- [18] Application of KKS plant coding (for new builds) - NMP47-7 Rev 1
- [19] Generation Leading Metrics manual - GGM 1539 Rev 0
- [20] Routine Work Management manual - GGM1490 Rev 0

**2.3. Definitions**

**Contractor:** Service provider contracted for supplying specific service to Eskom, Kusile Power Station.

**Employer:** Eskom, or Eskom Kusile Power Station

**2.4. Abbreviation**

<b>Abbreviation</b>	<b>Explanation</b>
BOM	Bill of Material
FI	Financial
KKS	Kraftwerk-Kenzeichnungs System
LAR	Limited Access Register.
LOPP	Life of Plant Plan
MM	Materials Management
NCR	Non-Conformance Report
PM	Preventive Maintenance
PPB	Parts per Billion
PPM	Part per Million
RT&D	Research, Testing and Development
SAP PM	System Application Products Plant Maintenance
SMP	Standard Maintenance Procedure

**Auxiliary Cooling Open Cycle Chemical Supply and Service at Kusile Power Station for Five years****2.5. Roles and Responsibilities****2.5.1. Contract Manager**

- a) Ensures that financial monitoring and control of the contract stays within the allocated budget.
- b) Ensuring Health, Safety, Environmental and Quality compliance is maintained and the Company's procedures and objectives are achieved.
- c) Shall ensure that all actions listed in this scope of work are undertaken (follow up, advice, consultation).
- d) Ensures procurement and reconciliation of materials is carried out in accordance with Company procedures to best value and to prevent delays.
- e) Liaises with all relevant stakeholders for any input.
- f) The requirements as stated in this procedure are fulfilled accordingly.

**2.5.2. Contract Supervisor**

- a) Shall implement this scope of work, perform random reviews and audits for adherence and provide assurance that any deviations will be corrected.

**2.5.3. Senior Chemist**

- a) Shall provide advices and technical support when necessary.

**2.6. Process for Monitoring**

The system specification is stipulated in Table 1 for the Open system. The specification of the make-up water is specified in Table 2; the make-up source for the Open system can change in future, should this happen, this URS needs to be reviewed and the Contract Supervisor shall notify the contractor of such changes, However it is the responsibilities of the contractor to verify the qualities.

**Table 1: Details of the Open Recirculation Cooling System**

<b>Cells</b>	8
<b>Delta T</b>	6°C
<b>Fill</b>	Splash pack fill
<b>Materials of construction</b>	Mildsteel, Concrete, 304SS, Polypropelene, PVC
<b>Max shell temperature</b>	34°C
<b>Supply temperature</b>	28°C
<b>Total Recirculation rate</b>	1168 l/s per cell
<b>Type</b>	Induced draft open cooling

**2.7. Related/Supporting Documents**

N/A

**Auxiliary Cooling Open Cycle Chemical Supply and Service at Kusile Power Station for Five years****3. Contract Requirements****3.1. Adherence to Eskom generic policies**

The Contractor shall comply with Eskom's policies and site regulations, including but not limited to, use of cell phones in restricted areas, adherence to Eskom's life-saving rules, adherence to Generation Occurrence Management Procedure, no smoking policy, zero tolerance on alcohol usage, etc. These requirements will be detailed during the induction training process.

**3.2. Contract Specifications**

The following work will be the Contractor's responsibility for East and West Auxiliary open cooling systems for the duration of the contract:

- a) Biocide Oxidising– Supply, delivery, offloading, dosing, replacement, monitoring and control
- b) Biocide Non-oxidising - Supply, delivery, offloading, dosing, replacement, monitoring and control
- c) Bio-dispersant - Supply, delivery, offloading, dosing, monitoring, replacement and control.
- d) Scale/Corrosion inhibitor - Supply, delivery, offloading, dosing, replacement, monitoring and control
- e) Chemical dosing equipment – Weekly inspections and maintenance.
- f) Weekly cooling water analysis - Report compilation and submittal.
- g) Monthly cooling water microbiological analysis – Total aerobic/anaerobic bacteria and H<sub>2</sub>S producers.
- h) Monthly corrosion rate analysis – Report compilation and submittal.
- i) Six monthly cooling water microbiological analysis – Report compilation and submittal.
- j) Quarterly Legionella Analysis - Report compilation and submittal.
- k) The contractor must supply and install corrosion coupon on the East cooling system only.
- l) The contractor must supply Chemical dosing equipment for East cooling system– erection, storage tanks, dosing pumps and piping. West cooling system chemical dosing equipment has already been installed.

The contractor must supply the chemicals, determine the dosing rate & time interval and monitor the chemical conditions (weekly) of both East and West Auxiliary open cooling systems to meet the specifications in table 2.

**Table 2: Filtered make up water, required cooling water specification and frequency of analysis**

Chemical parameter	Units	Specification	Frequency Eskom	For	Frequency Contractor
M-Alkalinity	mg/l CaCO <sub>3</sub>	60 to 150	D		W
Calcium	mg/l Ca	<200 to 400	W		W
Chloride	mg/l Cl	<400	W		W
Elect Conductivity	uS/m [25°C]	<3500	D		W

**Auxiliary Cooling Open Cycle Chemical Supply and Service at Kusile Power Station for Five years**

Iron	mg/l Fe	<500	W	W
Magnesium	mg/l Mg		W	W
Magnesium (Mg x SiO <sub>2</sub> )		<25000	W	W
pH	pH units [25°C]	8.3 to 8.9	D	W
Potassium	mg/l K	<500	W	W
Silica	mg/l Si	<150	W	W
Sodium	mg/l Na	<500	W	W
Sulphate	mg/l SO <sub>4</sub>	<1000	W	W
Turbidity	NTU	<15	D	W
Oil & grease	mg/l	<5	W	W
Total Hardness as CaCO <sub>3</sub>	mg/l	<500	D	W
Calcium carbonate precipitation Using Stasoft 4	mg/l	<30 with scale control program < 5 Without scale control program	W	W
Concentration Cycles		< 10	W	W
Total aerobic bacteria	CFUs.cm <sup>3</sup>	<10000	6M	M
Total anaerobic bacteria	CFUs.cm <sup>3</sup>	<1000	6M	M
Legionella	CFUs.cm <sup>3</sup>	<100	Q	Q
H <sub>2</sub> S producers	CFUs.cm <sup>3</sup>	<10	6M	M

**Auxiliary Cooling Open Cycle Chemical Supply and Service at Kusile Power Station for Five years**

Mild steel corrosion rate	Mils/year	<5	6M	M
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**3.2.1. Supply of Chemicals**

The contractor shall ensure that chemicals are ordered and delivered in time. The minimum amount of chemicals shall be 40% before topping up in order to ensure chemicals availability at all time. Chemicals supplied by the contractor are tested and approved by RT&D. The approval will be handed over to the employer for acceptance before chemicals are dosed into the plant. Delivery of chemicals will be notified to the Employer's representative 48 hours before delivery to the site can be made. Ignorance of this could result in chemicals being sent back at contractors own cost.

Off Loading of Chemicals: Offloading and filling of dosing tanks and removal of empty containers from site will be the Contractor's responsibility. The contractor must ensure that the off loaders are trained and declared competent. Competency certificates should be shared with the employer prior to the commencement of the contract

**3.2.2. Chemical Dosing Monitoring**

The contractor must supply the dosing equipment for East cooling system as required including dosing lines to the dosing points with stroke adjusters, pot test equipment, timers and containers with suitable volume, to contain sufficient chemicals until the next delivery date. (West cooling system dosing equipment installed). The contractor must supply any additional online monitoring equipment required to effectively monitor and control any chemical addition, corrosion / scaling potential and microbiological fouling potential on both East and West cooling. The employer will supply online conductivity and pH meter.

