



## NEC3 Term Service Contract (TSC3)

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

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

for **The Maintenance, Installation and Supply of Spares  
for the Fire Detection and Protection System at  
Hendrina Power Station**

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<b>Contents:</b>	<b>No of pages</b>
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**CONTRACT No. [Insert at award stage]**

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## **PART C1:      AGREEMENTS & CONTRACT DATA**

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[to be inserted from Returnable Documents at award stage]	
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[to be inserted from Returnable Documents at award stage]	
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## C1.1 Form of Offer & Acceptance

### Offer

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

### The Maintenance, Installation and Supply of Spares for the Fire Detection and Protection System at Hendrina Power Station

The tenderer, identified in the Offer signature block, has examined the documents listed in the Tender Data and addenda thereto and by submitting this Offer has accepted the Conditions of Tender.

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

Options A or C	The offered total of the Prices exclusive of VAT is	R [●]
Option E	The first forecast of the total Defined Cost plus the Fee exclusive of VAT is	R [●]
	Sub total	R [●]
	Value Added Tax @ 15% is	R [●]
	The offered total of the amount due inclusive of VAT is <sup>1</sup>	R [●]
	(in words) [●]	

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

Signature(s)

Name(s)

Capacity

**For the  
tenderer:**

(Insert name and address of organisation)

Name &  
signature of  
witness

Date

Tenderer's CIDB registration number:

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

## Acceptance

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

The terms of the contract, are contained in:

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

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

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

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

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

Signature(s)

Name(s)

Capacity

**for the  
Employer**

(Insert name and address of organisation)

Name &  
signature of  
witness

Date

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

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

Note:

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

No.	Subject	Details
1	[•]	[•]
2	[•]	[•]
3	[•]	[•]
4	[•]	[•]
5	[•]	[•]
6	[•]	[•]
7	[•]	[•]

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

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

	For the tenderer:	For the Employer
Signature	_____	_____
Name	_____	_____
Capacity	_____	_____
On behalf of	(Insert name and address of organisation)	(Insert name and address of organisation)
Name & signature of witness	_____	_____
Date	_____	_____

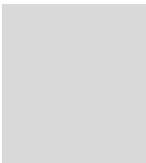

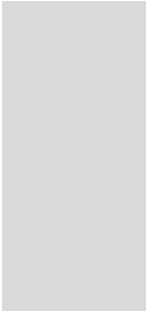

## C1.2 TSC3 Contract Data

### Part one - Data provided by the *Employer*

[Instructions to the contract compiler: (delete these two notes in the final draft of a contract)]

1. Please read the relevant clauses in the conditions of contract before you enter data. 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.
2. Some TSC3 options are always selected by Eskom Holdings SOC Ltd. The remaining TSC3 options are identified by shading in the left hand column. In the event that the option is not required select and delete the whole row. Where the following symbol is used "[●]" - data is required to be inserted relevant to the specific option selected.]

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

Clause	Statement	Data
1	<b>General</b>	
	The <i>conditions of contract</i> are the core clauses and the clauses for main Option:	
		A: Priced contract with price list
	dispute resolution Option	W1: Dispute resolution procedure
	and secondary Options	
		X1: Price adjustment for inflation
		X2: Changes in the law
		X17: Low service damages
		X18: Limitation of liability
		X19: Task Order
		Z: Additional conditions of contract
		
	of the NEC3 Term Service Contract April 2013 <sup>2</sup> (TSC3)	

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

10.1	The <i>Employer</i> is (name):	<b>Eskom Holdings SOC Ltd (reg no: 2002/015527/30), a state owned company incorporated in terms of the company laws of the Republic of South Africa</b>
	Address	<b>Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg</b>
	Tel No.	<b>[•]</b>
	Fax No.	<b>[•]</b>
10.1	The <i>Service Manager</i> is (name):	<b>Thandi Malobola</b>
	Address	<b>Hendrina Power Station</b>
	Tel	<b>013 296 3777</b>
	Fax	<b>013 296 3388]</b>
	e-mail	<b>malobodt@eskom.co.za]</b>
11.2(2)	The Affected Property is	<b>[•]</b>
11.2(13)	The <i>service</i> is	<b>The Maintenance, Installation and Supply of Spares for the Fire Detection and Protection System at Hendrina Power Station</b>
11.2(14)	The following matters will be included in the Risk Register	<b>[N/A</b>
11.2(15)	The Service Information is in	<b>Part 3: Scope of Work and all documents and drawings to which it makes reference.</b>
12.2	The <i>law of the contract</i> is the law of	<b>the Republic of South Africa</b>
13.1	The <i>language of this contract</i> is	<b>English</b>
13.3	The <i>period for reply</i> is	<b>[•] weeks</b>
2	<b>The <i>Contractor's</i> main responsibilities</b>	<b>Data required by this section of the core clauses is also provided by the <i>Contractor</i> in Part 2 and terms in italics used in this section are identified elsewhere in this Contract Data</b>
21.1	The <i>Contractor</i> submits a first plan for acceptance within	<b>[•] weeks of the Contract Date</b>
3	<b>Time</b>	
30.1	The <i>starting date</i> is.	<b>[•]</b>
30.1	The <i>service period</i> is	<b>5 Years</b>
4	<b>Testing and defects</b>	<b>There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data</b>
5	<b>Payment</b>	
50.1	The <i>assessment interval</i> is	<b>between the 25<sup>th</sup> day of each successive month.</b>

51.1	The <i>currency of this contract</i> is the	<b>South African Rand</b>
51.2	The period within which payments are made is	<b>[•] weeks.</b>
51.4	The <i>interest rate</i> is	<p>the publicly quoted prime rate of interest (calculated on a 365 day year) charged by from time to time by the Standard Bank of South Africa Limited (as certified, in the event of any dispute, by any manager of such bank, whose appointment it shall not be necessary to prove) for amounts due in Rands and</p> <p>(ii) the LIBOR rate applicable at the time for amounts due in other currencies. LIBOR is the 6 month London Interbank Offered Rate quoted under the caption “Money Rates” in The Wall Street Journal for the applicable currency or if no rate is quoted for the currency in question then the rate for United States Dollars, and if no such rate appears in The Wall Street Journal then the rate as quoted by the Reuters Monitor Money Rates Service (or such service as may replace the Reuters Monitor Money Rates Service) on the due date for the payment in question, adjusted <i>mutatis mutandis</i> every 6 months thereafter (and as certified, in the event of any dispute, by any manager employed in the foreign exchange department of The Standard Bank of South Africa Limited, whose appointment it shall not be necessary to prove.</p>
<b>6</b>	<b>Compensation events</b>	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data
<b>7</b>	<b>Use of Equipment Plant and Materials</b>	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data
<b>8</b>	<b>Risks and insurance</b>	
80.1	These are additional <i>Employer's</i> risks	<p>1. [•]</p> <p>2. [•]</p> <p>3. [•]</p>
<b>9</b>	<b>Termination</b>	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data.
<b>10</b>	<b>Data for main Option clause</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 service at intervals no longer than	<b>[•] weeks.</b>



<b>C</b>	<b>Target contract with price list</b>		
20.4	The <i>Contractor</i> prepares forecasts of the total Defined Cost for the whole of the service at intervals no longer than	[•] weeks.	
50.6	The <i>exchange rates</i> are those published in	[•] on [•] (date)	
53.1	The <i>Contractor's</i> share percentages and the share ranges are	<b>share range</b>  less than [•] % from [•]% to [•]% from [•]% to [•]% greater than [•]%	<b>Contractor's share %-age</b>  [•]% [•]% [•]% [•]%
53.3	The <i>Contractor's</i> share is assessed on (dates)	[•]	
<b>E</b>	<b>Cost reimbursable contract</b>		
20.4	The <i>Contractor</i> prepares forecasts of the total Defined Cost for the whole of the service at intervals no longer than	weeks /months	
	The <i>exchange rates</i> are those published in	[•] on [•] (date)	
<b>11</b>	<b>Data for Option W1</b>		
W1.1	The <i>Adjudicator</i>	the person selected from the ICE-SA Division (or its successor body) of the South African Institution of Civil Engineering Panel of Adjudicators by the Party intending to refer a dispute to him. (see <a href="http://www.ice-sa.org.za">www.ice-sa.org.za</a> ). If the Parties do not agree on an Adjudicator the Adjudicator will be appointed by the Arbitration Foundation of Southern Africa (AFSA).	
	Address	[•]	
	Tel No.	[•]	
	Fax No.	[•]	
	e-mail	[•]	
W1.2(3)	The <i>Adjudicator nominating body</i> is:	the Chairman of ICE-SA a joint Division of the South African Institution of Civil Engineering and the Institution of Civil Engineers (London) (see <a href="http://www.ice-sa.org.za">www.ice-sa.org.za</a> ) or its successor body.	
W1.4(2)	The <i>tribunal</i> is:	arbitration	
W1.4(5)	The <i>arbitration procedure</i> is	the latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.	
	The place where arbitration is to be held is	[•] South Africa	

	The person or organisation who will choose an arbitrator		the Chairman for the time being or his nominee of the Association of Arbitrators (Southern Africa) or its successor body.	
	<ul style="list-style-type: none"><li>- if the Parties cannot agree a choice or</li><li>- if the arbitration procedure does not state who selects an arbitrator, is</li></ul>			
12	Data for secondary Option clauses			
X1	Price adjustment for inflation			
X1.1	The <i>base date</i> for indices is	17 April 2025		
	The proportions used to calculate the Price Adjustment Factor are:	proportion	linked to index for	Index prepared by
	Labour (All hourly paid employees)	30%.	Table C3	Seifsa
	Transport	25%	Table L2 (A)	Seifsa
	Electrical spares	30%	Table G1	Seifsa
	Fixed	15%	Fixed	
X2	Changes in the law		There is no reference to Contract Data in this Option and terms in italics are identified elsewhere in this Contract Data.	
X3	Multiple currencies			
X3.1	The <i>Employer</i> will pay for these items or activities in the currencies stated	Items & activities	Other currency	Maximum payment in other currency
		[•]		
		[•]		
		[•]		
		[•]		
X3.1	The <i>exchange rates</i> are those published in	[•] on [•] (date)		
		The items & activities will be paid in the other currency		
		- to a foreign Bank account nominated by the Contractor		
		- to a valid SARB approved CFC account in South Africa		
		- in accordance with an alternative payment method agreed with the Employer before the Contract Date.		
		(select one of the three methods as agreed with the successful tenderer prior to contract award and delete the others and this note)		

<b>X4</b>	<b>Parent company guarantee</b>	There is no reference to Contract Data in this Option and terms in italics are identified elsewhere in this Contract Data.
<b>X12</b>	<b>Partnering</b>	
X12.1(1)	The <i>Client</i> is (Name):	[•]
	Address	[•]
	Contact details	[•]
	Telephone:	[•]
	Fax	[•]
	e-mail	[•]
X12.1(4)	The Partnering Information is in	Part 3 Scope of Work, section C3.[•]
X12.2(1)	The <i>Client's objective</i> is:	[•]
<b>X13</b>	<b>Performance bond</b>	
X13.1	The amount of the performance bond is	R [•]
<b>X17</b>	<b>Low service damages</b>	
X17.1	The <i>service level table</i> is in	[•]
<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	R0.0 (zero Rand)
X18.2	For any one event, the <i>Contractor's</i> liability to the <i>Employer</i> for loss of or damage to the <i>Employer's</i> property is limited to	the amount of the deductibles relevant to the event
X18.3	The <i>Contractor's</i> liability for Defects due to his design of an item of Equipment is limited to	<p>The greater of</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</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>the total of the Prices other than for the additional excluded matters.</p> <p>The <i>Contractor's</i> total liability for the additional excluded matters is not limited.</p> <p>The additional excluded matters are amounts for which the <i>Contractor</i> is liable under this contract for</p>

		<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	[•] months after the end of the <i>service period</i> .
<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	7 days of receiving the Task Order
<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	Annexure [•] to this Contract Data
X20.2	A report of performance against each Key Performance Indicator is provided at intervals of	[•] months
<b>Z</b>	<b>The <i>additional conditions of contract</i> are</b>	<b>Z1 to Z14 always apply.</b>

## **Z1 Cession delegation and assignment**

- Z1.1 The *Contractor* does not cede, delegate or assign any of its rights or obligations to any person without the written consent of the *Employer*.
- Z1.2 Notwithstanding the above, the *Employer* may on written notice to the *Contractor* cede and delegate its rights and obligations under this contract to any of its subsidiaries or any of its present divisions or operations which may be converted into separate legal entities as a result of the restructuring of the Electricity Supply Industry.

