



## NEC3 Term Service Contract (TSC3)

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

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

for Identification, classification, designing, installation,  
maintenance and training of Hazardous Locations at  
Duvha Power Station for a period of 5 years (60  
months).

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

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CONTRACT No. [                      ]

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## PART C1: AGREEMENTS & CONTRACT DATA

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Contents:	No of pages
<b>C1.1 Form of Offer and Acceptance</b>	<b>[•]</b>
[to be inserted from Returnable Documents at award stage]	
<b>C1.2a Contract Data provided by the <i>Employer</i></b>	<b>[•]</b>
<b>C1.2b Contract Data provided by the <i>Contractor</i></b>	<b>[•]</b>
[to be inserted from Returnable Documents at award stage]	
<b>C1.3 Proforma Guarantees</b>	<b>[•]</b>

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## C1.1 Form of Offer & Acceptance

### Offer

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

#### **Identification, classification, designing, installation, maintenance and training of Hazardous Locations at Duvha Power Station for a period of 5 years (60 months)**

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.

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

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

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

### For the tenderer:

### For the Employer

Signature

Name

Capacity

On behalf  
of

(Insert name and address of organisation)

(Insert name and address of organisation)

Name &  
signature  
of witness

Date

## C1.2 TSC3 Contract Data

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

Clause	Statement	Data
1	<b>General</b>	
	The <i>conditions of contract</i> are the core clauses and the clauses for main Option:	
		<b>A: Priced contract with price list</b>
	dispute resolution Option	<b>W1: Dispute resolution procedure</b>
	and secondary Options	
		<b>X1: Price adjustment for inflation</b>
		<b>X2: Changes in the law</b>
		<b>X17: Low Service Damages</b>
		<b>X18: Limitation of liability</b>
		<b>X19: Task Order</b>
		<b>X20: Key Performance indicators</b>
		<b>Z: Additional conditions of contract</b>
	of the NEC3 Term Service Contract April 2013 <sup>2</sup> (TSC3)	
10.1	The <i>Employer</i> is (name):	<b>Eskom Holdings SOC Ltd (reg no: 2002/015527/30), a state owned company incorporated in terms of the company laws of the Republic of South Africa</b>
	Address	<b>Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg</b>
	Tel No.	<b>[•]</b>
	Fax No.	<b>[•]</b>
10.1	The <i>Service Manager</i> is (name):	<b>Calvin Khoza</b>
	Address	<b>DUVHA POWER STATION P.O BOX 2199 WITBANK 1035</b>
	Tel	<b>0136900121</b>
	Fax	

<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)

	e-mail	<b>Khozamc@eskom.co.za</b>
11.2(2)	The Affected Property is	<b>Duvha Power Station</b>
11.2(13)	The <i>service</i> is	<b>Identification, classification, designing, installation, maintenance and training of Hazardous Locations at Duvha Power Station for a period of 5 years (60 months).</b>
11.2(14)	The following matters will be included in the Risk Register	
11.2(15)	The Service Information is in	<b>Part 3: Scope of Work and all documents and drawings to which it makes reference.</b>
12.2	The <i>law of the contract</i> is the law of	<b>the Republic of South Africa</b>
13.1	The <i>language of this contract</i> is	<b>English</b>
13.3	The <i>period for reply</i> is	<b>2 working Days</b>
<b>2</b>	<b>The Contractor's main responsibilities</b>	
21.1	The <i>Contractor</i> submits a first plan for acceptance within	<b>[•] weeks of the Contract Date</b>
<b>3</b>	<b>Time</b>	
30.1	The <i>starting date</i> is.	<b>01 September 2026 OR as soon as possible thereafter</b>
30.1	The <i>service period</i> is	<b>60 months</b>
<b>4</b>	<b>Testing and defects</b>	
		<b>2 Days</b>
<b>5</b>	<b>Payment</b>	
50.1	The <i>assessment interval</i> is	<b>After completion of every Task Order</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>30 Days</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</p>

Money Rates Service (or such service as may replace the Reuters Monitor Money Rates Service) on the due date for the payment in question, adjusted *mutatis mutandis* every 6 months thereafter (and as certified, in the event of any dispute, by any manager employed in the foreign exchange department of The Standard Bank of South Africa Limited, whose appointment it shall not be necessary to prove.

6	<b>Compensation events</b>	
7	<b>Use of Equipment Plant and Materials</b>	
8	<b>Risks and insurance</b>	
80.1	These are additional <i>Employer's</i> risks	<p>1. Cables, DB, Lights and Motors to be inspected and authorised for use by the EMD personnel</p> <p>2. QCP's to be enforced for any work to be done. QCP's to be compiled by the contractor to be reviewed by Eskom employee</p> <p>3. All the documents including inspection reports and test results must be submitted to Eskom after the work has been carried out</p>
9	<b>Termination</b>	
10	<b>Data for main Option clause</b>	
A	<b>Priced contract with price list</b>	
20.5	The <i>Contractor</i> prepares forecasts of the final total of the Prices for the whole of the <i>service</i> at intervals no longer than	3 Weeks
11	<b>Data for Option W1</b>	
W1.1	The <i>Adjudicator</i>	<p>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).</p> <p>Address [•]</p> <p>Tel No. [•]</p> <p>Fax No. [•]</p> <p>e-mail [•]</p>
W1.2(3)	The <i>Adjudicator nominating body</i> is:	the Chairman of ICE-SA a joint Division of the



		<b>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.</b>
W1.4(2)	The <i>tribunal</i> is:	<b>arbitration</b>
W1.4(5)	The <i>arbitration procedure</i> is	<b>the latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.</b>
	The place where arbitration is to be held is	<b>[•] South Africa</b>
	The person or organisation who will choose an arbitrator	
	- if the Parties cannot agree a choice or	<b>the Chairman for the time being or his nominee</b>
	- if the arbitration procedure does not state who selects an arbitrator, is	<b>of the Association of Arbitrators (Southern Africa) or its successor body.</b>

## 12 Data for secondary Option clauses

<b>X1</b>	<b>Price adjustment for inflation</b>			
X1.1	The <i>base date</i> for indices is	<b>May 2024</b>		
	The proportions used to calculate the Price Adjustment Factor are:	<b>Proportion</b>	<b>linked to index for</b>	<b>Index prepared by SEIFSA</b>
		<b>. 65</b>	<b>Labour</b>	<b>Table C3 (All Hourly-Paid Employees)</b>
		<b>.10</b>	<b>Material</b>	<b>Table G-1 (Engineering Input price indices, Electrical Engineering)</b>
		<b>.10</b>	<b>Transport</b>	<b>Table L2 (B)</b>
		<b>.15</b>	<b>Fixed amount</b>	
		<b>1.00</b>	<b>linked to index for</b>	<b>Index prepared by SEIFSA</b>
<b>X2</b>	<b>Changes in the law</b>			
<b>X17</b>	<b>Low service damages</b>			
	<b>Low service damage description</b>	<b>-Value of low service damages</b>	<b>Limit of low service damage</b>	
	<b>Delay in submission of documentation</b>	<b>10% of Task order on delayed</b>		

	<table> <tr> <td><b>Delay in delivery of goods</b></td><td><b>10% of Task order on delayed</b></td><td rowspan="5"><b>Limited to 50% of the task order Delayed goods value</b></td></tr> <tr> <td><b>Rework due to poor workmanship</b></td><td><b>20% of Task order</b></td></tr> <tr> <td><b>No response of NCR within 3 days</b></td><td><b>10% of Task order</b></td></tr> <tr> <td><b>No authorised RP'</b></td><td><b>20% of Task order</b></td></tr> <tr> <td><b>Unable to provide progress repair program to eskom</b></td><td><b>10% of Task order</b></td></tr> </table>	<b>Delay in delivery of goods</b>	<b>10% of Task order on delayed</b>	<b>Limited to 50% of the task order Delayed goods value</b>	<b>Rework due to poor workmanship</b>	<b>20% of Task order</b>	<b>No response of NCR within 3 days</b>	<b>10% of Task order</b>	<b>No authorised RP'</b>	<b>20% of Task order</b>	<b>Unable to provide progress repair program to eskom</b>	<b>10% of Task order</b>	
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X17.1	The <i>service level table</i> is in	<p><b>Plant Rework</b> For any plant rework the contractor will be held accountable for all costs relating to the re-work.</p> <p><b>Poor workmanship</b> Failure of the new equipment due to poor workmanship or negligence, the contractor will be held accountable for the cost of the re-work and furthermore the contractor has to submit a written programme within 8 hours after being made aware of the plant status as to how corrective maintenance on that specific plant will be performed</p> <p><b>PSR Authorisation</b> Failure by contractor to be authorised within the three (3) month period after contract has been awarded will result in penalties being charged for non-compliance. Penalty of 5% of the task order will be deducted.</p> <p><b>Plant unavailability</b> The penalty of 2% per day of the amount of the task order or a capped percentage of 10% of the task order will be charged and furthermore the contractor has to submit a written programme within 8 hours after being made aware of the plant status as to how corrective maintenance on that specific plant will be performed</p> <p><b>Plant unavailability due to production</b> Eskom will not be held accountable or attract penalties from the contractor if the plant is not available due to production issues or work permit issues.</p>											
<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	<p><b>R0.0 (zero Rand)</b></p> <p><b>the amount of the deductibles relevant to the event</b></p>											
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												

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	12 months after the end of the <i>service period</i> .						
X19	Task Order							
X19.5	The <i>Contractor</i> submits a Task Order programme to the <i>Service Manager</i> within	5 days of receiving the Task Order						
X20	Key Performance Indicators (not used when Option X12 applies)							
	The Key Performance Indicators is in							
	<table><tr><td>1. New spares Delivery Time</td><td>-floor over 4 weeks -kick 3 weeks -norm 2 weeks -stretch 1 week -Ceiling 5 days</td></tr><tr><td>2. Emergency Response time (call out)</td><td>-floor over 4 weeks -kick 3 weeks -norm 2 weeks -stretch 1 week -Ceiling 5 days</td></tr><tr><td>Providing The scope of work and the program during maintenance and</td><td>-floor over 4 weeks -kick 3 weeks -norm 2 weeks -stretch 1 week</td></tr></table>	1. New spares Delivery Time	-floor over 4 weeks -kick 3 weeks -norm 2 weeks -stretch 1 week -Ceiling 5 days	2. Emergency Response time (call out)	-floor over 4 weeks -kick 3 weeks -norm 2 weeks -stretch 1 week -Ceiling 5 days	Providing The scope of work and the program during maintenance and	-floor over 4 weeks -kick 3 weeks -norm 2 weeks -stretch 1 week	
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	outages	-Ceiling 5 days
<b>Z</b>	<b>The additional conditions of contract 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.

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**Z8            Notifying compensation events**

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

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

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

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

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

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

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

**Z11            Ethics**

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

**Affected Party**      means, as the context requires, any party, irrespective of whether it is the *Contractor* or a third party, such party's employees, agents, or Subcontractors or Subcontractor's employees, or any one or more of all of these parties' relatives or friends,

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

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

**Committing Party**      means, as the context requires, the *Contractor*, or any member thereof in the case of a joint venture, or its employees, agents, or Subcontractors or the Subcontractor's employees,

**Corrupt Action**      means the offering, giving, taking, or soliciting, directly or indirectly, of a good or service to unlawfully or illegally influence the actions of an Affected Party,

**Fraudulent Action**      means any unlawfully or illegally intentional act or omission that misleads, or attempts to mislead, an Affected Party, in order to obtain a financial or other benefit or to avoid an obligation or incurring an obligation,

**Obstructive**            means a Committing Party unlawfully or illegally destroying, falsifying, altering or

- Action** concealing information or making false statements to materially impede an investigation into allegations of Prohibited Action, and
- Prohibited Action** means any one or more of a Coercive Action, Collusive Action, Corrupt Action, Fraudulent Action or Obstructive Action.
- Z11.1 A Committing Party may not take any Prohibited Action during the course of the procurement of this contract or in execution thereof.
- Z11.2 The *Employer* may terminate the *Contractor's* obligation to Provide the Services if a Committing Party has taken such Prohibited Action and the *Contractor* did not take timely and appropriate action to prevent or remedy the situation, without limiting any other rights or remedies the *Employer* has. It is not required that the Committing Party had to have been found guilty, in court or in any other similar process, of such Prohibited Action before the *Employer* can terminate the *Contractor's* obligation to Provide the Services for this reason.
- Z11.3 If the *Employer* terminates the *Contractor's* obligation to Provide the Services for this reason, the amounts due on termination are those intended in core clauses 92.1 and 92.2.
- Z11.4 A Committing Party co-operates fully with any investigation pursuant to alleged Prohibited Action. Where the *Employer* does not have a contractual bond with the Committing Party, the *Contractor* ensures that the Committing Party co-operates fully with an investigation.

## Z12 Insurance

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

#### Insurance cover 83

- 83.1 When requested by a Party, the other Party provides certificates from his insurer or broker stating that the insurances required by this contract are in force.
- 83.2 The *Contractor* provides the insurances stated in the Insurance Table A from the *starting date* until the earlier of Completion and the date of the termination certificate.

**INSURANCE TABLE A**

Insurance against	Minimum amount of cover or minimum limit of indemnity
Loss of or damage caused by the <i>Contractor</i> to the <i>Employer's</i> property	The replacement cost where not covered by the <i>Employer's</i> insurance.  The <i>Employer's</i> policy deductible as at Contract Date, where covered by the <i>Employer's</i> insurance.
Loss of or damage to Plant and Materials	The replacement cost where not covered by the <i>Employer's</i> insurance.  The <i>Employer's</i> policy deductible as at Contract Date, where covered by the <i>Employer's</i> insurance.
Loss of or damage to Equipment	The replacement cost where not covered by the <i>Employer's</i> insurance.  The <i>Employer's</i> policy deductible as at Contract Date, where covered by the <i>Employer's</i> insurance.