- A. Maintenance: The contractor will stay responsible for the maintenance of his equipment at his cost. No maintenance or repairs must be done without consulting the employers representative. The maintenance of equipment will be of such a nature that no failure would occur that will jeopardise the dosing of the plant.
- B. Electrical Supply Points for Pumps: The employer will provide the electrical supply points for the pumps. This supply points consists of 220V normal household three point plug.

**3.2.3. Chemicals used and monitoring**

The Contractor must determine the type and amount of chemicals used within the specified contract specifications and monitor the condition on a weekly basis to ensure they meet Eskom Auxiliary cooling standards 240-1061921. The contractor shall keep records of all analyses done (as per table 2), and a report to be handed over on the last Friday (and or not later than the last working day) of each month, for the duration of the contract to the Employer's representative. This report should include everything done by the Contractor during the month for chemicals usage, explain variance in chemical consumption, monitoring, pumps settings, maintenance and pot test results. Formal site meetings shall be held quarterly between the contractor and the employer, to discuss the reports and other contract related matters.

**3.2.4. Cooling Water Treatment**

The contractor must establish the cooling water treatment that will prevent the following:

- A. Corrosion on heat exchangers.
- B. Precipitation of scale on heat exchanger surfaces and on the cooling tower packing.
- C. Fouling of pipe-work heat exchanger surfaces, cooling water packing and prevent micro biologically induced corrosion.
- D. Formation of algae, fungi, bacteria and other micro-organisms that can create a corrosive environment or impair heat transfer process.
- E. Foaming due to the addition of chemicals used.

**Auxiliary Cooling Open Cycle Chemical Supply and Service at Kusile Power Station for Five years**

The cooling water treatment system must allow sufficiently high cycles of concentration in order to obtain "Zero Liquid Effluent Discharge" without compromising other important aspects such as corrosion and scale formation. Treatment programs must strive to reduce the amount of Sulphuric acid used.

The contractor must check the pump settings and dosage weekly. The Contractor shall check and replace the corrosion coupons at least once in two months. The Contractor shall check bacteria count once monthly as stipulated in Table 2. The Contractor shall check legionella count at least once in six months. Legionella testing must be done using an accredited laboratory using the most probable number method (MPN).

The contractor must establish a disinfection program to be followed when Legionella or Bacteria counts exceed limits, the program must also cater for periodic preventative disinfection to be done, and the frequency of such a program shall be determined by the contractor based on the results obtained.

### **3.2.5. Key Performance Indicators**

Performance of the Contractor shall be based on the Key performance criteria identified below by the employer. The employer together with the contractor shall verify and compare results on a monthly basis. Falsification or reporting of incorrect data to meet KPI's will lead to an NCR or termination of contract within a period determined by the employer. KPI's comprises of the following aspects:

KPI 1: Late submission of reports to the employer

KPI 2: Non-compliance to safety regulations

KPI 3: Out of specification results

### **3.3. Quality Management**

The Contractor must provide a complete Quality Assurance plan in accordance with the requirements of ISO 9001 2018 to the Employer for approval. This plan must ensure an integrated quality service as part of the contract. Execution of all quality related activities, including inspection and test plans compilation and execution, stores material quality inspections and all quality-related record keeping is part of the Contractor's scope of work.

### **3.4. Safety Management**

#### **3.4.1. Health and safety regulations**

The Eskom document Safety Specifications for Contractors 32-136 is of primary importance in the management of safety on site. The Contractor shall comply with the Kusile Health and Safety Policy. It is expected that the contractor attend Kusile Monthly Safety meeting and Tool Box Talks, Project manager shall send the meeting appointments.

#### **3.4.2. Permit to work system**

No work shall be carried out without a "PERMIT TO WORK". The Contractor must ensure compliance to all requirements as per the Plant Safety Regulations and Operating Regulations for High-voltage Systems. The Contractor's Responsible Person must ensure that all sources of possible danger are isolated. Details of the Permit to Work system can be found in the Plant Safety Regulations (PSR) GGR 0992 and Operating Regulations for High Voltage Systems (ORHVS) ESKVAEY6.

