NEC3 Term Service Contract (TSC3)

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

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

for **Full rewinding and testing of transformers and NECRTs in Limlanga Cluster (500Kva, 750Kva, 1000Kva,1250kVA, 1600Kva, 2000Kva, 2500Kva, 3150kVA, 3500kVA, 4000Kva and 5000Kva) and NECRTs from 6,6kV, 11Kv, 22Kv, 33Kv and 44Kv and provide for auxiliary box, 24 way module, 12 way module, nameplate, LED light and heater on an "as and when required" basis over period of 5 years**

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

PART C1: AGREEMENTS & CONTRACT DATA

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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:

Full rewinding and testing of transformers and NECRTs in Limlanga Cluster (500Kva, 750Kva, 1000Kva,1250kVA, 1600Kva, 2000Kva, 2500Kva, 3150kVA, 3500kVA, 4000Kva and 5000Kva) and NECRTs from 6,6kV, 11Kv, 22Kv, 33Kv and 44Kv and provide for auxiliary box, 24 way module, 12 way module, nameplate, LED light and heater on an "as and when required" basis over period of 5 years

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	**Rates Based Contract**
Option E	The first forecast of the total Defined Cost plus the Fee exclusive of VAT is	**Rates Based Contract**
	Value Added Tax @ 15% is	**Rates Based Contract**
	The offered total of the amount due inclusive of VAT is[1]	**Rates Based Contract**
	Rates Based Contract	

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 .....

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

Tenderer’s CIDB registration number:

Acceptance

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

The terms of the contract, are contained in:

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

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

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

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

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

Signature(s) .....

Name(s) .....

Capacity .....

for the Employer

.....
(Insert name and address of organisation)

Name & signature of witness .....

Date .....

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

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

Note:

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

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

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

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

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

C1.2a TSC3 Contract Data

Part one - Data provided by the *Employer*

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

Clause	Statement	Data
1	**General**	
	The *conditions of contract* are the core clauses and the clauses for main Option:	
		A Priced contract with price list
	dispute resolution Option	**W1: Dispute resolution procedure**
	and secondary Options	**X1: Price adjustment for inflation**
		X2: Changes in the law
		X17: Low service damages
		X18: Limitation of liability
		X19: Task Order
		X20: Key Performance indicators
		Z: *Additional conditions of contract*
	of the NEC3 Term Service Contract April 2013[2] (TSC3)	
10.1	The *Employer* is (name):	**Eskom Holdings SOC Ltd (reg no: 2002/015527/30), a state owned company incorporated in terms of the company laws of the Republic of South Africa**
	Address	**Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg**
	Tel No.	**011 800 3000**
10.1	The *Service Manager* is (name):	**Anastacia Raphasha**
	Address	**90 Hans Van Rensburg Street Polokwane**
	Tel	**+27 11 800 5085**
	e-mail	raphasam@eskom.co.za
11.2(2)	The Affected Property is	**PPM Limlanga Cluster (Mpumalanga Area)**
11.2(13)	The *service* is	**FULL REWINDING AND TESTING OF TRANSFORMERS AND MOU NECRTS**