The <i>Contractor's</i> liability for loss of or damage to property (except the <i>Employer's</i> property, Plant and Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the <i>Contractor</i> ) arising from or in connection with the <i>Contractor's</i> Providing the Service	<p><b><u>Loss of or damage to property</u></b> The replacement cost</p> <p><b><u>Bodily injury to or death of a person</u></b> The amount required by the applicable law.</p>
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**

<b>Insurance against or name of policy</b>	<b>Minimum amount of cover or minimum limit of indemnity</b>
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 -NOT APPLICABLE AT DUVHA P/S**



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

#### **Z14 Asbestos**

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

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

normalised to the baseline of a 4 hour continuous period, also applicable to short term exposures, i.e. 10-minute TWA.

- Z14.1 The *Employer* ensures that the Ambient Air in the area where the *Contractor* will Provide the Services conforms to the acceptable prescribed South African standard for asbestos, as per the regulations published in GNR 155 of 10 February 2002, under the Occupational Health and Safety Act, 1993 (Act 85 of 1993) ("Asbestos Regulations"). The OEL for asbestos is 0.2 regulated asbestos fibres per millilitre of air as a 4-hour TWA, averaged over any continuous period of four hours, and the short term exposure limit of 0.6 regulated asbestos fibres per millilitre of air as a 10-minute TWA, averaged over any 10 minutes, measured in accordance with HSG248 and monitored according to HSG173 and OESSM.
- Z14.2 Upon written request by the *Contractor*, the *Employer* certifies that these conditions prevail. All measurements and reporting are effected by an independent, competent, and certified occupational hygiene inspection body, i.e. a SANAS accredited and Department of Employment and Labour approved AAIA. The *Contractor* may perform Parallel Measurements and related control measures at the *Contractor's* expense. For the purposes of compliance the results generated from Parallel Measurements are evaluated only against South African statutory limits as detailed in clause Z14.1. Control measures conform to the requirements stipulated in the AAIA-approved asbestos work plan.
- Z14.3 The *Employer* manages asbestos and ACM according to the Standard.
- Z14.4 In the event that any asbestos is identified while Providing the Services, a risk assessment is conducted and if so required, with reference to possible exposure to an airborne concentration of above the AL for asbestos, immediate control measures are implemented and relevant air monitoring conducted in order to declare the area safe.
- Z14.5 The *Contractor's* personnel are entitled to stop working and leave the contaminated area forthwith until such time that the area of concern is declared safe by either Compliance Monitoring or an AAIA approved control measure intervention, for example, per the emergency asbestos work plan, if applicable.
- Z14.6 The *Contractor* continues to Provide the Services, without additional control measures presented, on presentation of Safe Levels. The contractually agreed dates to Provide the Services, including the Completion Date, are adjusted accordingly. The contractually agreed dates are extended by the notification periods required by regulations 3 and 21 of the Asbestos Regulations, 2001.
- Z14.7 Any removal and disposal of asbestos, asbestos containing materials and waste, is done by a registered asbestos contractor, instructed by the *Employer* at the *Employer's* expense, and conducted in line with South African legislation.

## C1.2 Contract Data

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

**[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 \_\_\_\_\_.

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

**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:

<b>Identified and defined terms</b>	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*

### Price List A: Materials/ Services

1	Description	Unit	Qty	Rate	Amount
1,2	SUPPLY				
1,3	CONVEYOR 9 BELT MOTOR EX 55KW 380V 105A 1455RPM	No	2		
1,4	CONVEYOR 9 CONTROL PANEL EX	No	2		
1,5	DIP RATED ZONE 22 LED BULKHEAD LIGHT FITTINGS	No	100		
1,6	ALARM SIREN EX	No	2		
1,7	INDICATON LIGHTS	No	4		
1,8	GLAND SIZE 1 EX	No	20		
1,9	SHROUD SIZE 1	No	20		
1,10	CLASSIFICATION SIGN (300MM x 300MM)	No	2		
2	<b>COAL CONVEYOR 9A &amp; 9B Zone 22</b>				
2,1	SUPPLY				
2,2	COAL CONVEYOR 9 MOTOR 37KW 380V 73A 1473RPM	No	2		
2,3	CONVEYOR 9 CONTROL PANEL EX	No	2		
2,4	DIP RATED ZONE 22 LED BULKHEAD LIGHT FITTINGS	No	100		
2,5	ALARM SIREN EX	No	2		
2,6	INDICATON LIGHTS	No	4		
2,7	GLAND SIZE 1 EX	No	20		
2,8	SHROUD SIZE 1	No	20		
2,9	CLASSIFICATION SIGN (300MM x 300MM)	No	2		
3	<b>COAL CONVEYOR 10A &amp; 10B Zone 22</b>				
	<b>SUPPLY</b>				
3,1	COAL CONVEYOR 10 MOTOR 132KW 380v 243A 1475RPM EX	No	2		
3,2	GLAND SIZE 5 EX	No	2		
3,3	SHROUD SIZE 5	No	2		
3,4	INCLINE LIGHTS EX	No	100		
3,5	SUSPENDED MAGNET	No	2		
3,6	S.S.O 220V EX	No	2		
3,7	MAGNET RECTIFIER	No	2		



3,8	LIGHTING DB "M"	No	1		
3,9	CONVEYOR ALARM SIREN	No	2		
3,10	CLASSIFICATION SIGN (300MMX300MM)	No	2		
<b>4</b>	<b>COAL CONVEYOR 10C &amp; 10D Zone 22</b>				
	SUPPLY				
4,1	COAL CONVEYOR 10 MOTOR 132KW 380V 243A 1475 RPM EX	No	2		
4,2	GLAND SIZE 5 EX	No	2		
4,3	SHROUD SIZE 5	No	2		
4,4	INCLINE LIGHTS EX	No	100		
4,5	SUSPENDED MAGNET	No	2		
4,6	S.S.O 220V EX	No	2		
4,7	MAGNET RECTIFIER	No	2		
4,8	LIGHTING DB "T"	No	1		
4,9	CONVEYOR ALARM SIREN	No	2		
4,10	SUMP PUMP PANEL	No	1		
4,11	EXTERNAL EARTH CABLE 10MM SQ(SUMP PUMP A MOTOR)	No	20		
4,12	EXTERNAL EARTH CABLE 10MM SQ (SUMP PUMP B MOTOR)	No	20		
4,13	PIT AREA LIGHTS ZONE 22	No	10		
4,14	CLASSIFICATION SIGN (300MMX300MM)	No	1		
<b>5</b>	<b>SOUTH FUEL OIL PLANT</b>				
	SUPPLY				
5,1	EXTRACTION FAN EX(ZONE 1+2)	No	2		
5,2	LIGHTS EX (ZONE 1+2) 400W FITTING	No	30		
5,3	SIREN HOOTER EX	No	2		
5,4	CLASSIFICATION SIGN (300MMX300MM)	No	1		
<b>6</b>	<b>PLATERSHOP GAS STORAGE (SAFE ZONE)</b>				
	SUPPLY				
6,1	SHROUD SIZE 1 EX	No	10		
6,2	PRATLEY BOXES EX	No	10		
6,3	EARTH CABLE 10MMSQ	No	40		
6,4	CLASSIFICATION SIGN (300MMX300MM)	No	1		

	<b>AMMONIA BULK STORE (NOT SPECIFIC ZONES 1 &amp; 2)</b>				
	<b>SUPPLY</b>				
7,1	LIGHTS EX	No	15		
7,2	CABLE TRUNKING	No	10		
7,3	GLANDS SIZE 1 EX	No	10		
7,4	SHROUD SIZE 1 EX	No	10		
7,5	DAY/NIGH SWITCH	No	2		
7,6	PPE AND OTHER SAFETY SIGNS	No	4		
7,7	CLASSIFICATION SIGN (300MMX300MM)	No	1		
8	<b>DIESEL GENERATOR U1-6 (ZONE 2)</b>				
	<b>SUPPLY</b>				
8,1	EARTH CABLE 10MM SQ	No	100		
8,2	EYE LUGS 10MM SQ	No	36		
8,3	PPE AND OTHER SAFETY SIGNS	No	6		
8,4	CLASSIFICATION SIGN (300MMX300MM)	No	6		
9	<b>AMMONIA DILUTION PLANT (ZONE 2)</b>				
	<b>SUPPLY</b>				
9,1	EARTH CABLE 10MM SQ	No	10		
9,2	EYE LUGS 10MM SQ	No	6		
9,3	PPE AND OTHER SAFETY SIGNS	No	1		
9,4	CLASSIFICATION SIGN (300MMX300MM)	No	6		
10	<b>SMALL GAS CYLINDER STORAGE (ZONE 2)</b>				
	<b>SUPPLY</b>				
10,1	PPE AND OTHER SAFETY SIGNS	No	4		
10,2	CLASSIFICATION SIGN (300MMX300MM)	No	6		
11	<b>BATTERY ROOM U1-6 (ZONE 1)</b>				
	<b>SUPPLY</b>				
11,1	FLUORESCENT LIGHT EX	No	36		
11,2	EMERGENCY LIGHT EX	No	24		
11,3	EARTH CABLE 10MM SQ	No	60		
11,4	EYE LUGS 10MM SQ	No	36		
11,5	PPE AND OTHER SAFETY SIGNS	No	24		
11,6	CLASSIFICATION SIGN (300MMX300MM)	No	6		

12	<b>TRANSFORMER OIL OLD TANK (SAFE ZONE)</b>				
	SUPPLY				
12,1	EARTH CABLE 10MM SQ	No	10		
12,2	EYE LUGS 10MM SQ	No	6		
12,3	PPE AND OTHER SAFETY SIGNS	No	1		
12,4	CLASSIFICATION SIGN (300MMX300MM)	No	1		
13	<b>FULL CYLINDER AREA (ZONE 2)</b>				
	SUPPLY				
13,1	EARTH CABLE 10MM SQ	No	10		
13,2	EYE LUGS 10MM SQ	No	6		
13,3	PPE AND OTHER SAFETY SIGNS	No	1		
13,4	CLASSIFICATION SIGN (300MMX300MM)	No	1		
14	<b>PROPANE GAS TANK(ZONE 2)</b>				
14,1	SUPPLY				
14,2	EYE LUGS 10MM SQ	No	6		
14,3	PPE AND OTHER SAFETY SIGNS	No	1		
14,4	CLASSIFICATION SIGN (300MMX300MM)	No	1		
15	<b>TURBINE USED OIL TANK (ZONE 2)</b>				
15,1	SUPPLY				
15,2	LIGHTS EX	No	5		
15,3	GLANDS SIZE 1 EX	No	10		
15,4	SHROUD SIZE 1 EX	No	10		
15,5	EARTH CABLE 10MM SQ	No	10		
15,6	EYE LUGS 10MM SQ	No	6		
15,7	PPE AND OTHER SAFETY SIGNS	No	1		
15,8	CLASSIFICATION SIGN (300MMX300MM)	No	1		
16	<b>BULK DIESEL TANK</b>				
	SUPPLY				
16,1	EARTH CABLE 10MM SQ	No	10		
16,2	EYE LUGS 10MM SQ	No	6		
16,3	PPE AND OTHER SAFETY SIGNS	No	1		
16,4	CLASSIFICATION SIGN	No	1		

	(300MMX300MM)				
17	<b>EMD WORKSHOP 2 (ZONE 2)</b>				
	SUPPLY				
17,1	BONDING				
17,2	LIGHTS EX	No	20		
17,3	GLANDS SIZE 1 EX	No	10		
17,4	SHROUD SIZE 1 EX	No	10		
17,5	LIGHT SWITCH	No	5		
17,6	CLASSIFICATION SIGN (300MMX300MM)	No	1		
18	<b>STORES OUTSIDE FUEL TANKS (ZONE 2)</b>				
	SUPPLY				
18,1	BONDING	No	1		
18,2	TANK CAPACITY LABEL	No	1		
18,3	TANK PRODUCT NAME	No	1		
18,4	OFFLOADING EARTH POINT	No	1		
18,5	CLASSIFICATION SIGN (300MMX300MM)	No	1		
19	<b>STORES PAINT STORE (ZONE 2)</b>				
	SUPPLY				
19,1	LIGHTS EX RATING IDENTIFYING	No	1		
19,2	VENT FANS EX RATING IDENTIFYING	No	1		
19,3	EARTHING AND BONDING	No	100		
19,4	CLASSIFICATION SIGN (300MMX300MM)	No	1		
20	<b>C&amp;I SECTION 1 (ZONE 2)</b>				
	SUPPLY				
20,1	FLUORESCENT LIGHT EX	No	10		
20,2	EARTHING AND BONDING	No	10		
20,3	CLASSIFICATION SIGN (300MMX300MM)	No	1		
20,4	LABOUR TO STRIP	Hrs	30		
20,5	LABOUR TO INSTALL	Hrs	80		
20,6	ISSUE COC	Hrs	1		
21	<b>BON APETIT (SAFE ZONE)</b>				
	SUPPLY				
21,1	EARTHING AND BONDING	No	10		