## **Z2 Joint ventures**

- Z2.1 If the *Contractor* constitutes a joint venture, consortium or other unincorporated grouping of two or more persons or organisations then these persons or organisations are deemed to be jointly and severally liable to the *Employer* for the performance of this contract.
- Z2.2 Unless already notified to the *Employer*, the persons or organisations notify the *Service Manager* within two weeks of the Contract Date of the key person who has the authority to bind the *Contractor* on their behalf.
- Z2.3 The *Contractor* does not alter the composition of the joint venture, consortium or other unincorporated grouping of two or more persons without the consent of the *Employer* having been given to the *Contractor* in writing.

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

- Z3.1 Where a change in the *Contractor's* legal status, ownership or any other change to his business composition or business dealings results in a change to the *Contractor's* B-BBEE status, the *Contractor* notifies the *Employer* within seven days of the change.
- Z3.2 The *Contractor* is required to submit an updated verification certificate and necessary supporting documentation confirming the change in his B-BBEE status to the *Service Manager* within thirty days of the notification or as otherwise instructed by the *Service Manager*.
- Z3.3 Where, as a result, the *Contractor's* B-BBEE status has decreased since the Contract Date the *Employer* may either re-negotiate this contract or alternatively, terminate the *Contractor's* obligation to Provide the Service.
- Z3.4 Failure by the *Contractor* to notify the *Employer* of a change in its B-BBEE status may constitute a reason for termination. If the *Employer* terminates in terms of this clause, the procedures on termination are P1, P2 and P4 as stated in clause 92, and the amount due is A1 and A3 as stated in clause 93.

## **Z4 Confidentiality**

- Z4.1 The *Contractor* does not disclose or make any information arising from or in connection with this contract available to Others. This undertaking does not, however, apply to information which at the time of disclosure or thereafter, without default on the part of the *Contractor*, enters the public domain or to information which was already in the possession of the *Contractor* at the time of disclosure (evidenced by written records in existence at that time). Should the *Contractor* disclose information to Others in terms of clause 25.1, the *Contractor* ensures that the provisions of this clause are complied with by the recipient.
- Z4.2 If the *Contractor* is uncertain about whether any such information is confidential, it is to be regarded as such until notified otherwise by the *Service Manager*.
- Z4.3 In the event that the *Contractor* is, at any time, required by law to disclose any such information which is required to be kept confidential, the *Contractor*, to the extent permitted by law prior to disclosure, notifies the *Employer* so that an appropriate protection order and/or any other action can be taken if possible, prior to any disclosure. In the event that such protective order is not, or cannot, be obtained, then the *Contractor* may disclose that portion of the information which it is required to be disclosed by law and uses reasonable efforts to obtain assurances that confidential treatment will be afforded to the information so disclosed.
- Z4.4 The taking of images (whether photographs, video footage or otherwise) of the Affected Property or any portion thereof, in the course of Providing the Service and after the end of the *service period*, requires the prior written consent of the *Service Manager*. All rights in and to all such images vests exclusively in the *Employer*.
- Z4.5 The *Contractor* ensures that all his subcontractors abide by the undertakings in this clause.

## **Z5 Waiver and estoppel: Add to core clause 12.3:**

- Z5.1 Any extension, concession, waiver or relaxation of any action stated in this contract by the Parties, the *Service Manager* or the *Adjudicator* does not constitute a waiver of rights, and does not give rise to an estoppel unless the Parties agree otherwise and confirm such agreement in writing.

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

- Z6.1 The *Contractor* undertakes to take all reasonable precautions to maintain the health and safety of persons in and about the execution of the *service*. Without limitation the *Contractor*.

- accepts that the *Employer* may appoint him as the "Principal Contractor" (as defined and provided for under the Construction Regulations 2014 (promulgated under the Occupational Health & Safety Act 85 of 1993) ("the Construction Regulations") for the Affected Property;
- warrants that the total of the Prices as at the Contract Date includes a sufficient amount for proper compliance with the Construction Regulations, all applicable health & safety laws and regulations and the health and safety rules, guidelines and procedures provided for in this contract and generally for the proper maintenance of health & safety in and about the execution of the *service*; and
- undertakes, in and about the execution of the *service*, to comply with the Construction Regulations and with all applicable health & safety laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the *Contractor's* direction and control, likewise observe and comply with the foregoing.

Z6.2 The *Contractor*, in and about the execution of the *service*, complies with all applicable environmental laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the *Contractor's* direction and control, likewise observe and comply with the foregoing.

## **Z7 Provision of a Tax Invoice and interest. Add to core clause 51**

- Z7.1 Within one week of receiving a payment certificate from the *Service Manager* in terms of core clause 51.1, the *Contractor* provides the *Employer* with a tax invoice in accordance with the *Employer's* procedures stated in the Service Information, showing the amount due for payment equal to that stated in the payment certificate.
- Z7.2 If the *Contractor* does not provide a tax invoice in the form and by the time required by this contract, the time by when the *Employer* is to make a payment is extended by a period equal in time to the delayed submission of the correct tax invoice. Interest due by the *Employer* in terms of core clause 51.2 is then calculated from the delayed date by when payment is to be made.
- Z7.3 The *Contractor* (if registered in South Africa in terms of the companies Act) is required to comply with the requirements of the Value Added Tax Act, no 89 of 1991 (as amended) and to include the *Employer's* VAT number 4740101508 on each invoice he submits for payment.

## **Z8 Notifying compensation events**

- Z8.1 Delete the last paragraph of core clause 61.3 and replace with:

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

## **Z9 Employer's limitation of liability**

- Z9.1 The *Employer's* liability to the *Contractor* for the *Contractor's* indirect or consequential loss is limited to R0.00 (zero Rand)
- Z9.2 The *Contractor's* entitlement under the indemnity in 82.1 is provided for in 60.1(12) and the *Employer's* liability under the indemnity is limited to compensation as provided for in core clause 63 and X19.11 if Option X19 Task Order applies to this contract.

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

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

## Z11 Ethics

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

<b>Affected Party</b>	means, as the context requires, any party, irrespective of whether it is the <i>Contractor</i> or a third party, such party's employees, agents, or Subcontractors or Subcontractor's employees, or any one or more of all of these parties' relatives or friends,
<b>Coercive Action</b>	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,
<b>Collusive Action</b>	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,
<b>Committing Party</b>	means, as the context requires, the <i>Contractor</i> , or any member thereof in the case of a joint venture, or its employees, agents, or Subcontractors or the Subcontractor's employees,
<b>Corrupt Action</b>	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,
<b>Fraudulent Action</b>	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,
<b>Obstructive Action</b>	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
<b>Prohibited Action</b>	means any one or more of a Coercive Action, Collusive Action Corrupt Action, Fraudulent Action or Obstructive Action.

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

Z11.2 The *Employer* may terminate the *Contractor's* obligation to Provide the Services if a Committing Party has taken such Prohibited Action and the *Contractor* did not take timely and appropriate action to prevent or remedy the situation, without limiting any other rights or remedies the *Employer* has. It is not required that the Committing Party had to have been found guilty, in court or in any other similar process, of such Prohibited Action before the *Employer* can terminate the *Contractor's* obligation to Provide the Services for this reason.

Z11.3 If the *Employer* terminates the *Contractor's* obligation to Provide the Services for this reason, the amounts due on termination are those intended in core clauses 92.1 and 92.2.

Z11.4 A Committing Party co-operates fully with any investigation pursuant to alleged Prohibited Action. Where the *Employer* does not have a contractual bond with the Committing Party, the *Contractor* ensures that the Committing Party co-operates fully with an investigation.

## Z12 Insurance

### Z 12 .1 Replace core clause 83 with the following:

#### **Insurance cover** 83

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

- 83.2 The *Contractor* provides the insurances stated in the Insurance Table A from the *starting date* until the earlier of Completion and the date of the termination certificate.

**INSURANCE TABLE A**

Insurance against	Minimum amount of cover or minimum limit of indemnity
Loss of or damage caused by the <i>Contractor</i> to the <i>Employer's</i> property	The replacement cost where not covered by the <i>Employer's</i> insurance.  The <i>Employer's</i> policy deductible as at Contract Date, where covered by the <i>Employer's</i> insurance.
Loss of or damage to Plant and Materials	The replacement cost where not covered by the <i>Employer's</i> insurance.  The <i>Employer's</i> policy deductible as at Contract Date, where covered by the <i>Employer's</i> insurance.
Loss of or damage to Equipment	The replacement cost where not covered by the <i>Employer's</i> insurance.  The <i>Employer's</i> policy deductible as at Contract Date, where covered by the <i>Employer's</i> insurance.
The <i>Contractor's</i> liability for loss of or damage to property (except the <i>Employer's</i> property, Plant and Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the <i>Contractor</i> ) arising from or in connection with the <i>Contractor's</i> Providing the Service	<b><u>Loss of or damage to property</u></b> The replacement cost  <b><u>Bodily injury to or death of a person</u></b> The amount required by the applicable law.
Liability for death of or bodily injury to employees of the <i>Contractor</i> arising out of and in the course of their employment in connection with this contract	The amount required by the applicable law

**Z 12.2 Replace core clause 86 with the following:**

**Insurance  
by the  
*Employer*** 86

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



## INSURANCE TABLE B

Insurance against or name of policy	Minimum amount of cover or minimum limit of indemnity
Assets All Risk	Per the insurance policy document
Contract Works insurance	Per the insurance policy document
Environmental Liability	Per the insurance policy document
General and Public Liability	Per the insurance policy document
Transportation (Marine)	Per the insurance policy document
Motor Fleet and Mobile Plant	Per the insurance policy document
Terrorism	Per the insurance policy document
Cyber Liability	Per the insurance policy document
Nuclear Material Damage and Business Interruption	Per the insurance policy document
Nuclear Material Damage Terrorism	Per the insurance policy document

### Z13 Nuclear Liability

- Z13.1 The *Employer* is the operator of the Koeberg Nuclear Power Station (KNPS), a nuclear installation, as designated by the National Nuclear Regulator of the Republic of South Africa, and is the holder of a nuclear licence in respect of the KNPS.
- Z13.2 The *Employer* is solely responsible for and indemnifies the *Contractor* or any other person against any and all liabilities which the *Contractor* or any person may incur arising out of or resulting from nuclear damage, as defined in Act 47 of 1999, save to the extent that any liabilities are incurred due to the unlawful intent of the *Contractor* or any other person or the presence of the *Contractor* or that person or any property of the *Contractor* or such person at or in the KNPS or on the KNPS site, without the permission of the *Employer* or of a person acting on behalf of the *Employer*.
- Z13.3 Subject to clause Z13.4 below, the *Employer* waives all rights of recourse, arising from the aforesaid, save to the extent that any claims arise or liability is incurred due or attributable to the unlawful intent of the *Contractor* or any other person, or the presence of the *Contractor* or that person or any property of the *Contractor* or such person at or in the KNPS or on the KNPS site, without the permission of the *Employer* or of a person acting on behalf of the *Employer*.
- Z13.4 The *Employer* does not waive its rights provided for in section 30 (7) of Act 47 of 1999, or any replacement section dealing with the same subject matter.
- Z13.5 The protection afforded by the provisions hereof shall be in effect until the KNPS is decommissioned.