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

11.2(14)	The following matters will be included in the Risk Register	**1. Substandard work** **2. Damages to employer property**
11.2(15)	The Service Information is in	**Part 3: Scope of Work and all documents and drawings to which it makes reference.**
12.2	The *law of the contract* is the law of	**the Republic of South Africa**
13.1	The *language of this contract* is	**English**
13.3	The *period for reply* is	**1 week**
2	**The *Contractor*'s main responsibilities**	**Data required by this section of the core clauses is also provided by the *Contractor* in Part 2 and terms in italics used in this section are identified elsewhere in this Contract Data**
21.1	The *Contractor* submits a first plan for acceptance within	**1 weeks of the Contract Date**
3	**Time**	
30.1	The *starting date* is.	**To be advised**
30.1	The *service period* is	**60 Months (5 years)**
4	**Testing and defects**	
40	**Tests and inspections**	
40.1	This clause only applies to tests and inspections required by the Service Information or the applicable law.	
40.2	The *Contractor* and the *Employer* provide materials, facilities and samples for tests and inspections as stated in the Service Information	
40.3	The *Contractor* and the *Service Manager* each notifies the other of each of his tests and inspections before it starts and afterwards notifies the other of its results. The *Contractor* notifies the *Service Manager* in time for a test or inspection to be arranged and done before doing work which would obstruct the test or inspection. The *Service Manager* may watch any test done by the *Contractor*.	
40.4	If a test or inspection shows that any work has a Defect, the *Contractor* repeats the work if possible and the test or inspection is repeated.	
40.5	The *Service Manager* does his tests and inspections without causing unnecessary delay to the work.	
40.6	The *Service Manager* assesses the cost incurred by the *Employer* in repeating a test or inspection after a Defect is found. The *Contractor* pays the amount assessed.	
41	**Testing and inspection before delivery**	
41.1	The *Contractor* does not deliver those Plant and Materials which the Service Information states are to be tested or inspected before delivery until the *Service Manager* has notified the *Contractor* that they have passed the test or inspection.	
42	**Notifying and correcting Defects**	
42.1	Until the end of the *service period*, the *Service Manager* notifies the *Contractor* of each Defect as soon as he finds it and the *Contractor* notifies the *Service Manager* of each Defect as soon as he finds it. The *Contractor* corrects a Defect whether or not the *Service Manager* notifies him of it.	

42.2 The C*ontractor* corrects notified Defects within a time which minimises the adverse effect on the *Employer* or Others. If the *Contractor* does not correct a Defect within the time required by this contract, the *Service Manager* assesses the cost to the *Employer* of having the Defect corrected by other people and the *Contractor* pays this amount.

42.3 The *Service Manager* arranges for the *Employer* to allow the *Contractor* access if it is needed for correcting a Defect.

43 Accepting Defects

43.1 The *Contractor* and the *Service Manager* may each propose to the other that the Service Information should be changed so that a Defect does not have to be corrected. If the *Contractor* and the *Service Manager* are prepared to consider the change, the *Contractor* submits a quotation for reduced Prices to the *Service Manager* for acceptance. If the *Service Manager* accepts the quotation, he gives an instruction to change the Service Information and the Prices accordingly.

5 Payment

50.1	The *assessment interval* is	**As and when required**
51.1	The *currency of this contract* is the	**South African Rand**
51.2	The period within which payments are made is	**30 days after all work has been completed along with the required documentation submitted and final invoice has been approved.**
51.4	The *interest rate* is	**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** **(ii) the LIBOR rate applicable at the time for amounts due in other currencies. LIBOR is the 6 month London Interbank Offered Rate quoted under the caption "Money Rates" in The Wall Street Journal for the applicable currency or if no rate is quoted for the currency in question then the rate for United States Dollars, and if no such rate appears in The Wall Street Journal then the rate as quoted by the Reuters Monitor Money Rates Service (or such service as may replace the Reuters Monitor Money Rates Service) on the due date for the payment in question, adjusted *mutatis mutandis* every 6 months thereafter (and as certified, in the event of any dispute, by any manager employed in the foreign exchange department of The Standard Bank of South Africa Limited, whose appointment it shall not be necessary to prove.**

6 Compensation events

60.1 The following are compensation events.

(1) The *Service Manager* gives an instruction changing the Service Information except

- a change made in order to accept a Defect or
- a change to the Service Information provided by the *Contractor* for his plan which is made

either at his request or to comply with other Service Information provided by the *Employer*.

(2) The *Employer* does not provide the right of access to the Affected Property in accordance with the Accepted Plan.

(3) The *Employer* does not provide something which he is to provide as stated in the Service Information in accordance with the Accepted Plan.

(4) The *Service Manager* gives an instruction to stop or not to start any work.

(5) The *Employer* or Others do not work in accordance with the Accepted Plan or within the conditions stated in the Service Information.

(6) The *Service Manager* does not reply to a communication from the *Contractor* within the period required by this contract.

(7) The *Service Manager* changes a decision which he has previously communicated to the *Contractor.*

(8) The *Service Manager* withholds an acceptance (other than acceptance of a quotation for not correcting a Defect) for a reason not stated in this contract.

(9) A test or inspection done by the *Service Manager* causes unnecessary delay.

(10) A change to the Affected Property other than a change as a result of Providing the Service.

(11) The *Employer* does not provide materials, facilities and samples for tests and inspections as stated in the Service Information.