Contract Supervisor shall ensure that the Contractor sign limited access register at Water Treatment Plant before accessing the plant. It is the responsibilities of the Contractor to ensure compliance to limited access register procedure. The following activities under limited access register procedure must satisfy the following criteria:

- There is no risk of trip

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- There is no personal danger
- No plant isolation is required
- Activity duration is less than 12 hours
- Activity must be performed by a skilled person.

**3.4.3. Authorisation**

All Contractors must ensure they have responsible persons (in terms of PSR and ORHVS) for any work performed on the plant. This will require individuals to successfully complete a written and oral examination for the relevant regulation based on the Plant Safety Regulations and Operating Regulations for High Voltage Systems. All maintenance technically qualified (above semi-skilled) Contractors will be trained and authorised (in terms of PSR and ORHVS) within 3 months of contract award date. Training will be supplied by the Employer

**3.4.4. Plant Operation**

Only Eskom appointed personnel should operate plant.

**3.4.5. Task Risk Assessments**

The Employer and Contractor shall jointly conduct and document task risk assessments before work is performed. (According to procedure 32-520)

**3.4.6. Safety induction course**

A list of contractor employees requiring safety induction must be submitted at least 7 days in advance of arrival to site with the date and time of arrival so that the safety induction can be arranged prior. All the employees of the Contractor must attend a safety induction course before they are granted a site access permit. The induction-training program will cover safety rules and information essential to personnel employed on site, including Integrated Business Improvement (IBI) concepts. Site access permits remains the property of Eskom. Lost or damaged cards will be for the cost of the Contractor. The Contractor shall have no claim against the Employer in respect of delay at the security main gate.

**3.4.7. Local safety procedures**

The Contractor shall adhere to all local procedures. A list of local procedures is available on request from the Employer.

**3.4.8. Incidents/accidents**

All incidents and accidents must be reported to the Employer within 24 hours preferably during the same shift that the incident/accident occurred and the incident must be investigated within 7 days and corrective actions as well as recommendations should be put in place to prevent re-occurrences. An incident investigation report must be filed and closed-out with the Employers Risk management department. First aid and medical services will be available at the Kusile medical centre.

**3.4.9. Fire prevention**

Fire prevention and protection requirements to which Contractors must comply with will be detailed in the local procedures.



**Auxiliary Cooling Open Cycle Chemical Supply and Service at Kusile Power Station for Five years****3.4.10. Statutory appointments**

The Contractor shall comply with all statutory appointments required in terms of the Occupational Health and Safety Act of (No 85 of 1993) OHS Act. All Contractors are expected to be conversant with and comply with all relevant requirements of the OHS Act.

**3.4.11. Safety Documentation**

The Contractor is responsible to have the following documentation available on site in accordance with the local procedures and with reference to the Eskom procedure 32- 726:

- A. A copy of the OHS-Act.
- B. Safety organisation and appointments
- C. Copies of all site accident report forms as required by the OHS-Act.
- D. Copies of minutes of health and safety meetings held on site.
- E. Copies of inspection reports produced by the accident prevention officer.
- F. Task Risk Assessments that have been conducted jointly by the Employer and Contractor.

**3.5. Environmental Management****3.5.1. Environmental Policy and Waste Handling**

Kusile Environmental Policy must be adhered to.