### Z14 Asbestos

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

- AAIA** means approved asbestos inspection authority.
- ACM** means asbestos containing materials.

<b>AL</b>	means action level, i.e. a level of 50% of the OEL, i.e. 0.1 regulated asbestos fibres per ml of air measured over a 4 hour period. The value at which proactive actions is required in order to control asbestos exposure to prevent exceeding the OEL.
<b>Ambient Air</b>	means breathable air in area of work with specific reference to breathing zone, which is defined to be a virtual area within a radius of approximately 30cm from the nose inlet.
<b>Compliance Monitoring</b>	means compliance sampling used to assess whether or not the personal exposure of workers to regulated asbestos fibres is in compliance with the Standard's requirements for safe processing, handling, storing, disposal and phase-out of asbestos and asbestos containing material, equipment and articles.
<b>OEL</b>	means occupational exposure limit.
<b>Parallel Measurements</b>	means measurements performed in parallel, yet separately, to existing measurements to verify validity of results.
<b>Safe Levels</b>	means airborne asbestos exposure levels conforming to the Standard's requirements for safe processing, handling, storing, disposal and phase-out of asbestos and asbestos containing material, equipment and articles.
<b>Standard</b>	means the <i>Employer's</i> Asbestos Standard 32-303: Requirements for Safe Processing, Handling, Storing, Disposal and Phase-out of Asbestos and Asbestos Containing Material, Equipment and Articles.
<b>SANAS</b>	means the South African National Accreditation System.
<b>TWA</b>	means the average exposure, within a given workplace, to airborne asbestos fibres, normalised to the baseline of a 4 hour continuous period, also applicable to short term exposures, i.e. 10-minute TWA.

- Z14.1 The *Employer* ensures that the Ambient Air in the area where the *Contractor* will Provide the Services conforms to the acceptable prescribed South African standard for asbestos, as per the regulations published in GNR 155 of 10 February 2002, under the Occupational Health and Safety Act, 1993 (Act 85 of 1993) ("Asbestos Regulations"). The OEL for asbestos is 0.2 regulated asbestos fibres per millilitre of air as a 4-hour TWA, averaged over any continuous period of four hours, and the short term exposure limit of 0.6 regulated asbestos fibres per millilitre of air as a 10-minute TWA, averaged over any 10 minutes, measured in accordance with HSG248 and monitored according to HSG173 and OESSM.
- Z14.2 Upon written request by the *Contractor*, the *Employer* certifies that these conditions prevail. All measurements and reporting are effected by an independent, competent, and certified occupational hygiene inspection body, i.e. a SANAS accredited and Department of Employment and Labour approved AAIA. The *Contractor* may perform Parallel Measurements and related control measures at the *Contractor's* expense. For the purposes of compliance the results generated from Parallel Measurements are evaluated only against South African statutory limits as detailed in clause Z14.1. Control measures conform to the requirements stipulated in the AAIA-approved asbestos work plan.
- Z14.3 The *Employer* manages asbestos and ACM according to the Standard.
- Z14.4 In the event that any asbestos is identified while Providing the Services, a risk assessment is conducted and if so required, with reference to possible exposure to an airborne concentration of above the AL for asbestos, immediate control measures are implemented and relevant air monitoring conducted in order to declare the area safe.
- Z14.5 The *Contractor's* personnel are entitled to stop working and leave the contaminated area forthwith until such time that the area of concern is declared safe by either Compliance Monitoring or an AAIA approved control measure intervention, for example, per the emergency asbestos work plan, if applicable.

- Z14.6 The *Contractor* continues to Provide the Services, without additional control measures presented, on presentation of Safe Levels. The contractually agreed dates to Provide the Services, including the Completion Date, are adjusted accordingly. The contractually agreed dates are extended by the notification periods required by regulations 3 and 21 of the Asbestos Regulations, 2001.
- Z14.7 Any removal and disposal of asbestos, asbestos containing materials and waste, is done by a registered asbestos contractor, instructed by the *Employer* at the *Employer's* expense, and conducted in line with South African legislation.

## C1.2 Contract Data

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

**[Instructions to the contract compiler: (delete this notes before issue to tenderers with an enquiry)**

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 contractor:

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

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

Clause	Statement	Data
10.1	The <i>Contractor</i> is (Name): Address Tel No. Fax No.	
11.2(8)	The <i>direct fee percentage</i> is	%
	The <i>subcontracted fee percentage</i> is	%
11.2(14)	The following matters will be included in the Risk Register	
11.2(15)	The Service Information for the <i>Contractor's</i> plan is in:	
21.1	The plan identified in the Contract Data is contained in:	
24.1	The key people are:	
	1 Name:	
	Job:	
	Responsibilities:	
	Qualifications:	
	Experience:	
	2 Name:	
	Job	

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

Responsibilities:

Qualifications:

Experience:

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

<b>A</b>	<b>Priced contract with price list</b>
11.2(12)	The <i>price list</i> is in _____
11.2(19)	The tendered total of the Prices is <b>R</b> _____
<b>C</b>	<b>Target contract with price list</b>
11.2(12)	The <i>price list</i> is in _____
11.2(20)	The tendered total of the Prices is <b>R</b> _____
<b>E</b>	<b>Cost reimbursable contract</b>
11.2(12)	The <i>price list</i> is in _____

## C1.3 Forms of Securities

### Pro formas for Bonds & Guarantees

For use with the NEC3 Term Service Contract (TSC3)

***[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 include the following Secondary Options:

Option X4: Parent company guarantee  
Option X13: Performance Bond

Each of these secondary Options requires a bond or guarantee “in the form set out in the Service Information”. Pro forma documents for these bonds and guarantees are provided here for convenience but are to be treated as part of the Service Information.

The *Contractor* shall guarantee his ASGI-SA Obligations by providing the *Employer* with an ASGI-SA Guarantee in the form provided here.

***[Note to contract compiler: If there are no ASGI-SA Obligations in this contract, delete the above statement and the ASGI\_SA bond]***

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

## Pro forma Parent Company Guarantee (for use with Option X4)

(to be reproduced exactly as shown below on the letterhead of the Contractor's Parent Company)

Eskom Holdings SOC Ltd  
Megawatt Park  
Maxwell Drive  
Sandton  
Johannesburg

Date:

Dear Sirs,

### ***Parent Company Guarantee for Contract No***

With reference to the above numbered contract made or to be made between

**Eskom Holdings SOC Ltd**

(the *Employer*) and

**{Insert registered name and address of the Contractor}**

(the *Contractor*), for

**{Insert details of the works from the Contract Data}**

(the *works*).

I/We the undersigned

on behalf of the *Contractor's*  
parent company

of physical address

and duly authorised thereto do hereby unconditionally guarantee to the *Employer* that the *Contractor* shall Provide the Service in accordance with the above numbered Contract.

1. If for any reason the *Contractor* fails to Provide the Service, we hereby agree to cause to Provide the Service at no additional cost to the *Employer*.
2. If we fail to comply with the terms of this Deed of Guarantee, the *Employer* may itself procure such performance (whether or not the Agreement be formally determined). The *Employer* is to notify us and we shall indemnify the *Employer* for any additional cost or expense it incurs.
3. Our liability shall be as primary obligor and not merely as surety and shall not be impaired or discharged by reason of any arrangement or change in relationship made between the *Contractor* and the *Employer* and/or between us and *Contractor*; nor any alteration in the obligations undertaken by the *Contractor* or in the terms of the Agreement; nor any indulgence, failure, delay by you as to any matter; nor any dissolution or liquidation or such other analogous event of the *Contractor*.
4. The *Employer* shall not be obliged before taking steps to enforce the terms of this Deed of Guarantee to obtain judgement against the *Contractor* in any court or other tribunal, to make or file any claim in liquidation (or analogous proceedings) or to seek any remedy or proceed first against the *Contractor*.
5. This Deed of Guarantee shall be governed by and construed in accordance with the laws of the Republic of South Africa and we hereby submit to the non-exclusive jurisdiction of the High Court of South Africa.

Signed at \_\_\_\_\_ on this \_\_\_\_\_ day of \_\_\_\_\_ 200\_

Signature(s)	
Name(s) (printed)	
Position in parent company	
Signature of Witness(s)	
Name(s) (printed)	



## Pro forma Performance Bond – Demand Guarantee (for use with Option X13)

(to be reproduced exactly as shown below on the letterhead of the Bank providing the Guarantee)

**Eskom Holdings SOC Ltd**  
**Megawatt Park**  
**Maxwell Drive**  
**Sandton**  
**Johannesburg**

Reference No. [●] [Drafting Note:  
Bank reference  
number to be inserted]

Date:

Dear Sirs

Performance **Bond – Demand Guarantee**: [Drafting Note: Name of Contractor to be inserted]

Project [ ] Contract Reference: ..... [Drafting Note: Contractor contract reference number to be inserted]

---

1. In this Guarantee the following words and expressions shall have the following meanings:-

1.1 “Bank” - means [●], [●] Branch, (Registration No. [●]); [Drafting Note: Name of Bank to be inserted]

1.2 “Bank’s Address” - means [●]; [Drafting Note: Bank’s physical address to be inserted]

1.3 “Contract” – means the written agreement relating to the Services, entered into between Eskom and the Contractor, on or about the [●] day of [●] 200[●] (Contract Reference No. [.] as amended, varied, restated, novated or substituted from time to time; [Drafting Note: Signature Date and Contract reference number to be inserted])

1.4 “Contractor” – means [●] a company registered in accordance with the laws of [●] under Registration Number [●]. [Drafting Note: Name and details of Contractor to be inserted]

1.5 “Eskom” - means Eskom Holdings SOC Ltd, a company registered in accordance with the laws of the Republic of South Africa under Registration Number 2002/015527/30].

1.6 “Expiry Date” - means the earlier of

- the date that the Bank receives a notice from Eskom stating that all amounts due from the Contractor as certified in terms of the contract have been received by Eskom and that the Contractor has fulfilled all his obligations under the Contract, or
- the date that the Bank issues a replacement Bond for such lesser or higher amount as may be required by Eskom

1.7 “Guaranteed Sum” - means the sum of R [●] ([●] Rand);

1.8 “Services” - means [insert as applicable.].