(12) An event which is an *Employer*'s risk in this contract.

(13) The *Service Manager* notifies a correction to an assumption which he has stated about a compensation event.

(14) A breach of contract by the *Employer* which is not one of the other compensation events in this contract.

61 Notifying compensation events

61.1 For compensation events which arise from the *Service Manager* giving an instruction, changing an earlier decision or correcting an assumption, the *Service Manager* notifies the *Contractor* of the compensation event at the time of that communication. He also instructs the *Contractor* to submit quotations, unless the event arises from a fault of the *Contractor* or quotations have already been submitted. The *Contractor* puts the instruction or changed decision into effect.

61.2 The *Service Manager* may instruct the *Contractor* to submit quotations for a proposed instruction or a proposed changed decision. The *Contractor* does not put a proposed instruction or a proposed changed decision into effect.

61.3 The *Contractor* notifies the *Service Manager* of an event which has happened or which he expects to happen as a compensation event if

- the *Contractor* believes that the event is a compensation event and
- the *Service Manager* has not notified the event to the *Contractor*.

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 unless the event arises from the *Service Manager* giving an instruction, changing an earlier decision or correcting an assumption.

61.4 If the *Service Manager* decides that an event notified by the *Contractor*

- arises from a fault of the Contractor,
- has not happened and is not expected to happen,
- has no effect upon Defined Cost or
- is not one of the compensation events stated in this contract

he notifies the *Contractor* of his decision that the Prices are not to be changed. If the *Service Manager* decides otherwise, he notifies the *Contractor* accordingly and instructs him to submit quotations.

The *Service Manager* notifies his decision to the *Contractor* and, if his decision is that the Prices are to be changed, instructs him to submit quotations before the end of either

- one week after the *Contractor*'s notification or

- a longer period to which the *Contractor* has agreed.

If the *Service Manager* does not notify his decision, the *Contractor* may notify the *Service Manager* of his failure. A failure by the *Service Manager* to reply within two weeks of this notification is treated as acceptance by the *Service Manager* that the event is a compensation event and an instruction to submit quotations.

61.5 If the *Service Manager* decides that the *Contractor* did not give an early warning of the event which an experienced contractor could have given, he notifies this decision to the *Contractor* when he instructs him to submit quotations.

61.6 If the *Service Manager* decides that the effects of a compensation event are too uncertain to be forecast reasonably, he states assumptions about the event in his instruction to the *Contractor* to submit quotations. Assessment of the event is based on these assumptions. If any of them is later found to have been wrong, the *Service Manager* notifies a correction.

61.7 A compensation event is not notified after the end of the *service period*.

62 Quotations for compensation events

62.1 After discussing with the *Contractor* different ways of dealing with the compensation event which are practicable, the *Service Manager* may instruct the *Contractor* to submit alternative quotations. The *Contractor* submits the required quotations to the *Service Manager* and may submit quotations for other methods of dealing with the compensation event which he considers practicable.

62.2 Quotations for compensation events comprise proposed changes to the Prices assessed by the *Contractor*. The *Contractor* submits details of his assessment with each quotation. If the plan for remaining work is altered by the compensation event, the *Contractor* includes the alterations to the Accepted Plan in his quotation.

62.3 The *Contractor* submits quotations within three weeks of being instructed to do so by the *Service Manager.* The *Service Manager* replies within two weeks of the submission. His reply is

- an instruction to submit a revised quotation,
- an acceptance of a quotation,
- a notification that a proposed instruction will not be given or a proposed changed decision will not be made or

a notification that he will be making his own assessment.

62.4 The *Service Manager* instructs the *Contractor* to submit a revised quotation only after explaining his reasons for doing so to the *Contractor*. The *Contractor* submits the revised quotation within three weeks of being instructed to do so.

62.5 The *Service Manager* extends the time allowed for

- the *Contractor* to submit quotations for a compensation event and
- the *Service Manager* to reply to a quotation

if the *Service Manager* and the *Contractor* agree to the extension before the submission or reply is due. The *Service Manager* notifies the extension that has been agreed to the *Contractor*.