21,2	CLASSIFICATION SIGN (300MMX300MM)	No	1		
22	<b>OUTSIDE PLANT SEWAGE (SAFE ZONE)</b>				
	SUPPLY				
22,1	WELDING PLUG	No	1		
22,2	220 WALL SOCKET	No	2		
22,3	LIGHTS EX	No	10		
22,4	CLASSIFICATION SIGN (300MMX300MM)	No	1		
23	<b>OUTSIDE TRUCK DIESEL TANK &amp; DISPENSING PUMP (ZONE 2)</b>				
	SUPPLY				
23,1	CABLE SWA 2.5MM SQ 4 CORE	No	20		
23,2	EARTHING AND BONDING	No	10		
23,3	OFFLOADING EARTH POINT	No	1		
23,4	CLASSIFICATION SIGN (300MMX300MM)	No	1		
24	<b>OUTSIDE PUMP STATION (ZONE 1 &amp; 2)</b>				
	SUPPLY				
24,1	EMERGENCY STOP BUTTON	No	2		
24,2	GLANDS SIZE 1	No	10		
24,3	EARTHING AND BONDING	No	10		
24,4	SHROUD SIZE 1 EX	No	10		
24,5	OFFLOADING EARTH POINT	No	1		
24,6	CLASSIFICATION SIGN (300MMX300MM)	No	1		
25	<b>HYDROGEN PLANT(ZONE 1 &amp; 2)</b>				
	SUPPLY				
25,1	EARTHING AND BONDING	No	10		
25,2	OFFLOADING EARTH POINT	No	1		
25,3	FIREDOOR	No	1		
25,4	CLASSIFICATION SIGN (300MMX300MM)	No	1		
26	<b>OIL BURNER STORE (ZONE 1 &amp; 2)</b>				
	SUPPLY				
26,1	220 WALL SOCKET	No	2		

26,2	EARTHING AND BONDING	No	10		
26,3	CLASSIFICATION SIGN (300MMX300MM)	No	1		
27	<b>TURBINE NEW OIL TANK (ZONE 2)</b>				
	SUPPLY				
27,1	EARTHING AND BONDING	No	10		
27,2	OFFLOADING EARTH POINT	No	1		
27,3	LIGHTS EX	No	10		
27,4	CLASSIFICATION SIGN (300MMX300MM)	No	1		
28	C&I OUTSIDE PLANT				
	SUPPLY				
28,1	CLASSIFICATION SIGN (300MMX300MM)	No	1		
29	<b>OIL STORE (ZONE 2)</b>				
	SUPPLY				
29,1	LIGHTS 400W EX	No	10		
29,2	CLASSIFICATION SIGN (300MMX300MM)	No	1		
30	<b>EMPTY CYLINDER AREA (SAFE ZONE)</b>				
	SUPPLY				
30,1	PPE AND OTHER SAFETY SIGNS	Lot	1		
31	<b>SULPHUR BULK STORAGE (ZONE 2)</b>				
	SUPPLY				
31,1	EARTHING AND BONDING	No	10		
31,2	CLASSIFICATION SIGN (300MMX300MM)	No	1		
32	<b>CHLORINE STORAGE ROOM (ZONE 2)</b>				
	SUPPLY				
32,1	EARTHING AND BONDING	No	10		
32,2	CLASSIFICATION SIGN (300MMX300MM)	No	1		
33	<b>HAZADOUS FLAMMABLE CHEMICAL STORAGE (ZONE 2)</b>				
	SUPPLY				

33,1	EARTHING AND BONDING	No	10		
33,2	CLASSIFICATION SIGN (300MMX300MM)	No	1		
33,3	LABOUR TO INSTALL	Hrs	30		
33,4	ISSUE COC	Hrs	1		
34	<b>SANNIESHOF (KITCHEN)</b>				
	SUPPLY				
34,1	CLASSIFICATION SIGN (300MMX300MM)	No	1		
35	<b>NORT FUEL OIL PLANT (ZONE 2)</b>				
	SUPPLY				
35,1	EARTHING AND BONDING	No	10		
35,2	CLASSIFICATION SIGN (300MMX300MM)	No	1		
36	<b>PERIODIC MAINTENANCE SCHEDULES</b>				
36,1	COAL CONVEYOR BELT 9 (UNIT 1 TO 6) VISUAL INSPECTION	No	50		
36,2	COAL CONVEYOR BELT 9 (UNIT 1 TO 6) CLOSE INSPECTION	No	100		
36,3	COAL CONVEYOR BELT 9 (UNIT 1 TO 6) DETAILED INSPECTION	No	150		
36,4	COAL CONVEYOR BELT 10 (UNIT 1 TO 6 Close Inspection)	No	50		
36,5	COAL CONVEYOR BELT 10 (UNIT 1 TO 6 Close Inspection)	No	100		
36,6	COAL CONVEYOR BELT 10 (UNIT 1 TO 6 Close Inspection)	No	150		
36,7	SOUTH FUEL PLANT VISUAL INSPECTION	No	10		
36,8	SOUTH FUEL PLANT CLOSE INSPECTION	No	20		
36,9	SOUTH FUEL PLANT DETAILED INSPECTION	No	30		
36,10	PLATERSHOP GAS STORAGE VISUAL INSPECTION	No	10		
36,11	PLATERSHOP GAS STORAGE VISUAL INSPECTION	No	20		
36,12	PLATERSHOP GAS STORAGE VISUAL INSPECTION	No	30		
36,13	AMMONIA BULK STORE VISUAL INSPECTION	No	10		

36,14	AMMONIA BULK STORE CLOSE INSPECTION	No	20		
36,15	AMMONIA BULK STORE DETAILED INSPECTION	No	30		
36,16	DIESEL GEN U1 TO 6 VISUAL INSPECTION	No	50		
36,17	DIESEL GEN U1 TO 6 CLOSE INSPECTION	No	100		
36,18	DIESEL GEN U1 TO 6 DETAILED INSPECTION	No	150		
36,19	AMMONIA DILUTION PLANT VISUAL INSPECTION	No	10		
36,20	AMMONIA DILUTION PLANT CLOSE INSPECTION	No	20		
36,21	AMMONIA DILUTION PLANT DETAILED INSPECTION	No	30		
36,22	SMALL GAS CYLINDER STORAGE VISUAL INSPECTION	No	10		
36,23	SMALL GAS CYLINDER STORAGE CLOSE INSPECTION	No	20		
36,24	SMALL GAS CYLINDER STORAGE DETAILED INSPECTION	No	30		
36,25	BATTERY ROOM U1 TO 6 VISUAL INSPECTION	No	50		
36,26	BATTERY ROOM U1 TO 6 CLOSE INSPECTION	No	100		
36,27	BATTERY ROOM U1 TO 6 DETAILED INSPECTION	No	150		
36,28	TRANSFORMER OIL OLD TANK VISUAL INSPECTION	No	10		
36,29	TRANSFORMER OIL OLD TANK CLOSE INSPECTION	No	20		
36,30	TRANSFORMER OIL OLD TANK DETAILED INSPECTION	No	30		
36,31	FULL CYLINDER AREA VISUAL INSPECTION	No	10		
36,32	FULL CYLINDER AREA CLOSE INSPECTION	No	20		
36,33	FULL CYLINDER AREA DETAILED INSPECTION	No	30		
36,34	TRANSFORMER OIL OLD TANK VISUAL INSPECTION	No	10		
36,35	TRANSFORMER OIL OLD TANK CLOSE INSPECTION	No	20		
36,36	TRANSFORMER OIL OLD TANK DETAILED INSPECTION	No	30		
36,37	FULL CLINDER AREA VISUAL INSPECTION	No	10		



36,38	FULL CLINDER AREA CLOSE INSPECTION	No	20		
36,39	FULL CLINDER AREA DETAILED INSPECTION	No	30		
36,40	PROPANE GAS TANK VISUAL INSPECTION	No	10		
36,41	PROPANE GAS TANK CLOSE INSPECTION	No	20		
36,42	PROPANE GAS TANK DETAILED INSPECTION	No	30		
36,43	TURBINE USED OIL TANK VISUAL INSPECTION	No	10		
36,44	TURBINE USED OIL TANK CLOSE INSPECTION	No	20		
36,45	TURBINE USED OIL TANK DETAILED INSPECTION	No	30		
36,46	BULK DIESEL TANK VISUAL INSPECTION	No	10		
36,47	BULK DIESEL TANK CLOSE INSPECTION	No	20		
36,48	BULK DIESEL TANK DETAILED INSPECTION	No	30		
36,49	EMD OP WORKSHOP VISUAL INSPECTION	No	10		
36,50	EMD OP WORKSHOP CLOSE INSPECTION	No	20		
36,51	EMD OP WORKSHOP DETAILED INSPECTION	No	30		
36,52	STORES OUTSIDE FUEL TANK VISUAL INSPECTION	No	10		
36,53	STORES OUTSIDE FUEL TANK CLOSE INSPECTION	No	20		
36,54	STORES OUTSIDE FUEL TANK DETAILED INSPECTION	No	30		
36,55	C&I SECTION VISUAL INSPECTION	No	10		
36,56	C&I SECTION CLOSE INSPECTION	No	20		
36,57	C&I SECTION DETAILED INSPECTION	No	30		
36,58	BON APETEIT VISUAL INSPECTION	No	10		
36,59	BON APETEIT CLOSE INSPECTION	No	20		
36,60	BON APETEIT DETAILED INSPECTION	No	30		
36,61	OUTSIDE PLANT SEWAGE VISUAL INSPECTION	No	10		
36,62	OUTSIDE PLANT SEWAGE CLOSE INSPECTION	No	20		
36,63	OUTSIDE PLANT SEWAGE DETAILED INSPECTION	No	30		

36,64	OUTSIDE TRUCK DIESEL TANK AND DISPENSING PUMP VISUAL INSPECTION	No	10		
36,65	OUTSIDE TRUCK DIESEL TANK AND DISPENSING PUMP CLOSE INSPECTION	No	20		
36,66	OUTSIDE TRUCK DIESEL TANK AND DISPENSING PUMP DETAILED INSPECTION	No	30		
36,67	OUTSIDE PUMP STATION VISUAL INSPECTION	No	10		
36,68	OUTSIDE PUMP STATION CLOSE INSPECTION	No	20		
36,69	OUTSIDE PUMP STATION DETAILED INSPECTION	No	30		
36,70	HIDROGEN PLANT VISUAL INSPECTION	No	50		
36,71	HIDROGEN PLANT CLOSE INSPECTION	No	100		
36,72	HIDROGEN PLANT DETAILED INSPECTION	No	150		
36,73	OIL BURNER STORE VISUAL INSPECTION		10		
36,74	OIL BURNER STORE CLOSE INSPECTION	No	20		
36,75	OIL BURNER STORE DETAILED INSPECTION	No	30		
36,76	TURBINE NEW OIL STORE VISUAL INSPECTION	No	10		
36,77	TURBINE NEW OIL STORE CLOSE INSPECTION	No	20		
36,78	TURBINE NEW OIL STORE DETAILED INSPECTION	No	30		
36,79	C&I OP VISUAL INSPECTION	No	10		
36,80	C&I OP CLOSE INSPECTION	No	20		
36,81	C&I OP DETAILED INSPECTION	No	30		
36,82	OIL STORE VISUAL INSPECTION	No	10		
36,83	OIL STORE CLOSE INSPECTION	No	20		
36,84	OIL STORE DETAILED INSPECTION	No	30		
36,85	EMPTY CYLINDER AREA VISUAL INSPECTION	No	10		
36,86	EMPTY CYLINDER AREA CLOSE INSPECTION	No	20		
36,87	EMPTY CYLINDER AREA DETAILED INSPECTION	No	30		
36,88	CHLORINE STORAGE ROOM VISUAL INSPECTION	No	10		

36,89	CHLORINE STORAGE ROOM CLOSE INSPECTION	No	20		
36,90	CHLORINE STORAGE ROOM DETAILED INSPECTION	No	30		
36,91	HAZADOUS FLAMMABLE CHEMICAL STORE VISUAL INSPECTION	No	10		
36,92	HAZADOUS FLAMMABLE CHEMICAL STORE CLOSE INSPECTION	No	20		
36,93	HAZADOUS FLAMMABLE CHEMICAL STORE DETAILED INSPECTION	No	30		
36,94	SUNNIESHOF VISUAL INSPECTION	No	10		
36,95	SUNNIESHOF CLOSE INSPECTION	No	20		
36,96	SUNNIESHOF DETAILED INSPECTION	No	50		
36,97	NORTH FUEL PLANT VISUAL INSPECTION	No	10		
36,98	NORTH FUEL PLANT CLOSE INSPECTION	No	20		
36,99	NORTH FUEL PLANT DETAILED INSPECTION	No	50		
	<b>TOTAL CONTRACT VALUE FOR FIVE YEARS</b>				
	Preliminary and Generals				
37	<b>Fixed Related Items</b>				
37,1	Site Establishment	lot	1		
37,2	Site-de Establishment	lot	1		
37,3	Health and Safety	lot	1		
37,4	PPE	No	6		
37,5	Medical- In	No	6		
37,6	Medical -Exit	No	6		
38	<b>Time related Items</b>				
	<b>Labour portion (173 Hours x 60 Months)</b>				
38,1	Contract Manager	Hrs	10380		
38,2	Site Supervisor	Hrs	10380		
38,3	Technician	Hrs	10380		
38,4	Assistance x2	Hrs	20760		
39,1	<b>Training 50 resources per year</b>	No	250		

No	Vehicle type				
D1	LDV	Km	5000		
D2	4 ton Truck	Km	5000		
D3	10 ton Truck	Km	5000		
D4	Truck above 10 tons	M	5000		
	Total Budget Cost Proposal				