2. At the instance of the Contractor, we the undersigned \_\_\_\_\_ and \_\_\_\_\_, in our respective capacities as \_\_\_\_\_ and \_\_\_\_\_ of the Bank, and duly authorized thereto, confirm that we hold the Guaranteed Sum at the disposal of Eskom, as security for the proper performance by the Contractor of all of its obligations in terms of and arising from the Contract and hereby undertake to pay to Eskom, on written demand from Eskom received prior to the Expiry Date, any sum or sums not exceeding in total the Guaranteed Sum.

3. A demand for payment under this guarantee shall be made in writing at the Bank’s address and shall:

3.1 be signed on behalf of Eskom by a Group Executive, Divisional Executive, Senior General Manager or its delegate;

- 3.2 state the amount claimed ("the Demand Amount");
- 3.3 state that the Demand Amount is payable to Eskom in the circumstances contemplated in the Contract.
4. Notwithstanding the reference herein to the Contract the liability of the Bank in terms hereof is as principal and not as surety and the Bank's obligation/s to make payment:
- 4.1 is and shall be absolute provided demand is made in terms of this bond in all circumstances; and
- 4.2 is not, and shall not be construed to be, accessory or collateral on any basis whatsoever.
5. The Bank's obligations in terms of this Guarantee:
- 5.1 shall be restricted to the payment of money only and shall be limited to the maximum of the Guaranteed Sum; and
- 5.2 shall not be discharged and compliance with any demand for payment received by the Bank in terms hereof shall not be delayed, by the fact that a dispute may exist between Eskom and the Contractor.
6. Eskom shall be entitled to arrange its affairs with the Contractor in any manner which it sees fit, without advising us and without affecting our liability under this Guarantee. This includes, without limitation, any extensions, indulgences, release or compromise granted to the Contractor or any variation under or to the Contract.
7. Should Eskom cede its rights against the Contractor to a third party where such cession is permitted under the Contract, then Eskom shall be entitled to cede to such third party the rights of Eskom under this Guarantee on written notification to the Bank of such cession.
8. This Guarantee:
- 8.1 shall expire on the Expiry Date until which time it is irrevocable;
- 8.2 is, save as provided for in 7 above, personal to Eskom and is neither negotiable nor transferable;
- 8.3 shall be returned to the Bank upon the earlier of payment of the full Guaranteed Sum or expiry hereof;
- 8.4 shall be regarded as a liquid document for the purpose of obtaining a court order; and
- 8.5 shall be governed by and construed in accordance with the law of the Republic of South Africa and shall be subject to the jurisdiction of the Courts of the Republic of South Africa.
- 8.6 Any claim which arises or demand for payment received after expiry date will be invalid and unenforceable.
9. The Bank chooses domicilium citandi et executandi for all purposes in connection with this Guarantee at the Bank's Address.

Signed at \_\_\_\_\_

Date \_\_\_\_\_

For and behalf of the Bank

Bank Signatory: \_\_\_\_\_

Bank Signatory: \_\_\_\_\_

Witness: \_\_\_\_\_

Witness: \_\_\_\_\_

Bank's seal or stamp

## Pro forma ASGI-SA Guarantee

(to be reproduced exactly as shown below on the letterhead of the Bank providing the Guarantee)

Eskom Holdings SOC Ltd  
Megawatt Park  
Maxwell Drive  
Sandton  
Johannesburg

Reference No [●] [Drafting Note:  
Bank reference  
number to be inserted]

Date:

Dear Sirs

**Pro-Forma ASGI-SA Guarantee:** [Drafting Note: Name of Contractor to be inserted]

Project [ ] Contract Reference: [●] [Drafting Note: Contractor contract reference number to be inserted]

---

1. In this Guarantee the following words and expressions shall have the following meanings:-
  - 1.1 "Bank" - means [●], [●] Branch, (Registration No. [●]); [Drafting Note: Name of Bank to be inserted]
  - 1.2 "Bank's Address" - means [●]; [Drafting Note: Bank's physical address to be inserted]
  - 1.3 "Contract" – means the written agreement relating to the Project, entered into between the *Employer* and the *Contractor*, on or about the [●] day of [●] 200[●] (Contract Reference No. [●] as amended, varied, restated, novated or substituted from time to time; [Drafting Note: Signature Date and Contract reference number to be inserted])
  - 1.4 "*Contractor*" – means [●] a company registered in accordance with the laws of [●] under Registration Number [●]. [Drafting Note: Name and details of Contractor to be inserted]
  - 1.5 "*Contractor's ASGI-SA Obligations*" – means the *Contractor's ASGI-SA Obligations* under and as defined in the Contract.
  - 1.6 "*Employer*" - means Eskom Holdings SOC Ltd, a company registered in accordance with the laws of the Republic of South Africa under Registration Number 2002/015527/30.
  - 1.7 "Expiry Date" - means the [●] day of [●] 200[●]; [Drafting Note: anticipated date of issue of ASGI-SA Performance Certificate to be inserted.]
  - 1.8 "Guaranteed Sum" - means the sum of R [●] ([●] Rand);
  - 1.9 "Project" – means the .....
2. At the instance of the *Contractor*, we the undersigned \_\_\_\_\_ and \_\_\_\_\_, in our respective capacities as \_\_\_\_\_ and \_\_\_\_\_ of the Bank, and duly authorized thereto, confirm that we hold the Guaranteed Sum at the disposal of the *Employer*, as security for the proper performance by the *Contractor* of the *Contractor's ASGI-SA Obligations* and hereby undertake to pay to the *Employer*, on written demand from the *Employer* received prior to the Expiry Date, any sum or sums not exceeding in total the Guaranteed Sum.
3. A demand for payment under this guarantee shall be made in writing at the Bank's address and shall:
  - 3.1 state the amount claimed ("the Demand Amount");
  - 3.2 state that the Demand Amount is payable to the *Employer* in the circumstances contemplated in the Contract.

4. Notwithstanding the reference herein to the Contract the liability of the Bank in terms hereof is as principal and not as surety and the Bank's obligation/s to make payment:
- 4.1 is and shall be absolute provided demand is made in terms of this bond in all circumstances; and
- 4.2 is not, and shall not be construed to be, accessory or collateral on any basis whatsoever.
5. The Bank's obligations in terms of this Guarantee:
- 5.1 shall be restricted to the payment of money only and shall be limited to the maximum of the Guaranteed Sum; and
- 5.2 shall not be discharged and compliance with any demand for payment received by the Bank in terms hereof shall not be delayed, by the fact that a dispute may exist between the *Employer* and the *Contractor*.
6. The *Employer* shall be entitled to arrange its affairs with the *Contractor* in any manner which it sees fit, without advising us and without affecting our liability under this Guarantee. This includes, without limitation, any extensions, indulgences, release or compromise granted to the *Contractor* or any variation under or to the Contract.
7. Should the *Employer* cede its rights against the *Contractor* to a third party where such cession is permitted under the Contract, then the *Employer* shall be entitled to cede to such third party the rights of the *Employer* under this Guarantee on written notification to the Bank of such cession.
8. This Guarantee:
- 8.1 shall expire on the Expiry Date until which time it is irrevocable;
- 8.2 is, save as provided for in 7 above, personal to the *Employer* and is neither negotiable nor transferable;
- 8.3 shall be returned to the Bank upon the earlier of payment of the full Guaranteed Sum or expiry hereof;
- 8.4 shall be regarded as a liquid document for the purpose of obtaining a court order; and
- 8.5 shall be governed by and construed in accordance with the law of the Republic of South Africa and shall be subject to the jurisdiction of the courts of the Republic of South Africa.
- 8.6 Any claim which arises or demand for payment received after expiry date will be invalid and unenforceable.
9. The Bank chooses domicilium citandi et executandi for all purposes in connection with this Guarantee at the Bank's Address.

Signed at \_\_\_\_\_ Date \_\_\_\_\_

For and behalf of the Bank

Bank Signatory: \_\_\_\_\_ Bank Signatory: \_\_\_\_\_

Witness: \_\_\_\_\_ Witness: \_\_\_\_\_

Bank's seal or stamp

**PART 2: PRICING DATA**

**TSC3 Option A**

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



## C2.1 Pricing assumptions: Option A

### How work is priced and assessed for payment

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

Identified and defined terms	11	
	11.2	(12) The Price List is the <i>price list</i> unless later changed in accordance with this contract.
		(17) The Price for Services Provided to Date is the total of <ul style="list-style-type: none"><li>the Price for each lump sum item in the Price List which the <i>Contractor</i> has completed and</li><li>where a quantity is stated for an item in the Price List, an amount calculated by multiplying the quantity which the <i>Contractor</i> has completed by the rate.</li></ul>
		(19) The Prices are the amounts stated in the Price column of the Price List. Where a quantity is stated for an item in the Price List, the Price is calculated by multiplying the quantity by the rate.

This confirms that Option A is a priced contract where the Prices are derived from a list of items of service which can be priced as lump sums or as expected quantities of service multiplied by a rate or a mix of both.

### Function of the Price List

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

### Link to the *Contractor's* plan

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

### Preparing the *price list*

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

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

- Has taken account of the guidance given in the TSC3 Guidance Notes relevant to Option A;
- Understands the function of the Price List and how work is priced and paid for;
- Is aware of the need to link operations shown in his plan to items shown in the Price List;
- Has listed and priced items in the *price list* which are inclusive of everything necessary and incidental to Providing the Service in accordance with the Service Information, as it was at the time of tender, as well as correct any Defects not caused by an *Employer's* risk;
- Has priced work he decides not to show as a separate item within the Prices or rates of other listed items in order to fulfil the obligation to complete the *service* for the tendered total of the Prices.
- Understands there is no adjustment to items priced as lump sums if the amount, or quantity, of work within that item later turns out to be different to that which the *Contractor* estimated at time of tender. The only basis for a change to the (lump sum) Prices is as a result of a compensation event.