**3.5.2. Disposal of Waste**

Waste shall be removed promptly to the designated disposal areas. No stockpiling will be permitted. The Contractor is to split the waste that can be recycled according to their classifications e.g. paper, glass,

**3.5.3. Hazardous Waste Disposal and Handling**

Hazardous/toxic waste includes all waste that contains elements or compounds listed as hazardous substances in terms of the Hazardous Substances Act No. 15 of 1973. The Contractor is responsible for the safe removal of their hazardous waste to Kusile's Hazardous Waste Storage Area. Other requirements for hazardous waste will be detailed in the local procedures. The Employer will be responsible for the safe removal of such waste to a registered Class I site by a waste removal and disposal Contractor (who will be required to produce a certificate of safe disposal in accordance with the local procedures). The Contractor must ensure that persons handling hazardous waste have undergone suitable training and are acquainted with cleaning methods in case of a spillage. The philosophy around spillages is whoever spills pays. Permission must be sought from the Employers Risk Management group prior to any hazardous materials being brought onto site.

**3.6. Plant Spares and Material****3.6.1. Consumables**

The Contractor is responsible to procure any consumables required in the execution of this scope of work.

**3.7. Site Services Provided by the Employer****3.7.1. General**

Use of services provided by the Employer where the benefit to be gained is not for Eskom Kusile Power Station, need to be formally approved by Kusile Power Station General Manager.

**Auxiliary Cooling Open Cycle Chemical Supply and Service at Kusile Power Station for Five years****3.7.2. Supply of Electricity**

Kusile Power Station supplies electricity needed for the execution of the Contractor's scope of work. All points of supply requested by the Contractor are provided in terms of quantity and location at the discretion of the Employer. Under no circumstances is the Contractor or Contractor's employees allowed connecting up to any electrical supply without the prior permission of the Employer. All electrical installations or portable electrical equipment used on Kusile site shall comply with all relevant statutory regulations and requirements. For Contractor owned electrical equipment not tracked on SAP PM, an asset register shall be kept containing as a minimum requirement, the maintenance strategy for each item in service. Inspections shall be completed and signed off based on the required frequency in the register stating reference numbers of supporting documents, date and persons' name responsible for the inspection.

Failure to comply with the safety requirements shall lead to immediate disconnection and an NCR shall be raised against the Contractor. No guarantees of power supply quality are given and power supply breaks of some duration may occur without warning and it shall not be grounds for additional time or compensation.

**3.7.3. Water**

Kusile Power Station supplies water needed for the execution of the Contractor's scope of work. Under no circumstances is the Contractor or Contractor's employees allowed to connect to any piped services without the permission of the Employer. The Employer makes available free of charge, potable water as required for the purpose of this Contract. The Employer does not guarantee continuity of supply and in such cases the Contractor makes provision for standby supplies to maintain continuity.

The Employer makes available, free of charge, demineralised water as required for the works.  
(Demineralised water and water for fire systems may not be consumed by human beings).

The variation of pressure in the water supply, or breakdown in the supply, is not considered grounds for additional time or compensation.

The Employer supplies a water connection point at the Contractors off-terrace allocated site area. The Contractor provides, at his own cost, all connection fittings, pipe work, temporary plumbing and pumps necessary to lead the water from the Employer's points of supply to the various points where it is required. The Contractor is responsible to maintain these facilities and to remove it at completion of the contracted work.

**3.7.4. Compressed Air**

Kusile Power Station supplies compressed air needed for the execution of the Contractor's scope of work. Under no circumstances is the Contractor or Contractor's employees allowed to connect to any piped services without the permission of the Employer. This supply is available for normal maintenance activities, and does not include for periods of extensive air consumption, e.g. during plant overhaul. The variation of pressure in the air supply, or breakdown in the supply, is not considered grounds for additional time or compensation.

**3.7.5. First Aid Centre**

Medical, ambulance and first aid facilities are provided on site by the Employer.

**3.7.6. Training**

The Employer will supply training on all Eskom specific and other special initiatives at direct cost rates.

**3.8. Site Services Provided by the Contractor****3.8.1. Electrical Equipment / Appliances, Lighting and Power**

Any electrical equipment or appliances used by the Contractor must comply with all relevant safety regulations and requirements, and be maintained in safe and proper working condition.