If the *Service Manager* does not reply to a quotation within the time allowed, the *Contractor* may notify the *Service Manager* of his failure. If the *Contractor* submitted more than one quotation for the compensation event, he states in his notification which quotation he proposes is to be accepted. If the *Service Manager* does not reply to the notification within two weeks, and unless the quotation is for a proposed instruction or a proposed changed decision, the *Contractor*'s notification is treated as acceptance of the quotation by the *Service Manager*.

63 Assessing compensation events

63.1 For a compensation event which only affects the quantities of work shown in the Price List, the change to the Prices is assessed by multiplying the changed quantities of work by the appropriate rates in the Price List.

63.2 For other compensation events, the changes to the Prices are assessed as the effect of the compensation event upon

- the actual Defined Cost of the work already done,
- the forecast Defined Cost of the work not yet done and
- the resulting Fee.

If the compensation event arose from the *Service Manager* giving an instruction, changing an earlier decision or correcting an assumption, the date which divides the work already done from the work not yet done is the date of that communication. In all other cases, the date is the date of the notification of the compensation event.

Effects on the Defined Cost are assessed separately for

- people who are employed by the *Contractor*,
- Plant and Materials,
- work subcontracted by the *Contractor* and
- Equipment.

The *Contractor* shows how each of these effects is built up in each quotation for a compensation event.

63.3 If the *Service Manager* and the *Contractor* agree, rates and Prices in the Price List may be used as a basis for assessment instead of Defined Cost and the resulting Fee.

63.4 If the effect of a compensation event is to reduce the total Defined Cost, the Prices are not reduced except as stated in this contract.

63.5 The rights of the *Employer* and the *Contractor* to changes to the Prices are their only rights in respect of a compensation event.

63.6 If the *Service Manager* has notified the *Contractor* of his decision that the *Contractor* did not give an early warning of a compensation event which an experienced contractor could have given, the event is assessed as if the *Contractor* had given early warning.

63.7 Assessment of the effect of a compensation event includes risk allowances for cost for matters which have a significant chance of occurring and are at the *Contractor*'s risk under this contract.

63.8 Assessments are based upon the assumptions that the *Contractor* reacts competently and promptly to the compensation event, that any Defined Cost due to the event is reasonably incurred and that the Accepted Plan can be changed.

63.9 A compensation event which is an instruction to change the Service Information in order to resolve an ambiguity or inconsistency is assessed as if the Prices were for the interpretation most favourable to the Party which did not provide the Service Information.

64 The Service Manager's assessments

64.1 The *Service Manager* assesses a compensation event

- if the *Contractor* has not submitted a quotation and details of his assessment within the time allowed,
- if the *Service Manager* decides that the *Contractor* has not assessed the compensation event correctly in a quotation and he does not instruct the *Contractor* to submit a revised quotation,
- if, when the *Contractor* submits quotations for a compensation event, he has not submitted a plan or alterations to a plan which this contract requires him to submit or

if, when the *Contractor* submits quotations for a compensation event, the *Service Manager* has not accepted the *Contractor*'s latest plan for one of the reasons stated in this contract.

64.2 The *Service Manager* notifies the *Contractor* of his assessment of a compensation event and gives him details of it within the period allowed for the *Contractor*'s submission of his quotation for the same event. This period starts when the need for the *Service Manager*'s assessment becomes apparent.

64.3 If the *Service Manager* does not assess a compensation event within the time allowed, the *Contractor* may notify the *Service Manager* of his failure. If the *Contractor* submitted more than one quotation for the compensation event, he states in his notification which quotation he proposes is to be accepted. If the *Service Manager* does not reply within two weeks of this notification the notification is treated as acceptance of the *Contractor's* quotation by the *Service Manager*.

65 Implementing compensation events

65.1 A compensation event is implemented when

- the *Service Manager* notifies his acceptance of the *Contractor*'s quotation,
- the *Service Manager* notifies the *Contractor* of his own assessment or

a *Contractor*'s quotation is treated as having been accepted by the *Service Manager*.

65.2 The assessment of a compensation event is not revised if a forecast upon which it is based is shown by later recorded information to have been wrong.

7 Use of Equipment Plant and Materials

As per the terms and conditions of the NEC3 Term Service Contract April 2013 (TSC3).