### **Format of the *price list***

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

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

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

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

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



## C2.2 the *price list*

Item	Description	Qty	Unit	Rate	Cost
1	Smoke Detectors and Fire Panel (3 Monthly)	20	Quartely		
2	Extinguishant Gas Release Panel (ERP) (3 Monthly)	20	Quartely		
3	Extinguishant Gas Cylinders (6 Monthly)	10	Bi-annually		
4	Pilot Cylinders (6 Monthly)	10	Bi-annually		
5	Extinguishant Gas Release Manual-Initiate Switch (3 Monthly)	20	Quartely		
6	System Inoperative Visual Warning Device (VWD) (3 Monthly)	20	Quartely		
7	Extinguishant Release Actuator (3 Monthly)	20	Quartely		
8	Extinguishant Release Indication (3 Monthly)	20	Quartely		
9	Battery Life (6 Monthly)	10	Bi-annually		

Fire Detection and Suppression at Units 1-5 Equipment Rooms					
Item	Description	Qty	Unit	Rate	Cost
1	Smoke Detectors and Fire Panels (3 Monthly)	20	Quartely		
2	Extinguishant Gas Release Panel (ERP) (3 Monthly)	20	Quartely		
3	Extinguishant Gas Cylinders (3 Monthly)	20	Quartely		
4	Pilot Cylinders (3 Monthly)	20	Quartely		
5	Extinguishant Release Manual Initiate Switch (3 Monthly)	20	Quartely		
6	System Inoperative Visual Warning Device (VWD) (3 Monthly)	20	Quartely		
7	Extinguishant Release Actuator (3 Monthly)	20	Quartely		
8	Extinguishant Release Indication (3 Monthly)	20	Quartely		
9	Battery Life (6 Monthly)	10	Bi-annually		

Fire Detection and Suppression at the IT Servo Room at GigaWatt Park building					
Item	Description	Qty	Unit	Rate	Cost
1	Smoke Detectors and Fire Panel (3 Monthly)	20	Quartely		
2	Extinguishant Gas Release Panel (ERP) (3 Monthly)	20	Quartely		

3	Extinguishant Gas Cylinders (6 Monthly)	10	Bi-annually		
4	Extinguishant Release Actuator (3 Monthly	20	Quartely		
5	Extinguishant Release Indicator (3 Monthly)	20	Quartely		

Fire Detection System around the Station					
Item	Description	Qty	Unit	Rate	Cost
1	Ziton ZP3 Fire Control Panel Quarterly Maintenance Checks	20	Quartely		
2	Ziton ZP3 Fire Control Panel Annual Maintenance Checks	5	Yearly		
3	Maestro Fire Alarm Monitoring computer (6 Monthly)	10	Bi-annually		

	P&Gs				
1	Breakdowns/call-outs (allowance)	1	Sum		
2	Safety File	1	Once-off		

The total of the Prices

## Appendix A

### SPARES FOR FIRE PANELS AND EQUIPMENT ROOMS

<u>DESCRIPTION</u>	<u>QUANTITY</u>	<u>PRICE</u>
SUPPLY NEW 45KG CO2 CYLINDER WITH DAB VALVE	2	
SUPPLY NEW PILOT CYLINDER COMPLETE	2	
HPT & REFILL PYROSHIELD CYLINDERS	9	
HPT & REFILL CO2 CYLINDERS	9	
HPT & REFILL PILOT CYLINDERS	9	
PANEL BATTERIES 12V 7.2AH	40	
PANEL BATTERIES 12V 18AH	40	
KEYBOARD FOR ZP3 PANEL	1	
ZP3 2 LOOP PANEL	1	
ZP3 1 LOOP MOTHERBOARD	3	

ZITON NETWORK CARDS	2	
KENTECH 3 ZONE EXT PANEL	1	
KENTECH 4 ZONE GAS EXT PANEL	1	
ROLL OF 200M PH30 CABLE 1.5	1	
DISPLAY BOARD	1	
FIBRE CABLE 400M ROLL 1MM	1	
ZITON ZP755HAV – 2R LOOP SOUNDER	10	
HEAT SENSORS & BASES	15	
IP66 SOUNDER BEACON	15	
IP66 MCP	2	
SOUNDER BEACON – LOOP DRIVER	5	
WESTERMO (FIBRE TO RS485 CONVERTER)	1	
EDWARDS UNIVERSAL GLASS PACK (10PACKS)	6	
MAESTRO SYSTEM SOFTWARE (ATS 8691)	1	
MOTHERBOARD 2 LOOP	2	
MOTHERBOARD 4 LOOP	2	
ZP3 SMOKE SENSOR AND BASE	20	

The total of the Prices

## PART 3: SCOPE OF WORK

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C3.2	<i>Contractor's Service Information</i>	
	Total number of pages	

## C3.1: EMPLOYER'S SERVICE INFORMATION

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6.	Eskom shall be entitled to arrange its affairs with the Contractor in any manner which it sees fit, without advising us and without affecting our liability under this Guarantee. This includes, without limitation, any extensions, indulgences, release or compromise granted to the Contractor or any variation under or to the Contract. ....	5
7.	Should Eskom cede its rights against the Contractor to a third party where such cession is permitted under the Contract, then Eskom shall be entitled to cede to such third party the rights of Eskom under this Guarantee on written notification to the Bank of such cession.....	5
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2.	At the instance of the <i>Contractor</i> , we the undersigned _____ and _____, in our respective capacities as _____ and _____ of the Bank, and duly authorized thereto, confirm that we hold the Guaranteed Sum at the disposal of the <i>Employer</i> , as security for the proper performance by the <i>Contractor</i> of the <i>Contractor's</i> ASGI-SA Obligations and hereby undertake to pay to the <i>Employer</i> , on written demand from the <i>Employer</i> received prior to the Expiry Date, any sum or sums not exceeding in total the Guaranteed Sum. ....	6
3.	A demand for payment under this guarantee shall be made in writing at the Bank's address and shall: 6	
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6.	The <i>Employer</i> shall be entitled to arrange its affairs with the <i>Contractor</i> in any manner which it sees fit, without advising us and without affecting our liability under this Guarantee. This includes, without limitation, any extensions, indulgences, release or compromise granted to the <i>Contractor</i> or any variation under or to the Contract. ....	7
7.	Should the <i>Employer</i> cede its rights against the <i>Contractor</i> to a third party where such cession is permitted under the Contract, then the <i>Employer</i> shall be entitled to cede to such third party the rights of the <i>Employer</i> under this Guarantee on written notification to the Bank of such cession. ....	7
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# 1 Description of the service

## 1.1 Executive overview

### Background

At Hendrina we have installed the following Fire Detection systems:

- 46 Ziton ZP3 Fire panels that are installed on the office buildings, selected workshops and selected switchgear rooms. On the fire panels, we are monitoring smoke & heat detectors, break-glass units and interface units.
- A Desktop computer with a Maestro Fire Panel monitoring software for monitoring all the above named Ziton ZP3 fire panels.
- A Fire detection & protection system at 10 C&I Equipment rooms. Five C&I Equipment rooms on Units 1-5 are using Pyro-shield as an extinguisher gas and Five C&I Equipment rooms on Units 6-10 use CO<sub>2</sub> gas.
- Standalone Fire Protection system for IT server room that also uses CO<sub>2</sub> gas as an extinguishant.

## 1.2 Employer's requirements for the service

### A. Fire Detection and Suppression on Units 6-10 Equipment Rooms.

The fire panels on Units 6-10 Equipment Rooms are Ziton ZC3 panels (Precept fire control panels on Units 8-10 that were manufactured by UPC) and Technoswitch Fire alarm panels on Units 6-7.

All Units 6-7-10 Equipment Rooms have 6 smoke sensors, of which 2 are under a raised floor. The fire protection system uses CO<sub>2</sub> gas as a fire suppressing agent.

Adjacent to these C&I Equipment Rooms, are the battery rooms. On each Equipment Room, there are 12 CO<sub>2</sub> gas cylinders for quenching fire at the Equipment Room and 6 gas cylinders for quenching fire at the battery room. Each of these rooms has a pilot cylinder that activates the release of the CO<sub>2</sub> gas.

### B. Smoke Detectors and Fire Panel (3 Monthly)

- a) The Contractor to test in-situ the operation of all smoke detectors using a test medium whose testing particulate material does not contaminate the sensing chamber or entry screen, and which contains particles in the size range appropriate for the detector.
- b) The test will confirm if the fire panel is working or not. If the fire panel is not responding correctly to function testing, the Contractor shall inform the Service Manager of a way forward. That can either be to get the replacement parts or getting a suitable replacement fire panel.
- c) The Contractor checks if the fire indicator panel (FIP) is clearly visible readily accessible and free from dust and contaminants.
- d) The Contractor inspects the zone block plans to ensure that they are still securely mounted and legible.
- e) The Contractor tests the occupant warning system and check that the signals are distinctly audible in all areas of the building.
- f) The contaminated fire detectors shall be replaced.

### C. Extinguishant Gas Release Panel (ERP) (3 Monthly)

#### **Pre – caution**

The Contractor to take the pre-caution to prevent the discharge of the system during these tests

- a) The Contractor tests the operation of each Auto/Manual switch and confirms that it prevents the automatic discharge of the gas.
- b) The Contractor confirms that it stops and resets the normal system discharge sequence.
- c) If the Auto/Manual station is not responding correctly to function testing, the Contractor to inform the Service Manager of a way forward. That can either be to repair it or getting a suitable replacement Extinguishant Gas Release Panel.

**D. Extinguishant Gas Cylinders (6 Monthly)**

- a) The Contractor checks if the CO<sub>2</sub> gas cylinders still have enough gas in them by weighing each cylinder.
- b) For the tanks with a low weight, those CO<sub>2</sub> tanks shall be refilled by the Contractor.
- c) On the units where there are missing gas cylinders, the Contractor to supply the cylinders and install.

**E. Pilot Cylinders (6 Monthly)**

- a) The Contractor checks if the pilot cylinder on all Units have gas or not.
- b) Those ones without gas shall be refilled by the Contractor.
- c) On the Units where there are missing gas cylinders, the Contractor to supply the pilot cylinder and install.

**F. Extinguishant Gas Release Manual-Initiate Switch (3 Monthly)**

- a) The Contractor tests the operation of the manual initiate switch and confirm normal system discharge sequence including fire and evacuation alarm, time delays, equipment shutdown and that it overrides the ERP discharge inhibit switch.

**G. System Inoperative Visual Warning Device (VWD) (3 Monthly)**

- a) The Contractor confirms that the system inoperative VWD operates for:
  - Operation of a service switch (discharge initiating circuit electrical isolation)
  - Fault discharge actuator circuit.
  - Operation of the manual inhibit switch, if fitted.
  - Isolation or fault in any part of the fire detection system that prevents the discharge of the suppression system,

**H. Extinguishant Release Actuator (3 Monthly)**

**Precaution:**

The Contractor ensures that each actuator has been mechanically isolated or temporarily removed the CO<sub>2</sub> gas supply to prevent unintended discharge.

- a) The Contractor tests every function of the actuator and ensures that it operates correctly.
- b) For non-resettable actuators, the Contractor substitutes the actuator with a load of equivalent value and confirms that the operating current is in accordance with the baseline data

**I. Extinguishant Release Indication (3 Monthly)**

- a) The Contractor tests the extinguishant release detection device (e.g. pressure switch) and confirms the operation of the extinguishant.

**J. Battery Life (6 Monthly)**

- a) If the existing Fire panel has standby batteries, the Contractor checks the installation date of the batteries against the battery life as recommended by the battery supplier and replaces the batteries, if appropriate.
- b) When the batteries have not been replaced in the previous two years, the Contractor verifies the batteries condition by carrying out a battery discharge test.
- c) **Primary Power Supply**
  - the Contractor disconnects the standby power supply and check that the system continues to operate correctly, when powered from the primary power supply, under full load conditions.
- d) **Standby Power Supply**
  - The Contractor disconnects the primary supply and check that the system continues to operate correctly, when powered from the standby supply under full alarm load conditions.



### 1.2.1 Fire Detection and Suppression at Units 1-5 Equipment Rooms

The fire detection and suppression system is slightly different from the one at Units 6-10. The fire panel in use is an Technoswitch fire alarm panel (on Unit 04) and Aritech fire panel ( Units 1,2,3 and 5). The equipment rooms have two smoke sensors, of which both must be activated to release the gas. The fire protection system uses Pyro-Shield gas as fire suppressing agent. There are 3 Pyro-shield gas cylinders per unit for quenching fire at each Equipment Room. The Pyro-Shield gas is activated by the activation of a pilot cylinder via a solenoid valve.