**Please Note of the following:**

1. All Price must exclude VAT
2. ALL EX-material must come with IA certification from South African APPROVED TEST LAB

**Price List B  
Safety Costing**

<b>COSTING FOR SHE</b>			
<b>Description</b>	<b>quantity</b>	<b>rate</b>	<b>total</b>
<b>TRAINING AND COMPETENCY</b>			
First Aider (1)			
Supervisor (SHE Training)(1X )			
Incident Investigator (X1)			
Mobile Plant Operators (if applicable)			
Fire fighting level one( X1)/ After appointment on site all employees to attend Fire Demo (provided by the Client)			
Fall Protection planner (x1) & All employees to work at heights must be trained by an Accredited facility.			
Risk Assessor (1X)			
<b>sub-total</b>			
<b>PERSONAL PROTECTIVE CLOTHING (For each employee per annum); SABS &amp;CI APPROVED</b>			
Safety Boots (x1 pair)			
Two or one piece Overalls (x2) chemical proof type			
Reflective vest (x1)			
Hard hat with a chin strip with a company logo (x1)			
Safety gloves (applicable for the type of duty) (x2 pair)			
Safety Goggles/ glasses (applicable for the type of duty) (1X)			
Disposable Dust mask FFP2 Type (each to be replaced after contamination)			
Hearing protection (x1)sans approved			
Rain coats (If applicable)(x1)			
<b>OTHER CONTENTS</b>			
First Aid Box (Including all relevant required items) (x1)			
Fire extinguisher (x1 for the vehicle & x1 for the offices x1 for when conducting Hot work activities)			

## PART 3: SCOPE OF WORK

C3 TSC3 COVER PAGE

C3: Scope of Work

C3.1 SCOPE OF WORK

C3.1 Works Information

1.1SCOPE OF WORK

AS ATTACHED

## 1.2 Receivables Service

- The Contractor issues monthly reports to the Project Manager as agreed between both parties. This report shall include all work done to date, work in progress (including the status) and future work if an order is already in place during the preparation of the report and any other work that the *Contractor* is busy with. The report also includes a copy of all the invoices issued during that month.
- Investigate, identify and report potential plant failures.
- Recommend actions, modifications, system and process changes.
- Participate in investigations when required.
- There must be efficient overall organisation of personnel and services.

a) On notification of a defect/repair to be executed the *Contractor* will submit the following documentation to the *Contracts Service Manager* for approval:

- A detailed quotation for the works.
- A detailed scope of work.
- A program indicating the duration of the work.
- A process quality plan.
- A completion Certificate after the work is done.

In the event of a breakdown after hours and week-end the work needs to follow the Duvha Emergency approval process.

- The standby manager will approve the work to be done.

b) On completion of the work the *Contractor* will submit:

- Handover Documentation with signed off PQP.
- Test records of the work performed.
- COC certification if required.
- Completion Certificate.
- Assessment.
- Required invoicing for payment.

c) The *Contractor* must have in his employ a master installation electrician.

d) A list of all employees and their qualifications is submitted to the *Contract Service Manager* at the starting date.

e) The *Contractor* is registered with the *Electrical Contractor Board* and supplies the Employer with proof of this at the starting date.

f) Any cable more than 10m long that is decommissioned by the *Contractor* must be communicated to the Contract Service Manager or his delegate to obtain information about storage or disposal of that cable.

g) The *Contractor* ensure the availability of all special equipment to perform the required work as per specifications

h) The *Contractor* makes sure that her or his staff is authorised in PSR and HV regulation within 4 months of contract acceptance.

### 1.3 Quality Assurance

- The Contractor submits draft quality control documentation on request of the Supervisor or his delegate.
- The Contractor ensures that effective quality plans are in place prior to undertaking any task at Duvha Power Station.
- The Contractor submits quality plans for maintenance, commissioning and hand over.
- The Contractor is to liaise with the Project Supervisor or his delegate with respect to the maintenance scheduled

### Drawings and specification

- The method and conduct of work is in accordance with the specifications and conforms to the scope of work supplied by the Supervisor or his delegate.
- The drawings are specified in accordance with the respective projects.
- The Project Manager has the propriety rights to all the documentation applicable to Duvha Power Station
- The Contractor consults the Supervisor or his delegate regarding any cable on the plant for which the standards mentioned below are not applicable. This refers to specialised cables or any other cables that the Contractor is not familiar with.
- The Contractor must provide the tightening torque settings for each motor. This must include the thread size, spanner size, material used, grade and the quantity per phase.

### 1.4 Maintenance Philosophy

The *Contractor* provides all services, specialized tools and equipment, specialized personnel, and all associated maintenance services to accomplish and execute the requirements of the Service Information. The *Contractor* provides specialist technical consulting services, which support the optimum continuous operation of the *Employer's* assets on an "as and when" required basis.

The Services are performed on existing, and new installations and complies with good engineering and maintenance practices and standards for Power Stations and conforms to legal, environmental and other Eskom specifications, procedures, standards and conditions prevailing at the site.

In these terms the *Contractor* shall maintain and issue all legal required certification to ensure compliance.

Maintenance will be carried out in the following categories:

#### 1.4.1 Corrective Maintenance

The Maintenance carried out after a failure has occurred and is intended to restore an item to a state in which it can perform its required function.

#### 1.4.2 Preventative Maintenance

Maintenance carried out at pre-determined intervals, or corresponding to prescribed criteria, and intended to reduce the probability of failure or performance degradation of an item

#### 1.4.3 Planned Maintenance

Maintenance performed during a planned or scheduled outage of the specific plant or generating unit

#### 1.4.4 Routine Maintenance



Time based maintenance work that is performed with the plant either on or off load.

#### **1.4.5 General Overhaul**

During an outage all plant having no redundancy is overhauled to ensure reliable and safe operation.

#### **1.4.6 Mini General Overhaul**

During an outage, only the following interventions will be attended to:

- Those plant items with no redundancy and which will not remain reliable up to the next General Overhaul.
- Inspections of suspect plant items.

#### **1.4.7 Opportunity Repairs**

These are short outages between Overhauls to enable essential repairs and inspections to be executed.

### **1.5 Legislation, Regulations, Standards and Specifications**

The *Contractor* conforms to all prevailing legal requirements of the republic of South Africa, Eskom SOC Limited and Duvha Power Station Site legal Requirements, with special reference but not limited to the following:

- Occupational Health and safety Act 85 of 1993 as amended and its regulations.
- SANS 10400 National Building regulations
- Plant Safety Regulations (PSR) – Generation Plant Safety Regulations.
- GGPP0592: Generation Policy: Power Station Plant Classification.
- OPG 0159-02: Eskom manual: Classification Guideline.
- Compensation for Occupational Injuries and Diseases Act 130 of 1993 as amended.
- National Environmental Management Act 107 of 1998 as amended.
- National Environmental Waste Act 59 of 2008 as amended.
- National Water Act 36 of 1998 as amended.
- Occupational Health and Safety Incident Management Procedure -32-95
- Any other act or procedure deemed necessary or applicable if the work includes some toxic and/or hazardous substances during normal and routine maintenance activities stipulated in this document. In this case the *Contractor* handles such hazardous substances in accordance with the applicable regulations and procedures, and is disposed of by the *Contractor* in accordance with the applicable law

### **1.6 Earth Mat Testing**

- Inspect and conduct each 6 months mat testing in all systems of Duvha Power Station including all Hazloc Systems Correct /repair / fix and discrepancies / faults / defects
- Develop or write and submit formal report of the earth mat tests

### Specifications

**Table 1. Standards and specifications**

Item	Title	Revision	Tick if publicity available
1	Eskom ESKASAAU7: Quality Requirements for the Procurement of Assets, Goods and Services.	Latest	
2	SANS 1339 SABS 1339 2010 4 Electric cables - Cross-linked polyethylene (XLPE) insulated cables for rated voltages 3,8/6,6 kV to 19/33 kV	Latest	
3	SANS 1507-1 SABS 1507-1 2007 1.01 Electric cables with extruded solid dielectric insulation for fixed installations (300/500 V to 1 900/3 300 V) Part 1: General	Latest	
4	SANS 1507-2 SABS 1507-2 2007 1.01 Electric cables with extruded solid dielectric insulation for fixed installations (300/500 V to 1 900/3 300 V) Part 2: Wiring cables	Latest	
5	SANS 1507-3 SABS 1507-3 2007 1.01 Electric cables with extruded solid dielectric insulation for fixed installations (300/500 V to 1 900/3 300 V) Part 3: PVC Distribution cables	Latest	
6	SANS 1507-4 SABS 1507-4 2009 1.02 Electric cables with extruded solid dielectric insulation for fixed installations (300/500 V to 1 900/3 300 V) Part 4: XLPE Distribution cables	Latest	

7	SANS 1507-5 SABS 1507-5 2009 1.02 Electric cables with extruded solid dielectric insulation for fixed installations (300/500 V to 1 900/3 300 V) Part 5: Halogen-free distribution cables	Latest	
8	SANS 1507-6 SABS 1507-6 2007 1.02 Electric cables with extruded solid dielectric insulation for fixed installations (300/500 V to 1 900/3 300 V) Part 6: Service cables	Latest	
9	SANS 97 SABS 97 2010 7 Electric cables - Impregnated paper-insulated metal-sheathed cables for rated voltages 3,3/3,3 kV to 19/33 kV (excluding pressure assisted cables)	Latest	
10	SANS 529 SABS 529 2007 3 Heat-resisting wiring cables	Latest	
11	SANS 808 SABS 808 1967 1 Cable glands for use on flameproof enclosures (Ex d)	Latest	
12	SANS 876 2009 1 Cable terminations and live conductors within air-filled enclosures (insulation co-ordination) for rated a.c. voltages from 7,2 kV up to and including 36 kV	Latest	
13	SANS 10142-1 SABS 0142-1 2009 1.07 The wiring of premises Part 1: Low-voltage installations	Latest	
14	SANS 10142-2 2009 1 The wiring of premises Part 2: Medium-voltage installations above 1 kV a.c. not exceeding 22 kV a.c. and up to and including 3 000 kW installed capacity	Latest	
15	Eskom Generation GGS0386 Rev 5 Requirements for control and power cables for power stations	Latest	
16	NWS 1220: Specification for cable junction and reduction boxes for power stations.	Latest	
17	Drawing 0.00/1310: Standard power and control cable code	Latest	
18	Eskom NWS 1007/P: The Management of Construction, Commissioning and Hand-Over of Plant	Rev 2	

19	Eskom NWS 1525: Specification for Control and Instrumentation Cables	Rev 3	
20	Eskom NWS 1674: Drawing Acceptance	Latest	
21	Eskom NWS 1024: Specification for Panel Hardware and Components for Electronic Equipment	Latest	
22	Eskom GGS 0349: Quality Assurance	Rev 2	
23	Eskom Plant Safety Regulations	Latest	
24	Eskom Duvha 7.1/PR/03 KKS and Labelling – Duvha Procedure	Latest	
25	Eskom 0.54 393 Rev 22 Eskom Earthing Standard Drawings	Latest	
26	36-946 WI for electrical drawings and documentation	Latest	
27	36-944 General drawing standard WI	Latest	
28	GG0315 Standard drawing practise	Latest	
29	36-947 WI for C&I on drawings and documentation	Latest	
30	GG0450 Guideline to acceptance of <i>Contractor</i> drawings	Latest	
31	36-943 Engineering drawing office and engineering document standard.	Latest	

**Table 2 List of Services and Materials**

**2. Cable information to be supplied to the *Employer***

- i. The *Contractor* supplies the following cable information to the *Employer* for every cable task performed before invoicing(Sample):

(Information)	(Example)
Cable number	01BFA1012
Cable origin Function Location Code	01BFA06AA001
Cable origin Description	380V COMMON FUEL OIL PLANT BOARD A CIRCUIT 05
Cable destination Function Location Code	00EGD11AH001
Cable destination Description	TANK 1 OUTFLOW HEATER BANK 1
Termination Date	20/09/03
Cable type	BVX3PCV
Joint information	20m from origin.....

Gland type	
Cable Length	55m
Cable route	
Tagged as per Eskom standard	Yes

### 3. Contact Persons

- i. The Project Manager, his delegates (other departments using the Contract), and, if outside the Employer's working hours, the Electrical Maintenance Manager or his delegate are identified as those authorised to call out the Contractor as required to perform the works.
- ii. The Project manager ensures that the Contractor, his site manager or his delegate is on site during maintenance work been carried out. The Contractor's site manager or his delegate has full signing authority and is authorised to make binding decisions. The Contractor, his site manager or his delegate is reachable per telephone, after hours for any emergencies.
- iii. The Contractor notifies the Project Manager of his contact telephone numbers by the starting date.
- iv. The Contractor notifies the Project Manager of a change of Contractor's telephone number one week before such changes takes effect.

### 4. SITE INFORMATION AND FACILITIES

#### PROVIDED BY THE EMPLOYER

#### 4.1 LOCATION AND DESCRIPTION

Duvha Power Station is situated in the Mpumalanga Province in Witbank on the Old Bethal Road . This has been the major power producing area of South Africa since the sixties. The planning and design of Duvha Power Station began in the early seventies. Construction also started in the early seventies and the station began operating at full capacity early 1979. When Duvha was completed in 1979, it was the largest coal-fired station in the Southern Hemisphere. Duvha consists of six 500MW units at an installed capacity of 3 000MW.