8 Risks and insurance

80.1 These are additional *Employer*'s risks

1. Substandard work

2. Damages to employer property

9 Termination

90.1 If either Party wishes to terminate the *Contractor*'s obligation to Provide the Service, he notifies the *Service Manager* and the other Party giving details of his reason for terminating. The *Service Manager* issues a termination certificate to both Parties promptly if the reason complies with this contract.

90.2 The *Contractor* may terminate only for a reason identified in the Termination Table. The *Employer* may terminate for any reason. The procedures followed and the amounts due on termination are in accordance with the Termination Table.

TERMINATION TABLE

Terminating Party	Reason	Procedure	Amount due
The *Employer*	A reason other than R1–R21	P1, P2 and P4	A1, A2 and A4
	R1–R15 or R18	P1, P2, P3 and P4	A1, A2 and A3
	R17 or R20	P1 and P4	A1 and A2
	R21	P1, P3 and P4	A1 and A2
The *Contractor*	R1–R10, R16 or R19	P1, P2 and P4	A1, A2 and A4
	R17 or R20	P1, P2 and P4	A1 and A2

90.3 The procedures for termination are implemented immediately after the *Service Manager* has issued a termination certificate.

90.4 Within thirteen weeks of termination, the *Service Manager* certifies a final payment to or from the *Contractor* which is the *Service Manager*'s assessment of the amount due on termination less the total of previous payments. Payment is made within three weeks of the *Service Manager*'s certificate.

90.5 After a termination certificate has been issued, the *Contractor* does no further work necessary to Provide the Service.

91 Reasons for termination

91.1 Either Party may terminate if the other Party has done one of the following or its equivalent.

- If the other Party is an individual and has
  - presented his petition for bankruptcy (R1),
  - had a bankruptcy order made against him (R2),
  - had a receiver appointed over his assets (R3) or
  - made an arrangement with his creditors (R4).
- If the other Party is a company or partnership and has
  - had a winding-up order made against it (R5),
  - had a provisional liquidator appointed to it (R6),
  - passed a resolution for winding-up (other than in order to amalgamate or reconstruct) (R7),
  - had an administration order made against it (R8),
  - had a receiver, receiver and manager, or administrative receiver appointed over the whole or a substantial part of its undertaking or assets (R9) or

made an arrangement with its creditors (R10).

91.2 The *Employer* may terminate if the *Service Manager* has notified that the *Contractor* has defaulted in one of the following ways and not put the default right within four weeks of the notification.

- Substantially failed to Provide the Service (R11).
- Not provided a bond or guarantee which this contract requires (R12).

Appointed a Subcontractor for substantial work before the *Service Manager* has accepted the Subcontractor (R13).

91.3 The *Employer* may terminate if the *Service Manager* has notified that the *Contractor* has defaulted in one of the following ways and not stopped defaulting within four weeks of the notification.

- Substantially hindered the *Employer* or Others (R14).

Substantially broken a health or safety regulation (R15).

91.4 The *Contractor* may terminate if the *Employer* has not paid an amount due under the contract within eleven weeks of the date that it should have been paid (R16).

91.5 Either Party may terminate if the Parties have been released under the law from further performance of the whole of this contract (R17).

91.6 If the *Service Manager* has instructed the *Contractor* to stop or not to start any substantial work or all work and an instruction allowing the work to re- start or start has not been given within thirteen weeks,

- the *Employer* may terminate if the instruction was due to a default by the *Contractor* (R18),
- the *Contractor* may terminate if the instruction was due to a default by the *Employer* (R19) and

either Party may terminate if the instruction was due to any other reason (R20).

91.7 The *Employer* may terminate if an event which the Parties could not reasonably prevent has substantially affected the *Contractor*'s work for a continuous period of more than thirteen weeks (R21).

92 Procedures on termination

92.1 On termination, the *Employer* may complete the *service* and may use any Plant and Materials

provided by the *Contractor* (P1).

92.2 The procedure on termination also includes one or more of the following as set out in the Termination Table.

P2 The *Employer* may instruct the *Contractor* to remove any Equipment, Plant and Materials and assign the benefit of any subcontract or other contract related to performance of this contract to the *Employer*.

P3 The *Employer* may use any Equipment to which the *Contractor* has title to complete the *service*. The *Contractor* promptly removes the Equipment when the *Service Manager* notifies him that the *Employer* no longer requires it to complete the *service*.