#### A. Smoke Detectors and Fire Panels (3 Monthly)

- a) The Contractor tests in-situ the operation of all smoke detectors using a test medium whose testing Particulate material does not contaminate the sensing chamber or entry screen and which contains particles in the size range appropriate for the detector.
- b) The following tests will confirm if the fire panel is working or not:
  - The Contractor checks if the Fire indicator panel display is clearly visible readily accessible and free from dust and contaminants.
  - The Contractor inspects the zone block plans to ensure that they are still securely mounted and legible.
  - The Contractor tests the occupant warning system and check the signals are distinctly audible in all areas of the building.
  - If the Fire panel is not responding correctly to function testing, the Contractor shall inform the Service Manager of a way forward. That can either be to get the replacement parts or getting a suitable replacement Fire panel.

#### B. Extinguishant Gas Release Panel (ERP) (3 Monthly)

##### Pre-caution:

The Contractor to take the pre-caution to prevent the discharge of the system during these tests.

- a) The Contractor tests the operation of each inhibit or Auto/Manual switch and confirms that it prevents the automatic
- b) The Contractor confirms that it stops and resets the normal system discharge sequence.
- c) If the Auto/Manual station is not responding correctly to function testing, the Contractor to inform the Service Manager of a way forward. That can either to repair it or getting a suitable replacement Extinguishant Release Panel.

#### C. Extinguishant Gas Cylinders (3 Monthly)

- a) The Contractor checks if the Pyro-Shield gas cylinder still have enough gas in them.
- b) For the tanks which are not full, the gas tanks shall be refilled by the Contractor.
- c) The faulty Pyro-Shield gas gauges must be replaced by the Contractor.

#### D. Pilot Cylinders (3 Monthly)

- a) The Contractor checks if the pilot cylinder on all Units have gas or not.
- b) Those ones without the gas shall be refilled by the **Contractor**.
- c) On the Units where there are missing gas cylinders the Contractor to supply the pilot cylinders and install.

#### E. Extinguishant Release Manual Initiate Switch (3 Monthly)

- a) The Contractor tests the operation of the manual initiate switch and confirms normal system discharge sequence including fire and evacuation alarm, time delays equipment shutdown and that it overrides the ERP discharge inhibits switch.

#### F. System Inoperative Visual Warning Device (VWD) (3 Monthly)

- e) The Contractor confirms the system inoperative VWD operates for the:
  - Operation of a service switch (discharge initiating circuit electrical isolation)
  - Fault in discharge actuator circuit.
  - Operation of a lock-off valve, if fitted.
  - Operation of the manual inhibit switch, if fitted.
  - Isolation of fault in any part of the fire detection system that prevents the discharge of the suppression system.

#### G. Extinguishant Release Actuator (3 Monthly)

**Pre-caution:**

The Contractor to ensure that each actuator has been mechanically isolated or temporarily removed the extinguishant gas supply to prevent unintended discharge.

- a) The Contractor tests every function of the actuator and ensures that it operates correctly.
- b) For non-resettable actuators, the Contractor substitutes the actuator with a load of equivalent value and confirm that the operating current is in accordance with the baseline data.

**H. Extinguishant Release Indication (3 Monthly)**

- a) The Contractor tests the Extinguishant release detection device (e.g. pressure switch) and confirms the operation of the extinguishant release.

**I. Battery Life (6 Monthly)**

- a) If the existing Fire Panel has standby batteries, the Contractor checks the date of installation of the batteries against the battery life recommended by the battery manufacturer and replace the batteries, if appropriate.
- b) When the batteries have not been replaced in the previous two years, the Contractor verifies the battery condition by carrying out a battery discharge test.
- c) Primary Power Supply
  - The Contractor disconnects the standby power supply and check that the system continues to operate correctly, when powered from the primary supply, under full load conditions.
- d) Standby Power Supply
  - The Contractor disconnects the primary supply and check that the system continues to operate correctly, when powered from the standby supply under full alarm load conditions.

**1.2.2 Fire Detection and Suppression at the IT Server Room at Gigawatt Park Building**

The Fire Detection and Suppression System comprises the following:

- The fire panel is a Ziton ZC4 fire alarm panel capable of sensing 6 zones.
- The IT room has 4 smoke detectors.
- The system uses CO<sub>2</sub> gas as a suppressing agent.
- There is one CO<sub>2</sub> gas cylinder for quenching fire.
- The CO<sub>2</sub> gas cylinder directly activated by the solenoid that is connected to the Technoswitch TEC 057A Extinguishant Test & Interface Unit.

**A. Smoke Detectors and Fire Panel (3 Monthly)**

- a) The Contractor tests in-situ the operation of all smoke detectors using a test medium whose testing particulate material does not contaminate the sensing chamber or entry screen and which contains particles in the size range appropriate for the detector.
- b) This test will confirm if the fire panel is working or not.
- c) The Contractor checks if the fire indicator panel displays clearly visible, readily accessible and free from dust and contaminants.
- d) The Contractor inspects the zone block plans to ensure that they are still securely mounted and legible.
- e) The Contractor tests the alarm system and check that the signals are distinctly audible in all area of the building.
- f) If the fire panel is not responding correctly to function testing, the Contractor informs the Service Manager of a way forward. That can either be to get the replacement parts or getting a suitable replacement fire panel.

**B. Extinguishant Gas Release Panel (ERP) (3 Monthly)**

**Pre-caution:**

The Contractor to take the pre-cautions to prevent the discharge of the gas during these tests.

- a) The Contractor tests the operation of each inhibit or Auto/Manual switch and confirm that it prevents the automatic discharge of the gas.
- b) The Contractor confirms that ERP stops and resets the normal system discharge sequence.
- c) The gas release unit in use is a ZC4-GCU1 Auto/Manual Gas Release Unit.
- d) If the Auto/Manual station is not responding correctly to function testing, the Contractor informs the Service Manager of a way forward. That can either be to repair or getting a suitable replacement Extinguishant Release Panel.

**C. Extinguishant Gas Cylinders (6 Monthly)**

- a) The Contractor checks if the extinguishant gas cylinder still has enough gas inside by weighing it.
- b) If the gas tank is not full, the CO<sub>2</sub> gas shall be refilled by the Contractor.
- c) Any missing gas cylinders shall be supplied and installed by the Contractor.

**D. Extinguishant Release Actuator (3 Monthly)**

**Precaution:**

The Contractor to ensure that each actuator has been mechanically isolated or temporarily removed the extinguishant gas supply to prevent unintended discharge.

- a) The Contractor tests every function of the actuator and ensures that it operates correctly.
- b) For non-resettable actuators, the Contractor substitutes the actuator with a load of equivalent value and confirms that the operating current is in accordance with the baseline data
- c) The gas release valve actuator in use is a DAB2/2 Control Valve.

**E. Extinguishant Release Indicator (3 Monthly)**

- a) The Contractor tests the extinguishant release detection device (e.g. pressure switch) and confirm the operation of the extinguishant release as indicated in the FIP.

**1.2.3 Fire Detection System around the Station.**

Hendrina has installed a Ziton ZP3 addressable fire detection system. It comprises of 46 fire panels that are linked by fibre to form a ring. On this ring there is a Maestro monitoring PC that is capable of monitoring the status of each fire panel and is able to detect the fire panel condition on each building.

The network comprises of the following:

- Smoke & Heat Detectors, Sounders, Break Glass units in offices, switchgear rooms and workshops.
- There are 46 Ziton ZP3 fire panels.
- There are also Ziton A45E-2 interface units that are connected to some of the fire panels to monitor the fire spray water activation on the:
- Transformers and South & North Fuel Oil System
- Boiler Feed Pumps and Lube Oil Tanks.
- Coal Conveyors at the Coal Staithes.
- Maestro Fire Panel status monitoring at the Control Room.

**A. Quarterly Service**

The Contractor shall service these fire panels quarterly and annually to check that the system is functioning to its installation specifications, and this must be carried out by the Contractor.

The details of the checks are mentioned below:

**Ziton ZP3 Fire Control Panel Quarterly Maintenance Checks**

No	Quarterly Checks	Description
1	Log book analysis	Prepare for testing by reading through the log book. Any corrective action that has not yet been taken should be noted and carried out during the service
2	Service and pre-service check	Use the panel menu to take a print out of all the sensors that are in a "service" or "pre-service" condition, which indicates that they are contaminated. Exchange these points with replacement units, set to the same address. Dirty sensors can be sent to Ziton for cleaning.
3	Analogue value check	Use the panel menu to generate printer reports of device analogue values. Compare these values to permitted values for each point. Replace faulty devices or repair wiring.
4	Configuration check	Connect "Planner" to the panel and print out a complete system configuration from the panel software. Compare this to the system

		specification and verify that the system zoning, input-output mapping, and other settings have not been changed.
5	Disabled device check	Check if the common Disabled-LED on the front of the panel is illuminated. If so, use the menu to identify the disabled devices and investigate the reason. Any faults should be rectified, and any disabled devices should then be enabled.
6	Test the alarms	Test one sensor or call point in each zone. Activate each point in turn, checking that the sounders operate and that the panel reacts correctly. Check that the signals to auxiliary systems such as the Fire Station, air conditioning, building management systems, graphic displays or remote indicators, all function correctly.
7	Fault test	Remove one sensor in the system and check that the panel correctly reports the event. Accept the fault, replace the sensor and reset the panel.
8	Panel control test	Check that all control functions, the ACCEPT and RESET keys are operating correctly.
9	Monitor earth leakage	If the earth leakage monitoring feature on the ZP3 system is enabled, test the earth leakage by applying a short between the positive leg of the Z loop and earth. Make sure that the panel indicates an earth leakage fault. Repeat test using the negative leg of the Z loop.
10	Connection checks	Make sure that all terminal screws are tight and cables inside the panel are secure. Check that all printed circuit boards (PCB's) appear to be in good condition, are free of dust and securely mounted in the panel.
11	Battery replacement check	Make sure that the back-up batteries installed are sufficient to meet the system specification. If not then replace them with suitable ones as described under "removing and replacing the back-up batteries" on page 129 of the Ziton ZP3 Manual. Check if the battery replacement date will still be valid before next service. If not, then replace the batteries. The age of the battery should be marked on with a label, or refer to the log book. SLA batteries should be replaced at least every four years, or more frequently in high temperature environments (refer to manufacturer's documentation if necessary)
12	Battery operation check	Check that the battery is healthy. One method is to conduct an "all sounders on" operational test with the mains off and the system running on batteries. This will test the batteries under a full load. The battery voltage should be monitored during this test and should not fall below 24 volts. Remove one battery terminal and verify that the system reports a battery fault. Replace terminal, ensure that it is tight, and reset the panel. Clean the battery with a damp cloth and lightly lubricate any exposed terminals with petroleum jelly if necessary.
13	Time and date set	Set the correct time and date on panel, if necessary.
14	Completion of service	Restore the system to normal condition, re-enable any disabled devices, re-connect any disconnected devices, re-connect all external systems that were disconnected for testing, and make sure that the system is left in 100% working condition. Advise all staff and the remote manned centre that testing is complete, and that any alarm received must be treated as real.

## B) Ziton ZP3 Fire Control Panel Annual Maintenance Checks

No	Annual Checks	Description
1	Quarterly Checks	Make sure the quarterly checks have been performed (see above)
2	Input-Output configuration test	Using a fairly large representative sample, verify by testing that the input-output mapping operates as programmed. Activate an input, such as a sensor, call point, or interface unit, and verify that the correct outputs operate. Also check that the outputs function correctly, for example that they pulse, or operate continuously that any delays operate correctly etc.
3	Building changes check	Visually inspect that the internal structural layout of the building, including interoffice partitioning, has not changed from the system specification to such an extent that it may affect the efficient operation of the fire alarm system.
4	Lithium time/date batteries check	Check if the lithium time/date batteries will still be valid before the next service. If not then replace the batteries. The age of the battery should be marked on it with a label. SLA batteries should be replaced at least every four years, or more frequently in high temperature environments (refer to manufactures documentation if necessary)
5	Completion of Service	Restore the system to normal condition, re-enable any disabled devices, re-connect any disconnected devices, re-connect all external systems that were disconnected for the testing, and ensure that the system is left in 100% working condition. Advise all staff and the remote manned centre that testing is complete, and that any alarm now received must be treated as real.