#### 4.2 Data Item Descriptions

##### A. Working hours

##### i. Normal / Overtime hours

- a) Normal time will be deemed as any work during working hours from 7:00 – 16:30, 5 days per week, Monday to Friday.
- b) Overtime hours will be deemed as any activity for which Contractor receive a request to work after normal hours during the week, Monday to Friday including Saturday will be charged at the normal rate X 1,5. Any activity for which Contractor receive a request to work on Sunday or a Public holiday, will be charged at the normal rate X 2. The time would include his traveling time and all travelling cost.
- c) Where a unit start-up or outage or other work is being conducted outside normal office hours, the Contractor shall, in order to provide the works, be present at the event concerned at the Employer's request, provided such requests is provided at a notice period reasonable for the circumstances, by the Supervisor or his delegate.
- d) The contractor shall make provisions for 24hour standby every day for work on calls made by Eskom personnel, and shall make all resources available to continue the worked called for.

**A reasonable notice period shall be deemed to be:**

One day for general meetings,  
Seven days for a planned outage,  
One hour for a unit trip, as soon as possible but not longer than 3 hours and  
One hour for a health or safety hazard or a plant emergency that could lead to a trip or other loss of generating capacity

iv. The Contractor reports to the power station or any other site for meetings, seminars, conferences, etc. as notified by the Supervisor or his delegate.

#### 4.3 Additional conditions

- i. This contract and all information associated with its management are confidential and may not be divulged beyond the provisions stated within the contract. Should the Contractor violate this condition, the Employer may terminate this contract forthwith and nullifying any outstanding or further claims by the Contractor.
- ii. Neither the Contractor nor the key persons may have any interest, pecuniary, material or otherwise in any work arising from, impacting, or influencing the Contractor's ability to impartially fulfil the Scope of this contract, be it of a service or supply nature. The Contractor and the key persons are to declare any interest, pecuniary, material or otherwise, in any tender, offer or quotation to the Project Manager for any other work, supply or service, to the Employer's Agent at the time when such tender, offer or quotation is submitted. The Project Manager's interpretation of a situation shall apply where there is a conflict.

##### 4.3.1.1 Submission of Reports

- i. The Contractor keeps equipment and labour reports for inspection, and submits it monthly to the Project Manager.
- ii. The Contractor submit reports to the Project Manager within 5 (Five) days before the end of each month. The format of all reports is approved by the Project Manager prior to submission.
- iii. All quotations and Invoices includes the following table per item(see sample):

SAP line item:		
Item name (as per price list):		
Item price (as per price list):		
Quantity:		(Units of measure)
Description:		
Item Total		

- iv. Each task order includes the starting and completion date.

#### 4.3.1.2 Quality requirements

- i. The Contractor complies with the Employer's Quality Requirements as specified in Eskom Generation Standard GGS 0462 in to the Scope.
- ii. For a job where the Employer deems that a quality plan is necessary, the quality control documentation is submitted to the Supervisor or his delegate within 3 (Three) days after the job is requested, prior to the start of the job.

#### 4.3.1.3 Defects Correction Period

- i. Due to the different nature of defects, and the different risks associated with trips, the defect correction period as specified in the Contract Data varies per defect, as indicated by the Employer.

Priority 1 – 24 hours – All modifications which may affect the operations at Duvha Power Station.

Priority 2 – 2 days – Investigations and feasibility studies.

Priority 3 – 1 week – Repairs.

### 5 Site roads

- The *Contractor's* vehicles may use the roads. Vehicle access to some conveyor belts is restricted.
- Any costs incurred from damage caused to underground services, structures, roads, etc. as a result of the *Contractor* not using the prescribed routes, will be recovered from the *Contractor*.

### 6 Medical facilities

- The *Contractor* provides a first aid service to his employees and Subcontractors. In the case where these prove to be inadequate, like in the event of a serious injury, the *Employer's* medical centre and facilities will be available.
- Outside the *Employer's* office hours, the *Employer's* first aid services will only be available for serious injuries and life threatening situations.
- The *Employer* shall be entitled, however, to recover the costs incurred, through the use of the above *Employer's* facilities, from the *Contractor*.

### 7 Refuse disposal

- The Employer will provide and empty special colour coded bins for refuse disposal.
- For the full duration of the *works*, the *Contractor* is responsible to keep the work areas clean of any rubble, and to dispose all refuse to a registered dumpsite. Such a dumpsite is not available at Duvha Power Station.
- All waste introduced and/or produced on Eskom's premises by the *Contractor* for this Contract, must be handled in accordance with the minimum requirements for the Handling and Disposal of Hazardous Waste in terms of Government Legislation as proclaimed by the Department of Water Affairs and Forestry Act 1994 Ref.: ISBN0621 - 16296-5.

### 8 Accommodation

The provision of accommodation for the *Contractor's* personnel shall be the responsibility of the *Contractor*.

## 9 *Employer's* catering facilities

- The *Contractor* or any of his employees or Sub *Contractors* will not be allowed to use the *Employer's* dining facilities, unless a specific agreement has been made between the *Contractor* and Eskom Catering and Accommodation Services (ECAS).
- The *Contractor* or any of his employees or Sub *Contractors* may purchase take-away meals from the fast foods outlet on site.

## 10 Telecommunication

Connections are available. The contractor applies via the Project Manager for a connection. Connection fees and calls are for the Contractor's account.

## 11 Provisions for entering the Duvha's premises.

### Licences

- All drivers, who drive on site, must produce their provincial license.
- Anyone who operates a mobile machine or vehicle must be passed out by the mine and have a license for that specific machine.

### Vehicles

- All vehicles shall be in a roadworthy condition. The vehicles shall be inspected by the Diesel service department before these vehicles may be used on site.
- All vehicles shall comply with the Eskom Vehicle Safety Specification 32-345
- All vehicles entering the Duvha's premises shall be fitted with safety belts. (This includes all delivery vehicles).

### Speed Limit

- All vehicles must be driven with due consideration for personnel and property. A maximum speed limit of 40 kilometres per hour will be adhered to on the premises at all times.

## 12 Provisions for entering the *Employer's* premises.

### Security arrangements

- The *Contractor* applies for temporary access permits (*Contractor's* Permit) at the Security gate. The *Contractor's* personnel shall be required to be in the possession of a *Contractor* Permit at all times.
- All *Contractor* personnel shall be issued with a temporary access permit (*Contractor* Permit) which will contain the following information:
  - Name
  - ID Number
  - Company



- Validity date
- All *Contractor* permits must be submitted to Protective Services when the workers leave the Site after completion of the works.
- In order to assist Protective Services with the issuing of permits and the identification of personnel on Site, the *Contractor* is to supply a list of all personnel that he intends using on Site, at least 24 hours prior to entering the Security area. This list must be delivered to Protective Services, or can be faxed to (013) 690 0348. The list identified with the *Contractor's* name, is to contain the following information:
  - Employee Name.
  - Employee ID Number.
  - Eskom Safety Co-ordinators signature.
  - Eskom Project Manager's signature.
  - Copy of the first page of the ID book of every employee of the Contractor, photocopied to reduce the size to 65%.
- The list of details has to be completed on the special form appended to the *Contractor's* Safety Manual.
- To speed up the process of gaining access to the Site, the Contractor must compile detailed lists of all tools and equipment to be taken on Site before arriving at the Power Station Security gate. A special Tool List form is available at Protective Services. An authorised copy of this list must be retained and used again when the tools and Equipment is removed from Site after completion of the works.
- The Contractor's visitors and personnel shall conform to the security arrangements in force at the Site at all times. Application forms for visitors must be filled in by the Contractor's site manager and approved by the Employer, one day before the visit and submitted to the Employer's Protective Services office. Visitors will not be allowed on Site if the necessary forms are not in the possession of security staff.
- The Security Manager may, with valid cause, remove any of the *Contractor's* personnel from Site, either temporarily or permanently. He/she may deny access to the Site to any person whom, in the opinion of the said Security Manager, constitutes a security risk.
- No unauthorised vehicles will be allowed on Site. Contract vehicle application should be directed to the *Project Manager*.
- The *Contractor* will be limited to the *working areas* associated with the *works*. The *Contractor* is forbidden to enter any other areas, and must ensure that his employees abide by these regulations.
- Parking inside the power station is strictly forbidden, except for loading proposes.
- No recruiting of casual labour may be done on Eskom premises, including the area outside the power station security gate.

### 13 Safeguarding of Plant and Material

The *Contractor* is responsible for the safeguarding, care and security of all items whilst in the *Contractor's* custody and control, until the *Employer* has taken over the *works*.

### 14 Health and safety

#### Health and safety

### Occupational Health and Safety Act 85 Of 1993 – SECTION 37

- In accordance with Section 37 (2) of the Act, the *Contractor* is appointed by the *Employer* as a mandatory to assume the duties and responsibilities as stipulated in Annexure 9 to the Contract. The *Contractor* ensures compliance with all requirements of the Act and any instruction or notification that enhances those requirements.
- The *Contractor's* person appointed on the form in Annexure 9 is a competent person as defined in the General Machinery Regulations, Section 2.1 of the Act.
- The *Contractor* acknowledges that he is fully aware of all the requirements of the Occupational Health and Safety Act and undertakes to employ only staff who have been duly authorised in terms thereof and who receive sufficient safety training to ensure that they can comply therewith.
- The *Contractor* undertakes not to do, and not to allow anything to be done which will contravene any of the provisions of the Act, Regulations or Safety and Operating Procedures.

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* will appoint him as the "Main Contractor" (as defined and provided for under the Client's Generation Coal Fired Stations OHS Specification for High Risk Activities/Services 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 Occupational Health and Safety Act, 1993 and its related regulations, all applicable statutory and other requirements provided for in this contract and generally for the proper maintenance of health & safety in and about the execution of the *service*; and

The Main contractor must provide an organisational organogram on the company's letter head related to this contract, depicting all the levels of responsibility from the CE down to the supervisors responsible for the contract. List the relevant positions held, names of appointees, legal appointments and the Organogram must be signed off by the company's 16(1) or 16 (2).

The Main contractor must ensure that all appointed contractors comply with this requirement. The Main contractor is responsible for keeping copies of all the organograms' as well as submitting them with the OHS plan. All organograms shall be updated timeously when appointments are changed.

This diagram must be kept up to date and filed in the project OHS files.

- Before the commencement of work, review the submitted baseline risk assessments to include site or emerging risks. This should be done by a competent person appointed in writing with a view to identify hazardous and potentially hazardous work operations.
- Contractor site supervisor
- The contractor site supervisor must be trained in the following:
  - HIRA, Incident investigation training (Should one not already appointed), Supervisor training, authorised person & PSR (if this has been specified during the tendering process) and OHS Legal liability
  - Contractor Health and Safety officer -Fulltime basis
- The contractor health and Safety officer must be trained in the following:
  - SAMTRAC, HIRA, Incident investigation training, OHS Legal liability, Training, knowledge and understanding of ISO 45001, Minimum work experience 2yrs,

## **14.1 Plant Safety Regulations**

The *Employer* shall on request from the *Contractor*; isolate required plant from all sources of danger as described in the Plant Safety Regulations.

The *Employer* shall on request, make available a copy of the latest revision of the Plant Safety Regulations available to the *Contractor*.

The *Contractor* shall conform to all rules and regulations applicable to Plant Safety and shall complete the Workman's Register prior to working on the plant.

At every permit change the *Contractor* shall ensure he withdraws himself/herself/his staff for that period of permit suspension/revocation and thereafter only proceed with the *works* after signing onto the new permit.

The *Contractor* to ensure that he/she/all sub-contractors/personnel/staff/his visitors are medically, physically and psychologically fit to enter the Duvha Power Station, and specifically any confined space.

The *Contractor* is prohibited from entering Radiation Areas. The Project Manager in exceptional cases shall give special permission.

The onus is on the *Contractor* to ensure that the correct confined space requirements are met and that gas tests have been done by the *Employer* prior to entry into any confined space or hazardous plant areas.

The *Contractor* shall ensure that all personnel including himself is competent to carry out the *works*. Proof of competency for technical and safety aspects must be available as and when required on site.

## **14.2 ACCESS**

### **14.2.1 Limited Access Register (LAR)**

The LAR is for the person in charge of the plant to maintain control over activities taking place on his plant that are not covered by the Plant Safety Regulation and Operating Regulations for High Voltage Systems. Activities that are allowed to be carried out under the LAR must not require a permit and must satisfy the following criteria:

- 1.They must not involve danger to the person carrying out the activity;
- 2.No plant isolations must be required;
- 3.There must be no risk of a production loss;
- 4.The duration of the activity must be less than 12 hours;
- 5.The activity must be carried out by a skilled person.

It is very important that the person who plans to do an activity on a plant under the LAR informs the person in charge of the plant (ASS on the panel or PPO at WTP) of what will be done. This means verbally telling the person in charge of the plant what will be done and not just signing the LAR book. The LAR book must also be signed.

It is also important that as soon as the activity is completed the person, who was doing the activity, notify (verbally) the person in charge of the plant that conditions are back to normal and that the LAR has been signed off. Just signing the LAR book is not sufficient.

#### 14.2.2 RESTRICTED AREA

- a) Where access is prohibited for the purpose of power system protection and security, or to protect the health and **safety** of persons, such an area is regarded as a **restricted area**.
- b) A person must obtain permission for access to a **restricted area** through an **approved** system such as the **limited access register**.
- c) Typical examples of **restricted areas** are:
  - (i) Switch rooms.
  - (ii) Equipment Rooms, and
  - (iii) Areas where gas and environmental testing must be performed before access is allowed.
- d) Issue of keys to **restricted areas** for inspections/activity only

For more information please refer to Plant Safety Regulation C11.