P4 The *Contractor* provides to the *Employer* information and other things which the Service Information states he is to provide at the end of the *service period*.

93 Payment on termination

93.1 The amount due on termination includes (A1)

- an amount due assessed as for normal payments,
- the Defined Cost for Plant and Materials
  - which have been delivered and retained by the *Employer* or
  - which the *Employer* owns and of which the *Contractor* has to accept delivery,
- other Defined Cost reasonably incurred in expectation of completing the whole of the *service* and

any amounts retained by the *Employer*.

93.2 The amount due on termination also includes one or more of the following as set out in the Termination Table.

A2 The forecast Defined Cost of removing the Equipment.

A3 A deduction of the forecast of the additional cost to the *Employer* of completing the whole of the *service*.

A4 The *direct fee percentage* applied to

- for Options A and C, any excess of the total of the Prices at the Contract Date over the Price for Services Provided to Date or

for Option E, any excess of the first forecast of the Defined Cost for the *service* over the Price for Services Provided to Date less the Fee.

10 Data for main Option clause

A	**Priced contract with price list**	
20.5	The *Contractor* prepares forecasts of the final total of the Prices for the whole of the *service* at intervals no longer than	**1 weeks.**

11 Data for Option W1

W1.1	The *Adjudicator*	**the person selected from the ICE-SA Division (or its successor body) of the South African Institution of Civil Engineering Panel of Adjudicators by the Party intending to refer a dispute to him. (see www.ice-sa.org.za). If the Parties do not agree on an Adjudicator the Adjudicator will be appointed by the Arbitration Foundation of Southern Africa (AFSA).**
W1.2(3)	The *Adjudicator nominating body* is:	**the Chairman of ICE-SA a joint Division of the South African Institution of Civil Engineering**

		and the Institution of Civil Engineers (London) (see www.ice-sa.org.za) or its successor body.
W1.4(2)	The *tribunal* is:	**Arbitration**
W1.4(5)	The *arbitration procedure* is	**the latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.**
	The place where arbitration is to be held is	**South Africa**
	The person or organisation who will choose an arbitrator - if the Parties cannot agree a choice or - if the arbitration procedure does not state who selects an arbitrator, is	**the Chairman for the time being or his nominee of the Association of Arbitrators (Southern Africa) or its successor body.**

12 Data for secondary Option clauses

X1 Price adjustment for inflation

X1.1 The *base date* for indices is **Rates will be fixed and firm for the first 12 months of the contract. At the anniversary date of the contract the prices will be adjusted in accordance with the published SEIFSA INDICES. (Reference to be made to the price list)**

Proposed table	**Weight**
SEIFSA Table L-2(A), Road freight Costs	10%
SEIFSA Table C3, all hourly paid	15%
SEIFSA Table F - Copper RCP, Metric Ton	30%
SEIFSA Table J-3(A), Transformer oil	15%
SEIFSA Table J-3(A), Insulation	15%
Fixed Portion	15%
Total	100%

X2 Changes in the law **As per the terms and conditions of the NEC3 Term Service Contract April 2013 (TSC3).**

X17 Low service damages

X17.1 The *service level table* is in **Excellent performance- 100% up to the next Rewinding and Testing date.**
Exceptional performance- 80% before the next Rewinding and Testing date
Poor performance- 0% failure after the Rewinding and Testing has been recently done.
Excellence performance- Supplier attends to the task order within 1 week
Poor performance- Supplier fails to issue the Rewinding and Testing or attend a call out request after a week
Low service damages shall be 1% per week per