## B. Maestro Fire Alarm Monitoring Computer (6 Monthly)

- Sensor Changing/Removal:  
Check if there has been changes in sensor position, sensor types, call point locations and the general renaming of specific site areas. Update Maestro's maps to ensure that the additional devices added or removed are updated on Maestro
- Name Change  
Establish if there has been a name change or renaming of parts of the protected areas. Any name change, especially where the name of the building area forms the location point of the fire alarm device, must be updated within the MAESTRO system immediately any site change takes place.
- Check that the Maestro computer can still communicate with all of the fire panels, if not, check and correct.
- Check that it is still able to remotely control all devices on the Fire Panels.

### 1.2.4 General

- Critical system failures are responded to within 8 working hours of notification.
- If any equipment is faulty and requires repairs or replacement, the Contractor shall inform the Service Manager with the proposal. The Employer shall inform the Contractor the way forward.
- The Contractor must produce own Safety File as per Eskom Standard.
- The Contractor must notify at least one month in advance, his intention to withdraw and replace his Technician.
- The Employer requires onsite maintenance during normal working hours Monday to Friday except Public Holidays.
- The normal working hours is from 07H00 to 16H15, Mondays to Thursdays excluding Public Holidays. Lunch is from 12H00 to 12H35. On Fridays the working hours are from 07H00 to 12H00.

- g) The Contractor at all times keeps a record of his personnel who are on site and record all activities for personnel in the form of a time sheet or attendance register. The Service Manager must also sign the time sheet / attendance register for verification.
- h) Contingency amount to be used for call outs and spares that is not stock or available from Contractors list.
- i) Appendix A: spares that needs to be available from Contractor.

## 1.3 Interpretation and terminology

The following abbreviations are used in this Service Information:

Abbreviation	Meaning given to the abbreviation
C&I	Control and Instrumentation
UPS	Uninterrupted Power Supply
EOD	Electrical Operating Desk

## 2 Management strategy and start up.

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

- a) The Contractor plans all work for the duration of this service period.
- b) The Service Manager gives the Contractor at least two weeks notice with regards to additional activities, such as scheduled maintenance outages, that may affect the Contractors ability to complete the work, where such information is available to the Service Manager.
- c) The installation of fire detection in new or revamped offices as requested.
- d) The Contractor submits reports on the work as stated in this document. This report is a record of all activities carried out during work period and is submitted no later than one week after the work period has ended.
- e) The report is handed to the Service Manager as one hard copy and one soft copy.

#### 2.1.1 Monthly Progress Report

- a) The Contractor submits a written, monthly activity report to the Service Manager.
- b) The report is due on the last day of each month.
- c) The report is handed to the Service Manager as one hard copy and one soft copy.
- d) The report consists of the following:
  - Status overview
  - Key issues / items of concern and corrective actions
  - Progress report
  - Early warnings
  - Compensation events

## 2.2 Management meetings

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

Title and purpose	Approximate time & interval	Location	Attendance by:
Overall contract progress and feedback	As and when required by Service Manager	C&I Training Workshop	Employer, Contractor
Toolbox Meetings	Daily	Contractors Workshop	<i>Contractor</i>
Daily Work and Pre Job Brief	Daily	Contractors Workshop	Contractor
Daily Work Risk Assessment	Daily	Contractors Workshop	Contractor

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

All meetings shall be recorded using minutes or a register prepared and circulated by the person who convened the meeting. Such minutes or register shall not be used for the purpose of confirming actions or instructions under the contract as these shall be done separately by the person identified in the *conditions of contract* to carry out such actions or instructions

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

- a) The Contractor Technician must be registered with the SAQCC-Fire as a fire detection cabler, installer and the commissioner. They must be able to do fault finding and diagnose faults on the fire detection system using the Maestro monitoring system.
- b) The Contractor must provide a certificate with the registration number to prove such.
- c) The Contractor Technician must be registered with the SAQCC-Fire with gas suppression qualifications.
- d) Must be trained by the Ziton accredited company to service and maintain the Ziton ZP3 addressable panels and be able to get support from the Original Equipment Manufacturer.
- e) Technicians on site must be trained on SANAS Standards 10139 and 14520
- f) CV's must be available of all Contractors.
- g) The Contractor submits CV's and copies of qualifications of all personnel to the Service Manager
- h) The Contractor submits an organogram as well as a list of people on site to the Service Manager
- i) The Service Manager will interview all candidates and it will be the responsibility of the Contractor to provide suitable candidates.
- j) Any work done on the plant is to be done in terms of the Plant Safety Regulations
- k) If any Contractor is dismissed by the Employer on grounds of incompetence or misconduct, it shall be replaced by the Contractor within 14 days after notified.
- l) Assist with on-job training to Hendrina C&I learners, bursars and C&I Personnel.
- m) The Contractor allows the Employer's personnel from C&I Maintenance and Engineering Department to accompany them when performing work as stipulated in this document
- n) The Contractor trains the Employer's personnel in the full operation, maintenance and repair of the system and to such a point that these persons are able to fully maintain the system after the contract expires
- o) The Contractor provides the Employer with all information necessary to operate, maintain, configure and change the system. This includes all usernames, passwords, IP addresses, drawings and any other information needed to gain full access ton the system.
- p) Must adhere to Eskom Life Saving Rules**
  - Open, isolate, test, earth, bond and/or insulate before touch
  - Hook up at heights
  - Buckle up
  - Be sober

- Permit to work

## 2.4 Provision of bonds and guarantees

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

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

## 2.5 Documentation control

- a) All official communication between the Contractor and the Service Manager is in the form of an appropriate NEC form and or letter attached to an email.

## 2.6 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)

## 2.7 Contract change management

- a) All official communication between the Contractor and the Service Manager is in the form of an appropriate NEC form and / or letter attached to an email.

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

N/A

## 2.9 Insurance provided by the Employer

No additional requirements.



## **2.10 Training workshops and technology transfer**

- a) The Contractor allows the Employer's personnel from C&I Maintenance and Engineering Departments to accompany them when performing work as stipulated in this document.
- b) The Contractor trains the Employer's personnel in the full operation, maintenance and repair of the system and to such a point that these persons are able to fully maintain the system after the contract expires.

## **2.11 Design and supply of Equipment**

No additional requirements

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

### **A. Equipment**

None

### **B. Information and other things**

- a) The Contractor provides the Employer with all information necessary to operate, maintain, configure and change the system or for a third party to do this on behalf of the Employer. This includes all usernames, passwords, IP addresses and any other information needed to gain full access to the system.

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

- a) See Clause X19
- b) The Contractor complete all task orders as given to him by the Service Manager

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

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

- a) The Contractor complies with the Health, Safety and Environmental requirements contained in the Employer's specification HSPHO 058 "Safety, Health and Environmental specifications for Principal Contractors"
- b) The Contractor complies with any other SHE requirements not stated in HSPHO 058, but required by the Employer
- c) The Contractor complies with the Occupational Health and Safety Act no 85 of 1993 and its regulations, Eskom She Policy, Standards, Procedures, Guidelines, Specifications and regulations.
- d) The Contractor ensures safety awareness at all times responsible for the supervision of his employee, agents and Sub-Contractors and takes full responsibility and accountability for ensuring that they are competent, compliant and aware of the legal requirements and other requirements and execute the works accordingly
- e) The Contractor ensures that all statutory appointments and appointments required by any Eskom Regulations are made in writing and that all appointees fully understand their responsibilities and are trained and competent to execute their duties
- f) The Employer or any person appointed by the Employer may at any stage during the service period:
  - Conduct health and safety audits by a competent person regarding all aspects of compliance with the SHEQ Requirements, at any off-site place of work, or the site establishment of the Contractor
  - Refuse any employee, Sub-Contractor or agent of the Contractor access to the premises if such a person has been found to commit an unsafe act or any unsafe working practice or is found not to be competent or authorised.
  - Issue the Contractor with a stop order, should the Employer become aware of any unsafe working procedure or condition or any non-compliance
- g) The Contractor immediately reports any incidents, disabling injury, near miss, first aid incidents as well as any threat to health and safety of which it becomes aware at the works or on site to the Service Manager
- h) The Contractor agrees that the Employer is relieved of any and all of its responsibilities and liabilities in terms of the Occupational Health and Safety Act no 85 of 1993 in respect of any acts or omissions of the Contractor, and the Contractor's employees, agents or Sub-Contractors, to the extent permitted by the Occupational Health and Safety Act no 85 of 1993

#### **3.2 Environmental constraints and management**

- a) The Contractor ensures that all goods, services or works supplied in terms of the Contract comply with all applicable environmental legislation.
- b) The Contractor is responsible to keep its work area clean of any rubble
- c) All waste introduced and/or produced on the Employer's premises by the Contractor for this contract is 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 Act 1994 and the Hendrina Waste Management Procedure HSPPIN 003 "Waste Management Procedure"

#### **3.3 Quality assurance requirements**

- a) The Contractor conforms to the following Quality Management Requirements:
  - The quality requirements are as per ISO 9001:2008 and Hendrina Power Station Procedure HSPPA 006 "Quality Requirements for Quality Related Items"
  - Quality Inspection Plans are in the format of FESK 231 "Quality Inspection Plan Form"
- b) The Contractor submits a full detailed Contract Quality Plan for acceptance within 30 days of the Contract Date
- c) The Contractor utilises the Employer's quality documentation forms for requesting access, erection checks etc. These request form MUST BE SUBMITTED TO THE Service Manager at least 72 hours

- notification for off site but local (within the country) 15 days if Offshore and 24 hours for on-site inspections. This is coordinated by the quality team and Service Manager.
- d) Apart from any statutory data package required, the Contractor also compiles a data package (books) of the relevant drawings, test certificates etc. for each section of work which must be reviewed and signed off by the Service Manager at erection check phase prior to the commencement of the commissioning phase.
  - e) The Contractor is responsible for defining the level of QA/QC or inspection to be imposed on his Sub-Contractors and suppliers of material. This level should be based on criticality of equipment and be submitted to the Service Manager for acceptance in the form of a QCP or ITP.
  - f) The Contractor submits a quality report on a monthly basis, including the following:
    - A list of Defects with those older than 30days being flagged and explanation attached.
    - Inspections completed/outstanding
    - Register of accepted Defects
    - No conformance Reports, Corrective Actions, Preventative Action and Concession Reports.
    - Copy of all work instructions and procedures when requested by the Service Manager
  - g) The Contractor conforms to the following Quality Management Requirements:
    - The quality requirements are as per ISO 9001:2008 and Hendrina Power Station quality procedure QM 56

## 4 Procurement

There is a cross reference from the core clause 11.2(6) definition of Disallowed Cost to the Service Information regarding procurement procedures. This part of the Service Information MUST include any such procedures to be able to administer Disallowed Cost.