#### 14.3 Health and Safety Arrangements

The *Contractor* shall comply with the guidelines set out in the Duvha Power Station Safety Manual SAS 0012 and OHS Specification issued. The sheet on the first page must be completed by the *Contractor's* Site Manager and submitted to the *Employer* before taking possession of the *works*.

This Safety File must be approved and signed by a Duvha Safety Officer before the *Contractor* and his personnel may attend the Health and Safety Induction Course.

The *Contractor* ensures that all his personnel attend a Health and Safety Induction Course prior to starting with their work. The Safety Risk Department presents the induction course at Duvha Power Station. Arrangements are to be made with Safety Risk Management by the *Contractor*. The *Contractor* submits the following information to Safety Risk Management before the induction course:

- Medical certificates of the *Contractor's* personnel indicating that the personnel are fit to perform the work.

The *Contractor* to ensure that all appointments required are completed and that the appointee and appointees fully understand their responsibilities and are competent and trained to execute their duties. The appointees/appointee shall ensure that all duties are carried out and records are kept by the *Contractor* for review/audit by the *Employer* or Inspector of Machinery.

The *Employer* shall be entitled to instruct the *Contractor* to stop work, without penalty to the *Employer*, where the *Contractor's* personnel fail to conform to safety standards or contravene health and safety regulations. The *Employer* is entitled to cause the *Contractor* to discipline his employees and to submit disciplinary action, and submit a report to the *Employer*

The *Contractor* supplies and ensures that his employees wear all the necessary personal protective equipment at all times.

The *Contractor* ensures that everyone entering Duvha Power Station under his supervision are medically, physically and psychologically fit to enter Duvha Power Station.

A Registered Professional Occupational Health Practitioner shall carry out the medical examination, at the *Contractors* cost, and the examination shall include the following tests: Eye Test, Blood Pressure, Heart Function, Hearing Test and Lung Function. A thorough examination should be done and previous physical injuries, as well as occupational diseases/complications should be covered.

If at any point in time during the execution of the Works, the *Contractor* has a radiation-related incident/exposure, the onus is on the *Contractor* to immediately notify the *Employer*, the Medical Station. The onus thereafter is for the *Contractor* to immediately arrange, at his/her cost, for blood samples to be taken by a Registered Laboratory and for this sample to be sent to the Excellerator Laboratory

The *Contractor* shall and will take full responsibility and accountability for all other people/staff/personnel/labour that he/she employs or utilises, whether in full-time/part-time/contract basis, in executing the Works or other work whilst on the *Employers* premises.

The *Contractor* shall at all times consider himself as "Employer", as defined in the Occupational Health and Safety Act, No 85 of 1993, section 32.7 and shall not consider himself as under supervision or management of the *Employer* with regard to Health and Safety Requirements but only from a Commercial Contractual Condition of Contract. Under no circumstances shall the *Contractor* consider himself a sub-ordinate or being given supervision.

The *Contractor* shall provide and maintain his own facilities as required in the Occupational Health and Safety Act, No 85 of 1993 or any other Code of Practice or standard

The *Contractor* shall have Safety Systems in place at his premises for the total contract period and these shall include the following:

1. Safety Management Structure and Compliance to these
2. Statutory Appointments
3. Records and documentation of all Risk and Hazard Analyses.
4. Planned Job Observations Records and Documents.
5. Employment history and records of all personnel, part-time or full-time or contract labour.
6. Medical History of all personnel, part-time or full-time or contract labour
7. Training and Competency Records with regard to Safety, Health and Environment.
8. Training and Competency Records with regard to the skills he uses to carry out the Works or any other works in the *Employers* premises.
9. Compensation Commissioner records and proof of registration.
10. Records and documentation with regard to any sub-contractor or labour-only contracts he places or uses to carry out the Works or any other works in *Employers* premises.
11. Personal Protective Equipment and Safety Equipment Inspection, training and competency records and documentation.
12. Employment contracts for all sub-contractor or labour-only contracts.
13. Compliance to a Safety System, such as NOSA or any other system that is similar in nature.
14. Records of all man-hours, including sub-contractors or labour-only contracts, the *Contractor* spends on the *Employers* premises.
15. Written Safe Work Procedures for all hazardous tasks the *Contractor* executes on the *Employers* premises.
16. A Fall Protection Plan for all elevated work the *Contractor* does on the *Employers* premises.
18. Environmental Plan and awareness training.
19. Induction training records of his staff by himself/herself.
20. Risk Assessment of this type of works
22. Proof of Pre-Job briefing session attendance for each task

- 23. Proof of authorisation/accreditation from Department of Employment and Labour and or other Statutory Body for this type of works, if applicable
- 24. Emergency Evacuation and Rescue Plan for the hazardous tasks related to the works.

#### **14.4 Fire Precautions**

Any tampering with the *Employer's* fire equipment is strictly forbidden.

All exit doors, fire escape routes, walkways, stairways, stair landings and access to electrical distribution boards must be kept free of obstruction, and not be used for work or storage at any time. Fire fighting equipment must remain accessible at all times.

In case of fire, report the location and extent of the fire to the Electrical Operating Desk at extension 2222, 2235/6.

Take the necessary action to safeguard the area to prevent injury and the spreading of the fire.

No contractor will conduct any Hot Work without a Hot Work Permit. Falling sparks and welding slag, when carrying out hot work, is prohibited. The onus is on the *Contractor* to prevent and contain falling sparks. All hot work above zero metre boiler and turbine floors must be adequately protected and screened to prevent falling sparks.

#### **14.5 Reporting of accidents**

The *Employer* follows an accident prevention policy that includes the investigation of all accidents involving personnel and property. This is done with the intention of introducing control measures to prevent a recurrence of the same incidents. The *Contractor* is expected to fully co - operate to achieve this objection.

Radiation incidents must be reported immediately.

- 1. Proof of Contract of Employment.
- 2. Proof of WCL notification to Department of Employment and Labour.
- 3. Proof of Medical Doctors Note/Certificate detailing nature of injury and period of rest.
- 4. Risk and Hazard Analysis, if not in place prior to injury.
- 5. Written Safe Working Procedure, if not in place prior to injury.

NOTE! This report does not relieve the *Contractor* of his legal obligations to report certain incidents to the Department of Employment and Labour, or to keep records in terms of the Occupational Health and Safety Act, and Compensation for Occupational Injuries and Diseases Act.

#### **14.6 Environmental Responsibilities**

##### **General**

To protect the *Employer's* environmental interests, the *Contractor* complies with all relevant and appropriate environmental legal requirements contained in governmental notices, laws and regulations promulgated by the national and provincial governments.

The *Contractor* accepts all responsibility, accountability and liability associated with such legal requirements.

The *Contractor* provides the *Employer* with a product and service falling in the scope of Act 36 of 12874 or Hazardous Substances Act no 15 of 1973. The *Contractor* provides the *Employer* with all the necessary information to comply with the legal requirements of Government Notice R1179 in Government Gazette No 16596 of 25 August 1995 (Exposure of employees to Hazardous Chemical Substances) and Section 10 of the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, No 36 of 1947 (Registered pesticides, fertilizers and agricultural remedies, including herbicides ("weed killer").

The *Contractor* adheres to all environmental legislation.

#### **14.7 Land Management**

##### **Veld fires**

The *Contractor* takes all precautions to control fires. A veld fire management plan is submitted to the *Project Manager* 2 weeks after the Contract Date for acceptance. The *Contractor* establishes and maintains firebreaks to prevent any spread of veld fires.

##### **Erosion control**

The *Contractor* takes all the necessary precautions to eliminate or minimise erosion of the *works*. Any work done is subject to acceptance by the *Project Manager*.

Any erosion damage must be repaired and the areas restored to their original condition. Such repair work is carried out as soon as possible after damage occurred.

#### **14.8 Safety**

The *Contractor* complies with the Occupational Health and Safety Act.

The *Contractor* complies with the Eskom Plant Safety Regulations and the Operating Regulations for High Voltage Systems when performing activities on the *works*.

##### **Safety plan**

The *Contractor* maintains a safety plan in accordance with the OHSA.

The *Contractor* provides safety statistical information on a monthly basis to the *Project Manager*, on the 15<sup>th</sup> of every month. Details of the reporting format and information required, are obtained from the *Project Manager*.

#### **14.9 Standard isolation procedures**

The *Contractor* designs a standard isolation procedure for the use of his workforce, as reference and training guide, to be submitted to and accepted by the *Project Manager* 2 weeks before the *possession date*. The purpose is to impress upon his workforce, the importance of safety in preventing injury to personnel, or damage to plant. The safe shut down sequence and step-by-step isolation sequence, must be listed in the procedure, inline with Eskom's Plant Safety Regulations.

#### **14.10 Permit-to-Work arrangements**

- The *Contractor* implements a Permit-to-Work system with lock-out facilities in accordance with the Eskom Plant Safety Regulations.

#### 14.11 Meetings

The *Contractor* attends meetings as instructed by the *Project Manager*. Daily and monthly meetings are envisaged, as a minimum.

#### 14.12 Quality

Quality Management shall comply to the *Employer's* standard GGS0462 - Quality Requirements for Engineering and Construction Works, as required in form A & B of the *Employer's* standard GGS0462, included in the Works Information.

The *Contractor* complies with the Occupational Health and Safety Act 85 of 1993.

##### **Personal Protective Equipment**

The *Contractor* supplies, maintains and ensures that his personnel at all times wear personal protective equipment as required, including at least hard hats, safety glasses, overalls, hearing protection and safety shoes.

##### **Safety Regulations of the *Employer***

- The *Contractor* shall conform to the Eskom Plant Safety Regulations.
- The *Employer* shall on request, make available a copy of the latest revision of the Plant Safety Regulations available to the *Contractor*.

##### **Health and Safety Arrangements**

- The *Contractor* must ensure that all his personnel attend a Health and Safety Induction Course prior to starting with any work. The Induction Course is presented by the *Employer's* Safety Risk Department at Duvha Power Station. Arrangements are to be made with Safety Risk Management by the *Contractor*.
- The *Contractor* shall comply with the guidelines set out in the Duvha Power Station Safety Manual SAS 0012. The sheet on the first page must be completed by the *Contractor* and submitted to the *Project Manager* before starting any work. This sheet will be valid for the duration of the contract.
- Safety Risk Management has the right and authority to visit and inspect the *Contractor's* work place or site yard and the *working areas* to ensure that tools; machinery and Equipment comply with the minimum safety requirements.
- The *Project Manager* may instruct the *Contractor* to stop work, where the *Contractor's* personnel fail to conform to safety standards or contravene health and safety regulations. Such stop-work order is not a compensation event. The *Project Manager* may instruct the *Contractor* to discipline his employees and to submit a disciplinary action report to the *Project Manager*. The *Contractor* shall implement addition health and safety precautions where necessary.

#### 15. Barricading and screens



- The *Contractor* will provide and install barricades and warning devices to ensure that equipment and persons are not exposed to danger or to prevent access to dangerous areas.  
All welding, flame cutting and grinding work shall be properly screened to protect persons from any injury.  
  
All gratings shall be covered with adequate protective screening when welding or flame cutting in the vicinity.

## 17. Environmental controls, fauna & flora

All work complies with relevant environmental regulations as required.

If the works includes some toxic and hazardous substances during normal and routine maintenance activities. In this case the *Contractor* uses such hazardous substances in accordance with the applicable regulations and procedures and are disposed off by the contractor in accordance with the applicable law

## 18. Housekeeping

The *Contractor's* Equipment does not impair the operation of the plant or access to the plant.

## 19. SERVICES AND OTHER THINGS PROVIDED BY THE *EMPLOYER*

### Items

ITEM	DATE BY WHICH IT WILL BE SUPPLIED
220V AND 380V POWER SUPPLY IS AVAILABLE AT THE EXISTING PLUGS (UNINTERRUPTED POWER SUPPLY NOT GUARANTEED).	STARTING DATE
WATER IS AVAILABLE AT THE EXISTING POINTS.	STARTING DATE
<b>SANITARY FACILITIES</b> PERMANENT FACILITIES TO SERVE THE POWER STATION TERRACE ARE PROVIDED BY THE EMPLOYER	
<b>TOILET FACILITIES</b> THE EMPLOYER PROVIDES THE CONTRACTOR ACCESS TO TOILET FACILITIES, FREE OF CHARGE.	
<b>WASTE REMOVAL</b> HOUSEHOLD WASTE REMOVAL TO THE BINS, AS PROVIDED ON THE SITE BY THE EMPLOYER, IS THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR COMPLIES WITH EMPLOYER'S POLICY FOR WASTE MANAGEMENT ON SITE, POLICY. 004/4100.	

## C3.2: CONTRACTOR'S WORKS INFORMATION

**To provide a service for the Hazloc as SANS 10108 to Duvha Power Station and do repairs to comply as per the scope of work**

### Executive overview

#### Procedures

- Update the classification procedure according to SANS 10108
- Hazloc areas access control procedure (up to approval state by the employer)
- Tools, test instrument and equipment used in Hazloc areas procedure (up to approval state by the employer)
- Type of maintenance and Authorisation of maintenance personnel procedure for Hazloc areas ( up to approval state by the employer)
- Hazloc areas maintenance strategy procedure (up to approval state by the employer)
- Procedure for issuing of gas free or hot work permits (PTW system) in Hazloc areas ( up to approval state by the employer)
- Design and develop a certificate of compliance test procedure (up to approval state by the employer) for normal and specialised installation, and the procedure must include comprehensive details about the test equipment to be used.
- Develop a procedure for the selection of the contractors and equipment to be utilised for the electrical installation in classified locations (up to approval by the employer).