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Asset register to be maintained with corresponding history records (e.g. statutory inspections, repair reports)

**3.8.2. Water connection to workshop/office facility external to main station building**

The Contractor provides at his own cost, all connection fittings, pipe-work, temporary plumbing, and pumps necessary to lead the water from the point of supply to the various points where it is required, and maintain same in good condition. Excessive usage/consumption must be guarded against.

**3.8.3. Compressed Air supply**

The Contractor provides at own cost, all connection fittings and pipe-work necessary to lead the compressed air from the point of supply to the various points where it is required, maintain same and remove on completion of contract. Excessive usage/consumption must be guarded against.

**3.8.4. Housekeeping and security**

Each Contractor is responsible for the housekeeping of their workshop, office, work area, to a standard that is in line with Kusile PS management requirements. The Contractor is responsible for security of own facilities and equipment, as well as the equipment and facilities provided to the Contractor by the Employer.

**3.8.5. Working Hours**

A power station is a 24 hour/day, 7days/week, and 365-days/year business. Contractors will therefore have to ensure that staff is available to work extended shifts during times of plant emergency or high maintenance demand. The Employer must approve all overtime prior to any planned work.

**3.8.6. Standby Services**

The Contractor will ensure that staff with adequate expertise is available to manage plant issues on a 24-hour standby service. Response time to these standby services is 45 minutes.

**3.8.7. Accommodation and travelling**

The Contractor is responsible for staff accommodation, transportation and travelling cost.

**3.8.8. Sub-contracting**

All Sub-contractors are to be Employer approved Contractors / vendors / suppliers. If the Contractor is uncertain of the approval status of the Contractors / vendors / suppliers the Contractor formally requests from the Employer confirmation of the status. The Contractor does not procure the services of Contractors / vendors / suppliers without the prior approval of the Employer.

**3.9. Comn Site Services and Conditions****3.9.1. Roads and vehicles**

All traffic is limited to using existing roads.

All vehicles used on site, by the Contractor will be road worthy.

All road signs and traffic laws / regulations on site will be adhered to.

Damage caused to underground services, structures, etc., as a result of the Contractor not using the prescribed routes will be recovered from the Contractor.

All Contractors shall comply with Eskom Vehicle and Driver Procedure 32 – 93 and Construction Site Vehicles requirements.

**Auxiliary Cooling Open Cycle Chemical Supply and Service at Kusile Power Station for Five years****3.9.2. Sanitary Facilities**

The Employer will clean and maintain all toilet and shower/change room facilities on site.

**3.9.3. Clean-up after work**

The Contractor is responsible for cleaning up the work area. After completion of every works, the contract supervisor shall be called to inspect the site and ensure that it is in a presentable state. The Employer will perform ad-hoc inspections on the Contractor's work site.

**3.10. Security****3.10.1. Site access and departure**

All vehicles and persons entering or leaving site will be subjected to Security checks and or search. This includes, but is not limited to briefcases and toolboxes. Personal tools need to be listed and acknowledged by Security when brought on site. This list will be used for verification when the tools are removed from site.

**3.10.2. Equipment and material removal from site**

The Contractor is not allowed to remove any equipment or materials from site without producing the relevant forms or the equipment lists. If the equipment or material is to be removed the same day on which they were brought on to site, then the form will need to be produced at the gate when leaving the site. If the equipment or material is removed after this time then a Non-Returnable Gate

Release will be provided by the Employer's representative, on receipt of the original form with which the Contractor brought the equipment on site.

**3.10.3. Plant Access**

The Contractor and all contract employees will have to comply with all access requirements when working in areas designated as "limited access" areas e.g. equipment rooms, Transformer bays, switchgear rooms, etc. Entrance to these areas will be controlled using biometric control system (thumb print reader or any system that the Employer deems necessary), and will be monitored by Closed Circuit Television cameras.

**3.11. Site Establishment and Occupation****3.11.1. Application for Site Establishment**

The Employer allocates office and workshop sites and facilities. The location of the site or area is agreed upon during the site or area take-over inspection.