### 4.1 People

#### A. Minimum requirements of people employed

- a) All of the Contractor's personnel must be fully qualified and certified to perform the duties required in the works
- b) The Service Manager evaluates the competency of personnel before works commence
- c) The Contractor Technician must be registered with the SAQCC-Fire as a fire detection cabler, installer and the commissioner
- d) Must be able to do fault finding and diagnose faults on the fire detection system using the Maestro monitoring system
- e) The Contractor must provide a certificate with the registration number to prove such
- f) The Contractor Technician must be registered with the SAQCC-Fire with gas suppression qualifications
- g) Must be trained by the Ziton accredited company to service and maintain the Ziton ZP3 addressable panels and be able to get support from the Original Equipment Manufacturer

#### B. BBBEE and preferencing scheme

Specify constraints which *Contractor* must comply with after contract award in regard to any Broad Based Black Economic Empowerment (B-BBEE) or preferencing scheme measures.

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

If the ASGI-SA requirements are to be included in this contract specify constraints which *Contractor* must comply with after contract award in regard to any ASGI-SA requirements. The ASGI-SA Compliance Schedule completed in the returnable tender schedules is reproduced here. If ASGI-SA does not apply, delete this paragraph.

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

.  
[Insert the agreed ASGI-SA Compliance Schedule here]

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

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

## **4.2 Subcontracting**

### **A. Preferred subcontractors**

N/A

### **B. Subcontract documentation, and assessment of subcontract tenders**

N/A

### **C. Limitations on subcontracting**

N/A

### **D. Attendance on subcontractors**

N/A

## **4.3 Plant and Materials**

### **A. Specifications**

N/A

### **B. Correction of defects**

- a) Defective items are replaced with new items and sent to the OEM for analysis
- b) Defective items are repaired if possible and returned to the Employer
- c) The same warranties that apply to new items also apply to repaired items.

### **C. *Contractor's* procurement of Plant and Materials**

N/A

### **D. Tests and inspections before delivery**

No additional information

**E. Plant & Materials provided “free issue” by the *Employer***

N/A

**F. Cataloguing requirements by the *Contractor***

N/A

## **5 Working on the Affected Property**

- a) The rules and regulations for site access and security measures are contained in HSPHO 020 “Access Control”. The Contractor is required to adhere to this procedure at all times.
- b) The Contractor adheres to the Eskom “Life Saving Rules” at all times. These rules are clearly communicated during the induction process and are also indicated on signage within the perimeter of the station.
- c) Failure to adhere to any of the access, security or “Life Saving” rules at any time results in the suspension of the permit for the relevant person and may also lead to criminal prosecution for the violation of safety rules and regulations

### **5.1 People restrictions, hours of work, conduct and records**

- a) Normal working hours are from 07H00 to 16H15 on Mondays to Thursdays and from 07H00 to 12H00 on Fridays. Lunch time is from 12H00 to 12H35.
- b) An extension to working hours as well as working on weekends is allowed with permission from the Service Manager.
- c) Unless such overtime is requested by the Employer, no claims by the Contractor regarding overtime hours is considered and the responsibility for the completion of the works within the contract period remains with the Contractor.
- d) The Contractor at all times keeps a record of his personnel who are on site and records all activities for his personnel in the form of a time sheet or attendance register.
- e) No compensation events for additional or standing time are considered without the relevant proof of presence and activity as contained in a time sheet / attendance register.

### **5.2 Health and safety facilities on the Affected Property**

- a) No additional requirements

### **5.3 Environmental controls, fauna & flora**

- a) No additional requirements

### **5.4 Cooperating with and obtaining acceptance of Others**

- a) No extra payment or claim of any kind is allowed on account of difficulties of access to the works or for the requirement of working adjacent to or in the same area as the Employer.

## 5.5 Records of *Contractor's* Equipment

- a) The Contractor must obtain a "Tool Permit" from security when entering the site with an itemised list of material and equipment when entering the site. A copy of the list must be kept by the Contractor.
- b) The Contractor must obtain a "Gate Permit" from the Service Manager before materials and equipment can be removed from site. The "Gate Permit" gives an itemised list of materials and equipment to be removed from site.

## 5.6 Equipment provided by the *Employer*

- a) The Employer does not assist the Contractor with the off-loading of equipment, plant and material, and the responsibility and liability for off-loading remains with the Contractor.
- b) The Contractor is responsible for any special tools and equipment to be used on site for the execution of the works.
- c) Should skyjack or similar to be required for the execution of the works, it is supplied by the Contractor.

## 5.7 Site services and facilities

### A. Provided by the *Employer*

#### a) Supply of Electricity

- Electricity is made available for construction purposes free of charge from power point which are indicated by the Service Manager.
- The Contractor is responsible for the provision of the reticulation system from point of supply
- All points of supply requested by the Contractor are provided in terms of quality and location at the discretion of the Service Manager,
- No guarantee of power supply quality are given and power supply breaks of some duration may occur without warning. Planned outages are also possibility. The Contractor makes arrangements at his own expenses to improve continuity and quality of power where necessary for any reason and no claim of any nature relating to power failures is considered.
- No connection is made to the permanent installation at the Power Station without the prior acceptance of the Service Manager.
- A36-681 "Generation Plant Safety Regulations" CoC for the site installation is required prior to power being switched on. This is provided by the Contractor.

#### b) Lighting

- Area lighting and stairway lighting is provided by the Employer.
- The Contractor, at his own expense, provides temporary lighting in accordance with the requirements of the OHS Act as amended. The Service Manager provides no local lighting.
- All construction lighting is the responsibility of the Contractor.

#### c) Water

- Water is made available on request and free of charge from water points on site. The Contractor supplies at his own cost all connections, fittings, piping work, temporary plumbing and pumps necessary to lead water from Employer's point of supply to the various points where it is required. The Contractor is responsible to maintain this equipment and to remove it the completion of the works.
- The Service Manager does not guarantee continuity of supply and the Contractor makes his own provision for standby supplies to maintain continuity of works. Claims of any nature relating to the discontinuity of water supply are not considered.

#### d) Scrap Removal

- Scrap bins will be provided at set points
- Blue bins must be used for scrap metal only
- Yellow bins must be used for general types of debris only
- White bins must be used for paper only

**e) General**

- The Contractor provides everything else necessary for providing the Service

**B. Provided by the *Contractor***

**a) Contractor's Yard, Offices, Workshops and Stores**

- The Contractor is responsible for all further treatment of the yard areas that he considers necessary for his entire operation throughout his period of occupation and under all weather conditions. This includes all security fencing, security and access arrangements.
- Maintenance of the yard is the Contractor's responsibility and to the Service Manager's acceptance
- Outfall drainage and surface run-off drains is constructed to the acceptance of the project manager in order to minimise erosion and to effect control of contaminated water. The Contractor's plan for the layout of his yard area are accepted by the Service Manager prior to occupying the yard and the Contractor does not occupy any other area other than allocated to him. The Contractor's plan states fully what measures are taken regarding waste removal and storage of topsoil, stabilisation of eroded area and further loss of topsoil.
- The Contractor complies with the Employer's Environmental Policy.
- The Contractor provides, erects and maintain his own use adequate size office accommodation and stores together with such drainage, lighting, heating and hot and cold water services as may be required. Provision is also made for adequate parking and turning area adjacent to all the aforesaid structures. The Service Manager prior to commencement of any work on site, accepts all design and layouts for these provisions.
- The Contractor dismantles and clears the yard of all such temporary structures and associated foundations and infrastructure at the direction of the Service Manager on completion of the whole of the works. No such dismantling and clearance work is carried out without prior acceptance from the Service Manager.

**b) Telecommunications**

- Neither a network point nor a telephone point is available on site. Should the Contractor requires one, he is to make his own arrangements with relevant authorities. Arrangements may also be made to use the telephones of the station if they are available. Calls from these are charged for at prevailing GPO rates.
- Should the Contractor wish to use radio communication equipment on site, he makes his own arrangements with the relevant authorities.
- In this case, he is requested to liaise with the Service Manager at the station to ensure that there is no interference with existing channels or equipment.

**c) Sanitary Facilities and Refuse**

- The Contractor is to supply his own sanitary facilities at his Contractor's yard
- A refuse control system is established by the Contractor. All waste and refuse is collected and disposed of, as directed by the Service Manager, at Hendrina Power Station refuse disposal site

**d) Equipment / Appliances**

- Any electrical equipment or appliances used by the Contractor conforms to the applicable OHS Act safety standards and is maintained in a safe and proper working condition.
- The Service Manager has the right to stop the Contractor's use of any electrical equipment or appliance which, in the opinion of the Service Manager, does not conform to these safety standards
- All hand tools, including Eskom approved multi-meters with valid calibration certificates
- All test equipment with valid calibration certificates

**e) Laydown**

- No plant and material lay down areas permitted on site. The Contractor delivers all plant and materials to the point of erection as and when needed. Plant and materials not used within 14 days are removed from terrace and stored in the yard

**f) Security**

- The Contractor provides security necessary for the protection of the works at all times until the completion of the whole of the works.
- Access to the site is controlled and is governed by the terms and conditions as laid down by the Station Security Officials from time to time. The proposed site is be shown to the Contractor during the site meeting or clarification meeting.
- The Contractor liaises with the Power Station Security Staff via the Service Manager in order to obtain temporary permits for his staff and vehicles that are working within the station premises.
- The Contractor submits his application for a vehicle permit to the Service Manager. Personnel and vehicles entering and leaving the site are subject to routine searches
- If any of the Contractor's staff are transferred from Hendrina or leave site, the persons permit is handed over to the Service Manager. The Contractor ensures that personnel leaving site are transported out of the security area and that the permit is returned.
- No firearms, weapons, alcohol, illegal substances and cameras (including cell phones with cameras) are permitted on site. No "Private Work" is carried out for or on behalf of any of the Employer's personnel. Any person suspected of being under the influence of alcohol, if proved to be over the acceptable limit of 0%, is refused entry to the security area.
- Testing for alcohol will be done every time you enter the security area
- All people must hand in police clearance before commence work

**g) Underground Services, other Existing Services, Cable and Pipe Trenches and Covers**

- The locations of underground services such as fibre optic cabling, power cabling etc. are mostly undocumented
- All proposed routes for trenching and the laying of cables within the ground are scanned with a ground penetrating radar device before such work commence.
- In the event that underground service are damaged due to negligent operation of scanning equipment by the Contractor or the failure to scan planned routes before the commencement of work by the Contractor the responsibility of repair to the services resides with the Contractor.
- Such repairs are made by the Contractor with no additional cost to the Employer.

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

- a) The Contractor complies at all times with the requirements as stated in the latest revision of:
  - HSPHO 058: Safety Health and Environmental Specifications for Principal Contractors
  - HSPPIN 003: Waste Management Procedure



## **5.9 Hook ups to existing works**

- a) The Contractor uses the existing electrical distribution boards (DB's) in order to supply power to equipment supplied as part of the works.
- b) All cabling, connections and Certificates of Compliance (CoC) are the responsibility of the Contractor unless otherwise stated.

## **5.10 Tests and inspections**

### **A. Description of tests and inspections**

- All testing is done accordance with IEC 62381: Automation System in Process Industry
- FAT: Factory Acceptance Test
- SAT: Site Acceptance
- SIT: Site Integration Test
- 

### **B. Materials facilities and samples for tests and inspections**

N/A

6 List of drawings

6.1 Drawings issued by the *Employer*

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

Drawing number	Revision	Title