#### Training

- Provide formal trainings to Duvha Power Station employees and contractors working in any classified location, including trainings material, books and accessories to a max of 50.
- Provide Technical trainings for the procurement department on Hazloc to prevent purchasing of non-compliant material.
- Provide any specialised trainings to maintenance personnel for Hazloc areas up to a max of 50.
- Incorporate basic Hazloc awareness trainings on the Duvha induction trainings.

#### Inspections

- Design and develop a routine and two yearly inspection schedules for all equipment in classified locations.
- Establish the 'TYPE' and 'GRADE' of the inspections for planned schedule.
- Develop an inspection checklist for planned schedules performed by maintenance personnel.

### **Plant in general**

- All areas where a danger of fire or explosion could occur to be identified as Hazloc and re-classified by being part of the team or committee involved in re-classification.
- Perform required test as per SANS 10142 on all hazardous locations and issue the certificate of compliance for specialised installations.
- Ensure demarcation of Hazloc areas once classified.
- Develop work instruction procedure for all task performed in Hazloc areas.
- Develop task observation documents for all tasks performed in Hazloc areas.

### **General conditions**

- The Contractor will be responsible to supply and deliver the spares required for the repairs or installation. The contractor will then be liable until handing the plant back to Eskom after the repair or installation is completed and handover certificate has been signed.

## **General Requirements**

### **3.2.1 Time Management**

3.2.1.1 The *Contractor* supplies the services required, with at least one or more technicians and MIE based at Duvha full-time in order to supplement the Duvha Maintenance and Engineering personnel to maximise the reliability, availability and safety operations of all systems in Hazardous locations.

The employer may request assistance with the following activities:

- All Preventative and administrative activities.
- All Non critical corrective maintenance activities.
- Critical corrective maintenance activities that occur during this time.
- Technical Support needs during this time.
- Implementation of Modifications
- Contract administration activities
- Updating of critical spares lists, disaster recovery plans, and system operating and maintenance manual.
- Participation in risk management activities.
- Provision of on job Training and coaching.
- Assist Maintenance and Engineering personal in terms of the site requirements on the contracts.

- Installation and replacement of field equipment, testing and commissioning of the installation in Hazardous locations.

3.2.1.2 The *Contractor* must submit timesheets to the *employer* to substantiate the hours that must be compensated.

3.2.1.3 Compensation for hours spent attending to these activities will be compensated on hourly bases, as per quality assurance forms, corrective maintenance reports, and timesheets submitted to the *employer*. Compensation will be at the agreed hourly rate for normal time.

3.2.1.4 The *Contractor* is available to the *Employer* on a 24hr basis- with an option of alternating the staff on weekly basis. The response time of 1-hours and an additional hour to site is applicable. The *Contractor* must provide the *Employer* with contact telephone/cell numbers. Main and second contact telephone numbers are required for all the *Contractor's* personnel.

3.2.1.5 The *Contractor* is on site within 1 hour of receiving a call-out and to start.

3.2.1.6 If the presence of the *Contractor* is required by the *Employer* on site, after normal working, the *Contractor* will be called out by either the Shift manager, EOD personal, contract supervisor, System Engineer, or C&I manager. All call outs will be compensated for, at applicable overtime rates for actual hours worked.

3.2.1.7 All service related travelling costs are included in the Hourly rates supplied by the *Contractor*.

3.2.1.8 Time spend by the *Contractor* on site, out of own choice, will not be compensated. Contractors will work same normal hours as Eskom maintenance personnel.

### **3.2.2 Travelling**

The *Contractor* ensures that his personnel have transport available at all times.

#### **i. Internet Access**

The *Contractor* provides his own mobile internet access to his personnel to fulfil the requirements of this contract.

#### **ii. Access**

The *Employer* provides access to the *Contractor* to the site in order to perform his duties in accordance with this contract.

### **3.2.6 Disaster Recovery Plan**

The *Contractor* updates the disaster recovery plan for the Hazloc system/s when requested to do so by the *employer*. As part of the disaster recovery plan, the *Contractor* indicates the time it will take to rebuild each Hazloc system. The *Employer* evaluates the disaster recovery plan in conjunction with the applicable risk assessment. After major changes as requested by the *Employer*, the disaster recovery plan must be updated.

### **3.2.7 Risk Management**

The *Contractor* actively participates in the risk management of the Hazardous locations. The *Contractor* assesses all the risks related to the reliable and secure operation of the Systems installed in Hazardous location. The *Contractor* recommends mitigations to the risks identified.

### **3.2.8 System Operating and Maintenance Documentation**

The *Contractor* updates the System Operating and Maintenance documentations.

### **3.2.9 Reporting**

The *Contractor* provides feedback once a month at the weekly meeting to the *Employer* on the following:

- *Activities completed durations and applicable person rate.*
- *Any spares used and spares required.*
- *Incident/s impacting on the system reliability, availability in terms of Hazardous locations.*
- *Optimisation results and problems experienced.*
- *Report on the status of work related to additional task instructions.*
- *Notify any compensation events in terms of Clause 61.*
- *Submit quality assurance forms, corrective maintenance reports, and timesheets.*

### **3.2.10 Documentation**

All documentation and reports generated by the *Contractor* is generated using MS Office, Excel, and PowerPoint and are submitted in hardcopies and soft copies. All documentation is submitted as a complete electronic package to the *Employer* for his acceptance. The *Contractor* does not attach copy right to any of the produced documentation or drawings and allows *Employer* to copy and reproduce the documentation and drawings for any purpose related to power generation and the building or modification of power generation in Eskom.

### **3.2.12 Administrative and Preventive maintenance activities**

The contractor must assist in developing an administration and preventive maintenance strategy and schedule to ensure reliability, performance and relevance of the Hazloc system. These must be properly documented. The contractor must assist with agreed administration and preventive maintenance activities.

### **3.2.13 Backup's**

The contractor must assist in developing applicable back up routines. These must be properly documented. The contractor must assist with agreed back up activities.

### **3.2.14 Quality assurance and control**

- Due to the criticality of the systems installed in Hazardous locations, the *contractor and the employer* needs to be assured that all necessary maintenance activities are carried out to the utmost quality standard, to ensure that the system is maintained to the optimum operating condition, thereby maximising the reliability, availability and security of the system.

- In order to ensure that all maintenance activities are carried out as per the employer's quality standard, a quality assurance form must be completed for all preventive maintenance and administrative activities. The forms must be signed off by the Contractor and signed off by the employer's agent.
- Forms are free issued to the Contractor, whereby the forms must be filled in by hand.
- Contractor must comply to the requirements of QM58

### **3.2.15 Maintenance schedule**

A comprehensive preventive maintenance schedule, listing maintenance and administrative activities with durations, and frequencies must be provided by the contractor. The *employer* and *Contractor* must agree and finalise the schedule. The schedule must make allowance for critical and non-critical corrective maintenance.

### **3.2.16 Corrective maintenance – Critical**

- All system (in hazardous locations) failures that require urgent attention that may be causing a load loss or other production risk, as determined by the employer, must be repaired urgently by the Contractor, with employer's personnel in attendance.
- The Contractor must submit a completed corrective maintenance feedback form for every failure incident. The form will include the following details:
  - a) Description of failure as reported
  - b) Findings
  - c) Corrective actions executed
  - d) Spares used
  - e) Description of component that failed
  - f) Date, time and duration
  - g) SAP notification number if available.
- Corrective maintenance feedback form must be signed off by the employer's agent. Shift manager or EOD personnel must sign off if after hours and Employers technicians, or system engineer is not on site.

### **3.2.17 Corrective maintenance – Non Critical**

- All system failures that do not require urgent attention that is not causing a load loss or other production risk, as determined by the employer, must be repaired by the Employers personnel with assistance by Contractor if necessary as per schedule agreed with employer.

- The Contractor must submit a corrective maintenance feedback form for every failure incident. The form will include the following details:
  - a) Description of failure as reported.
  - b) Findings.
  - c) Corrective actions executed.
  - d) Spares used.
  - e) Description of component that failed.
  - f) Date, time and duration.
  - g) SAP notification number if available.
- Corrective maintenance feedback form must be signed of the employer's agent.

### **3.2.18 Response Times**

- When offsite, the employer requires that the Contractor must respond to a call within a maximum of 1 hour. (i.e.: Contractor is on site and has begun with corrective work within 1 hour).
- When Contractor is on site the employer requires that the Contractor respond to a call within 30 minutes.

### **3.2.19 Modifications**

- The Contractor must also sign off the modification form clearly stating that the implementation of the specific modification will not adversely affect the performance of the system. The employers acknowledges that this is not always practical, hence the mods may be allowed to be implemented even when the Contractor cannot give assurance that the modification will not adversely affect the performance of the system. In this case the implementation is deemed to be a test modification and must be monitored. If the modification is successful and no adverse effects are found the modification can be signed off. If however the modification is not successful and there are adverse effects found the modification must be reversed immediately.
- This approval form must contain the following minimum information.
  - a) Date of the modification implementation.
  - b) Confirmation by the *Contractor* that the implementation of the specific modification will not adversely affect the performance of the Hazloc systems, unless the modification is determined to be a test as described above.
  - c) Approval to implement by *Employer*.
  - d) Confirmation that system has been backed up prior the implementation and system backed up after implementation.

- The Contractor must participate in commissioning and testing of modifications, and will have to correct any problems either directly or indirectly associated to the implemented modification, as part of the corrective maintenance described already.

### 3.2.20 Meetings

Meetings with the *Employer* are required:

- Weekly planning meeting*
- Once a Month*
- Hazloc committee meetings will be held on agreement with the Contractor in order to resolve urgent issues.*

### 3.2.21 Critical work

Critical work is defined as the work that endangers safety of people, machinery, has a legal bearing in terms of compliance and/or affects the station performance targets in terms of load losses, return to service, stability, monitoring and control of plant related to the systems specified in this contract. The *Contractor* acts or responds in a manner that will minimise the effect. These must be included in the corrective maintenance – critical, already stated.

### 3.2.22 Non- critical work

All other work not falling into the definition of Critical Work above is non-critical work. The planning for non-critical work is discussed in the weekly meetings. These must be included in the corrective maintenance – non critical, already stated.

### 3.2.23 Non-disclosure

The *Contractor* signs the confidentiality agreement which will be provided by the Employer's agent prior to the Contract Date.

### 3.2.24 PSR

Contractor must comply with PSR requirements and must ensure that their technicians or MIE's are authorised as RP's within 3-6 months of the contract start date.

## Specifications and standards

As a minimum, the following standards must be adhered to;

Title	Date or revision	Tick if publicly available
<b><u>General Specifications:</u></b>		
<b>Occupational Health and Safety Act</b>	<b>Latest</b>	
<b>Environment Conservation Act (Act 73 of 1989)</b>	<b>Latest</b>	
<b><u>Technical specifications:</u></b>		
<b>SANS 10108</b>	<b>Latest</b>	



<b>SANS SANS 60079-10: 2005</b>	<b>Latest</b>	
<b>SANS 10100</b>	<b>Latest</b>	
<b>SANS 10086-1</b>	<b>Latest</b>	
<b>SANS 10142-1</b>	<b>Latest</b>	
<b>SANS 10086-1 2003 3.03</b>	<b>Latest</b>	
<b>SANS 10086-3 2001 1.01</b>	<b>Latest</b>	
<b>SANS 10089-2 2007 3.00</b>	<b>Latest</b>	
<b>SANS 10108 2005 5.00</b>	<b>Latest</b>	
<b>SANS 101232001 1.01</b>	<b>Latest</b>	
<b>SANS 10142-1 2006 1.05</b>	<b>Latest</b>	
<b>SANS 10313-220052.00</b>	<b>Latest</b>	
<b>SANS 60079-0 2005 3.00</b>	<b>Latest</b>	
<b>SANS 60079-10 2005 3.00</b>	<b>Latest</b>	
<b>SANS 61241-0 2005</b>	<b>Latest</b>	
<b>SANS 61241-10 2005 1.00</b>	<b>Latest</b>	
<b>SANS 60079-19 1993 1.00</b>	<b>Latest</b>	
<b><u>Eskom Regulations:</u></b>		
<b>Application Process for Access to Duvha Power Station</b>	<b>Latest</b>	

#### 4. Scope Verification

Description	Name	Designation	Signature	Date
Compiled By	Elliot Mamba	Technician Engineering		
Verified by	Andile Nqayane	Electrical Eng. Manager		

## C3.1: EMPLOYER'S SERVICE INFORMATION

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## Description of the service

### Executive overview

Put yourself in the position of the *Contractor's* senior management who need a high level overview of what is involved – the scope of work - so that they can decide when tendering whether they have the resources and capability to undertake the work. Include a description of the different services and disciplines of work involved within the *service* and the location where most of the work will be carried out.

### Employer's requirements for the service

Either

Describe in detail what the *Employer* requires the *Contractor* to do and how he is to do it if the *Contractor* is mainly providing labour and tools to carry out the *Employer's* requirements

Or

Provide the *Employer's* operating philosophy / user requirement specification (URS) / performance specification giving deliverables and constraints for the *service* from which the *Contractor* is to plan in detail how he is to achieve the required deliverables.

Reference could be made to an Annexure for a detailed classification of services or to the Price List in the case of Option A or C and if the Price List descriptions are complete.