**3.11.2. Site Occupation**

The Contractor does not occupy any site, facility or area other than that allocated to him.

**3.12. Termination of Occupancy**

The site shall be vacated on completion or termination of contract within a reasonable time agreed with the Employer.

**3.13. Records**

None

**Auxiliary Cooling Open Cycle Chemical Supply and Service at Kusile Power Station for Five years****3.14. Annexes**

None

**4. Acceptance**

This document has been seen and accepted by:

<b>Name</b>	<b>Designation</b>
Joseph Ngqendesha	Engineering Group Manager (Acting)
Charlotte Tsumaki	Chemical Services Manager
Mohau Skhosana	Senior Technician Chemistry
Sithabile Ndlovu	Senior Technician Chemistry
Galeboe Kgarimetsa	Senior Supervisor Tech Chemistry
Evans Ramabina	Senior Chemist
Mpho Mokwena	Senior Supervisor Tech Chemistry
Bongani Ndala	Senior Supervisor Tech Chemistry

**5. Revisions**

<b>Date</b>	<b>Rev.</b>	<b>Compiler</b>	<b>Remarks</b>
September 2021	2	BK Manganyi	Review
January 2020	1	SP Ndlovu	New Contract Document

**6. Development Team**

The following people were involved in the development of this document:

- Sithabile Ndlovu
- Mohau Skhosana
- Khanyi Manganyi

**7. Acknowledgements**

The Development Team

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

<b>Title and purpose</b>	<b>Approximate time &amp; interval</b>	<b>Location</b>	<b>Attendance by:</b>
Operational and Liaison Meeting	Monthly, first Tuesday at 09:00	Kusile Power Station	<i>Employer, Contractor and Eskom Project department</i>

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

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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.

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

In addition to the Contractor's agreed personnel, other key stakeholders include Eskom's Project department and Eskom's Primary Energy Division. Contractor to provide organogram to Employer

**Documentation control**

Daily performance/operational reports to be sent to Service Manager. Monthly production and safety statistic report sent to Service Manager. Special events and or diversion to scope to be communicated in writing. All parties are responsible for document filing and safe keeping.

**Invoicing and payment**

The Z clauses make reference to invoicing procedures stated here in this Service Information. Also include a list of information which is to be shown on an invoice.

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

The *Contractor* shall address the tax invoice to

and include on each invoice the following information:

- Name and address of the *Contractor* and the *Service Manager*;
- The contract number and title;
- *Contractor's* VAT registration number;
- The *Employer's* VAT registration number 4740101508;
- Description of service provided for each item invoiced based on the Price List;
- Total amount invoiced excluding VAT, the VAT and the invoiced amount including VAT;
- (add other as required)

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

**Contract change management**

Contract change management will be communicated in writing by Employer to Contractor. Details of the stand-in person to be included in such communication. Contractor to acknowledge receipt of such notification in writing.

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

The Contractor is required to keep record and submit proof of all actuals, in order to be verified at invoice assessment.

**Insurance provided by the Employer**

As per NEC3 TSC

## **Training workshops and technology transfer**

Basic competency training and competency assessment to be provided by Contractor at the start of contract.

## **Design and supply of Equipment**

Equipment supplied must be in a safe working order at all times. Regular maintenance must be done on all equipment used to execute the services required.

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

### **Equipment**

As concluded by both parties prior to start of contract.

### **Information and other things**

Intellectual property and material remains property of client and shall be made available at the end of service period.

## **8. Health and safety, the environment and quality assurance**

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

The *Contractor* shall comply with the health and safety requirements as specified in the SHE specification.

### **Environmental constraints and management**

The *Contractor* shall comply with the health and safety requirements as specified in the SHE specification.

### **Quality assurance requirements**

The *Contractor* shall comply with the stockpile construction parameters stated in Kusile User Requirement Specification.