### Interpretation and terminology

If required include here definitions additional to those used in the *conditions of contract* which are required only for the purpose of making the Service Information easier to draft and read. Also list abbreviations used and provide a full interpretation of each one, for example:

The following abbreviations are used in this Service Information:

Abbreviation	Meaning given to the abbreviation
OBL	Outside battery limits

## Management strategy and start up.

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

In the TSC3 the *Contractor's* plan is his “design” for performing the *service* throughout the *service period*. Section 2 of the *conditions of contract* describes what the *Contractor* is to show in his plan both in the core clauses and some additional requirements in each of the main Options.

The extent of the *Contractor's* plan will depend on whether the *Contractor* is required to develop a plan in accordance with the *Employer's* broad outline of the *service* or whether the *Employer* has provided a plan for the *Contractor* to follow. Read the TSC3 Guidance Notes pages 21 and 22 for more information on the *Contractor's* plan.

Use this section to describe any particulars which must be taken into account by the *Contractor* in developing his plan as required by clause 21.2. For example information about the order and timing or method of carrying out particular items of work.

List technical reporting and scheduling requirements which are to be incorporated into the *Contractor's* plan.

## Management meetings

The *conditions of contract* (e.g. Clause 16.2) and other sections of the Service Information (e.g. safety risk management) may require that a meeting shall be held. However the intention of all NEC contracts is that the Parties and their agents use the techniques of partnering to manage the contract by holding meetings designed to pro actively and jointly manage the administration of the contract with the objective of minimising the adverse effects of risks and surprises for both Parties.

Depending on the size and complexity of the *service*, it is probably beneficial for the *Service Manager* to hold a weekly risk register meeting (Clause 16.2). This could be used to discuss safety, compensation events, subcontracting, overall co-ordination and other matters of a general nature. Separate meetings for specialist activities such as planning and activities of a technical nature may also be warranted.

Describe here the general meetings and their purpose. Provide particulars of approximate times, days, location, and attendance requirements, stipulating that attendees shall have the necessary delegated authority to make decisions in respect of matters discussed at such meetings.

The following text could be used as a model for this section:

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

Title and purpose	Approximate time & interval	Location	Attendance by:
Risk register and compensation events	Weekly on _____ at _____		
Overall contract progress and feedback	Monthly on _____ at _____		<i>Employer, Contractor</i> and _____

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.

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

State any additional constraining requirements on *Contractor's* supervision and key people that are not already stated in other sections such as for Health and Safety. This section could be used to solicit an organogramme from the *Contractor* showing his people and their lines of authority / communication. This would be essential if the *Contractor* is a Joint Venture.

## **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.

## **Documentation control**

Specify how documentation will be identified with an alpha numeric which indicates source, recipient, communication number etc. Provide details of any particular format or other constraints; for example that all contractual communications will be in the form of properly compiled letters or forms attached to e mails and not as a message in the e mail itself. State any particular routing requirements but note from TSC3 who issues what to whom.

## **Invoicing and payment**

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

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

The *Contractor* shall address the tax invoice to

\_\_\_\_\_ and include on each invoice the following information:

Name and address of the *Contractor* and the *Service Manager*;

The contract number and title;

*Contractor's* VAT registration number;

The *Employer's* VAT registration number 4740101508;

Description of service provided for each item invoiced based on the Price List;

Total amount invoiced excluding VAT, the VAT and the invoiced amount including VAT;  
(add other as required)

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

## **Contract change management**

This section is intended to deal with any additional requirements to the compensation event clauses in section 6 of the core clauses; such as the use of standard forms. Not the same thing as documentation control.

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

If Option C or E applies first read clause 52.2 and then state whether the *Contractor* is required to keep any other records. Include any other constraint which may be required in regard to format and filing of the records, and whether access for the *Service Manager* shall be provided in hard copy or electronically.

Could delete if Option A applies unless the *Employer* requires some form of control over the *Contractor's* record keeping for the purpose of compensation event management.

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

First read TSC3 Core Clause 86.1 and then add anything necessary for the management of insurance related issues such as a cross reference to where procedures for making claims can be found. Also provide contact details for persons capable of being able to answer any insurance related queries the *Contractor* may have, as well as to whom the information required by Marine Insurance (if any) may be addressed.

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

Describe type and frequency of any on job training workshops, as well as any obligation for technology transfer being included as part of the *service* or at the end of the *service period*.

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

On some complex services (e. g. nuclear) it could be in the Parties best interests that some details of the design of Equipment are shared with the *Service Manager*, not necessarily for his acceptance but as an assurance that the Equipment will be able to allow the *Contractor* to Provide the Service efficiently and without delay. For example specialised handling Equipment for a particular maintenance operation. Clause 23.1 is always available to the *Service Manager* if this paragraph is not used.

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

Draft in such a way that there is no doubt that the liability for such design supply and use of the Equipment remains with the *Contractor*.

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

#### **Equipment**

The *Employer* may wish to use some of the Equipment used by the *Contractor* after the end of the *service period*. Clause 70.2 requires that details of such requirement be stated in the Service Information. Complete here or if not applicable retain the heading and state 'None'.

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

Clause 70.2 requires that information and other things which the *Contractor* is to provide at the end of the *service period* be stated in the Service Information.

## Management of work done by Task Order

Only use this heading if Option X19 applies to this contract.

In some cases all work may be done in terms of Task Orders in which case it may be logical to move this section closer to the start of this part 2 of the Service Information. In some cases only parts of the *service* may require to be handled by Task Order, for example a major repair which has become necessary during a continuous maintenance service contract.

Please read Option X19 before drafting requirements here as much of the procedure for the administration of Task Orders is already provided in X19, for example X19.2 specifies what a task Order should include

A Task Order format could be provided in an Annexure to this Service Information.

Many considerations can apply to Task Orders, such as availability of resources, arrangements for emergency work, Task Order reporting (work carried out and service results), assessment of additional Prices for *service* not included in the Price List etc.

Clause X19.6 requires information which should be included on a Task Order programme.

Further requirements for Task Orders include things to be provided by the *Employer* under a Task Order and the conditions under which the *Employer* or Others are to work.



## Health and safety, the environment and quality assurance

### Health and safety risk management

In addition to the requirements of the laws governing health and safety, Eskom may have some additional requirements particular to the *service* and the Affected Property for this contract. The text below provides for these being attached as an Annexure to this Service Information. PLEASE ALSO READ CORE CLAUSE 27.4 TOGETHER WITH Z7 IN THE ADDITIONAL CONDITIONS OF CONTRACT TO MAKE SURE THAT WHATEVER IS INCLUDED IN THE ANNEXURE FOLLOWS ON FROM THOSE CLAUSES.

The Divisional/Regional Safety Risk Manager or his representative having jurisdiction over the *service* must provide the relevant safety, health and environmental (SHE) criteria for incorporation into this Service Information. The SHE specification / scope must be signed off by the Divisional/Regional Safety Risk Manager or his representative confirming that the applicable safety criteria have been taken into account.

The Commodity Manager / Buyer must refer the tender to the Divisional/Regional Safety Risk Manager or his representative in order to evaluate against enquiry-specific safety criteria.

The Divisional Safety Risk Managers who will be responsible for the allocation of resources to assist P&SCM with the above processes are as follows:

- Generation: Roley McIntyre
- Transmission: Tony Patterson
- Distribution: Alex Stramrood
- Enterprises: Jace Naidoo
- Corporate: Kerseri Pather

The *Contractor* shall comply with the health and safety requirements contained in Annexure \_\_\_\_\_ to this Service Information.

### Environmental constraints and management

Describe or cross refer to environmental constraints applicable to the *Contractor's* plan and his activities on the Affected Property and how they should be managed. Include here or cross refer to an Annexure to the Service Information.

The *Contractor* shall comply with the environmental criteria and constraints stated in Annexure \_\_\_\_\_

### Quality assurance requirements

Specify minimum requirements for the *Contractor's* Quality Plan and Work Procedures or provide the *Employer's* Quality Plan if that is to be used. Make sure witness and hold points are identified generally and describe any particular requirements for QA outside the Affected Property. Indicate how the *Contractor's* QA documentation is to be submitted for acceptance and any conditions that need to be imposed relating to acceptance. State whether ISO compliance is a condition and if so which ISO standard shall apply.

## 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.

## People

### Minimum requirements of people employed

Specify any constraints relating to people employed to Provide the Service; for example permits for foreigners, training (other than H & S), use of labour from designated areas and industrial relations.

### 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.

### 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.

## Subcontracting

### Preferred subcontractors

TSC3 does not make use of nominated subcontracting, but the *Employer* may list which subcontractors or suppliers the *Contractor* is required to enter into subcontracts with. This is usually only required where specialist services need to be obtained from a particular supplier or group of suppliers in order to comply with operational standards.

### Subcontract documentation, and assessment of subcontract tenders

Specify any constraints on how the *Contractor* is to prepare subcontract documentation, whether use of the NEC system is compulsory or not (compulsory is recommended) and how subcontract tenders are to be issued, received, assessed (using a joint report?) and awarded.

### Limitations on subcontracting

The *Employer* may require that the *Contractor* must subcontract certain specialised work, or that the *Contractor* shall not subcontract more than a specified proportion of the whole of the contract.

### Attendance on subcontractors

State requirements for attendance on Subcontractors, if any

## Plant and Materials

### Specifications

Plant and Materials are defined as items intended to be included in the Affected Property. This will refer to replacement of worn or defective parts, routine replacement as part of regular preventative maintenance and supply of spare parts. Quality is usually designed in or specified in the technical specifications. However to cover circumstances where quality may not be prescribed, this sub-paragraph could also be used to state an overarching default requirement – fitness for purpose etc.

Either specify here or provide a list of the applicable specifications and attach them as Annexure or state where they can be obtained from.

### Correction of defects

State any constraints when dealing with defective Plant and Materials such as how repairs are carried out - can the item be fixed up or must it be replaced by a new one.

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

Specify any constraints on how the *Contractor* is to order, codify, expedite, freight, import, transport to the Affected Property and any other requirements for delivery and storage before installation. The *Employer* may require warranties from suppliers to be in favour of the *Employer* and not just to the *Contractor*. The *Employer* may also need schedules of vendor data for his own use after the end of the *service period*.

### Tests and inspections before delivery

Core Clause 41.1 makes reference to the Service Information stating which Plant and Materials are to be inspected and tested before delivery. Specify any requirements particularly if such tests and inspections are to be carried out by agents of the *Employer* overseas.

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

List any Plant and Materials which are to be provided by the *Employer*.

State arrangements for collection by *Contractor* or delivery by others on behalf of the *Employer*, off loading, inspection, storage, care custody and control, return of unused Plant and Materials, etc. Always include a statement to the effect that 'all other Plant and Materials are to be provided by the *Contractor*'.

**Cataloguing requirements by the *Contractor***

State whether cataloguing is applicable, if it is, reference the requirements for cataloguing that need to be satisfied by the *Contractor* (consult Procurement Instruction Number 1 of 2018 – Incorporating Cataloguing into the Procurement Environment, Unique Identifier 240-1289988974).

## Working on the Affected Property

This part of the Service Information addresses constraints, facilities, services and rules applicable to the *Contractor* whilst he is doing work on the Affected Property.

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

Sites such as Koeberg Nuclear Power Station have very strict entrance requirements which tendering contractors need to allow for in their prices, and the *Contractor* has to comply with. State these or similar requirements here.

In addition to the above there may be other restrictions once on the site, plus rules relating to roads, walkways and the provision of barricades

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

Restrictions and hours of work may apply on some sites. It is very important that the *Contractor* keeps records of his people working on the Affected Property, including those of his Subcontractors. State that the *Service Manager* shall have access to them at any time. These records may be needed when assessing compensation events.

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

Section 3 deals with contractual H & S requirements in addition to those of the OHSA Act. This section allows the *Employer* to state what measures are to be taken on the Affected Property by describing where First Aid facilities provided by the *Employer* are located and any other emergency arrangements. Do not use if already addressed in 2.3.

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

This sub-paragraph may not be required in a service contract or if these matters are dealt with in the general environmental requirements referred to in section 3 above.

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

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

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

## Records of *Contractor's* Equipment

This sub-paragraph is intended to address how records are to be kept of Equipment on Site including whether it is owned or hired. Include any constraints about scaffolding, rigs, heavy lifts and cranes, including removal from the Affected Property.

## Equipment provided by the *Employer*

Provide details of equipment (e.g. overhead cranes) made available for use by the employer and set out conditions relating thereto.

## Site services and facilities

### Provided by the *Employer*

This is a mandatory cross reference form clause 25.2 in TSC3. State what the *Employer* will provide in the way of power, water, waste disposal, telecomms, ablutions, fire protection and lighting (etc) on the Affected Property. Give hook up locations and any constraints on how the hook up is to be done. Always conclude by stating that the *Contractor* shall provide everything else necessary for Providing the Service.

### Provided by the *Contractor*

Describe what the *Contractor* is to provide in the way of accommodation, laboratories, storage, vehicles and office equipment for the *Service Manager* and any restrictions or minimum requirements concerning the *Contractor's* own facilities. Also state what happens to these facilities upon completion of the contract.

## Control of noise, dust, water and waste

State requirements, if any.

## Hook ups to existing works

State any constraints

## Tests and inspections

### Description of tests and inspections

Describe the tests and inspections to be carried out by the *Contractor* and the *Service Manager* and others [40.1].

### Materials facilities and samples for tests and inspections

State what materials facilities and samples for tests and inspections the *Contractor* and the *Employer* are to provide, per core clause 40.2.

List of drawings

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