		task order, up to 10% of the Task Order value.
X18	**Limitation of liability**	
X18.1	The *Contractor*'s liability to the *Employer* for indirect or consequential loss is limited to	**R0.0 (zero Rand)**
X18.2	For any one event, the *Contractor*'s liability to the *Employer* for loss of or damage to the *Employer*'s property is limited to	**the amount of the deductibles relevant to the event described in the "Format TSC3" insurance policy available on** *http://www.eskom.co.za/Tenders/InsurancePolicies Procedures/Pages/EIMS_Policies_ From_1_April_2014_To_31_March_2015.aspx*
X18.3	The *Contractor*'s liability for Defects due to his design of an item of Equipment is limited to	**The greater of** • **the total of the Prices at the Contract Date and** • **the amounts excluded and unrecoverable from the *Employer*'s insurance (other than the resulting physical damage to the *Employer*'s property which is not excluded) plus the applicable deductibles**
X18.4	The *Contractor*'s total liability to the *Employer*, for all matters arising under or in connection with this contract, other than the excluded matters, is limited to	**the total of the Prices other than for the additional excluded matters.** **The *Contractor's* total liability for the additional excluded matters is not limited.** **The additional excluded matters are amounts for which the *Contractor* is liable under this contract for** • **Defects due to his design, plan and specification,** • **Defects due to manufacture and fabrication outside the Affected Property,** • **loss of or damage to property (other than the *Employer*'s property, Plant and Materials),** • **death of or injury to a person and** • **infringement of an intellectual property right.**
X18.5	The *end of liability date* is	**52 weeks after the end of the *service period*.**
X19	**Task Order**	
X19.5	The *Contractor* submits a Task Order programme to the *Service Manager* within	**3 days of receiving the Task Order**
X20.1	A report of performance against each Key Performance Indicator is provided at intervals of	**3 months**
Z	**The *additional conditions of contract* are**	**Z1 to Z14 always apply.**

Z1 Cession delegation and assignment

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

Z1.2 Notwithstanding the above, the *Employer* may on written notice to the *Contractor* cede and delegate its rights and obligations under this contract to any of its subsidiaries or any of its present divisions or operations which may be converted into separate legal entities as a result of the restructuring of the Electricity Supply Industry.

Z2 Joint ventures

Z2.1 If the *Contractor* constitutes a joint venture, consortium or other unincorporated grouping of two or more persons or organisations then these persons or organisations are deemed to be jointly and severally liable to the *Employer* for the performance of this contract.

Z2.2 Unless already notified to the *Employer*, the persons or organisations notify the *Service Manager* within two weeks of the Contract Date of the key person who has the authority to bind the *Contractor* on their behalf.

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

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

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

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

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

Z3.4 Failure by the *Contractor* to notify the *Employer* of a change in its B-BBEE status may constitute a reason for termination. If the *Employer* terminates in terms of this clause, the procedures on termination are P1, P2 and P4 as stated in clause 92, and the amount due is A1 and A3 as stated in clause 93.

Z4 Confidentiality

Z4.1 The *Contractor* does not disclose or make any information arising from or in connection with this contract available to Others. This undertaking does not, however, apply to information which at the time of disclosure or thereafter, without default on the part of the *Contractor*, enters the public domain or to information which was already in the possession of the *Contractor* at the time of disclosure (evidenced by written records in existence at that time). Should the *Contractor* disclose information to Others in terms of clause 25.1, the *Contractor* ensures that the provisions of this clause are complied with by the recipient.

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

Z4.3 In the event that the *Contractor* is, at any time, required by law to disclose any such information which is required to be kept confidential, the *Contractor*, to the extent permitted by law prior to

disclosure, notifies the *Employer* so that an appropriate protection order and/or any other action can be taken if possible, prior to any disclosure. In the event that such protective order is not, or cannot, be obtained, then the *Contractor* may disclose that portion of the information which it is required to be disclosed by law and uses reasonable efforts to obtain assurances that confidential treatment will be afforded to the information so disclosed.

Z4.4 The taking of images (whether photographs, video footage or otherwise) of the Affected Property or any portion thereof, in the course of Providing the Service and after the end of the *service period*, requires the prior written consent of the *Service Manager*. All rights in and to all such images vests exclusively in the *Employer*.

Z4.5 The *Contractor* ensures that all his subcontractors abide by the undertakings in this clause.

Z5 Waiver and estoppel: Add to core clause 12.3:

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

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

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

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

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

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

Z7.1 Within one week of receiving a payment certificate from the *Service Manager* in terms of core clause 51.1, the *Contractor* provides the *Employer* with a tax invoice in accordance with the *Employer*'s procedures stated in the Service Information, showing the amount due for payment equal to that stated in the payment certificate.

Z7.2 If the *Contractor* does not provide a tax invoice in the form and by the time required by this contract, the time by when the *Employer* is to make a payment is extended by a period equal in time to the delayed submission of the correct tax invoice. Interest due by the *Employer* in terms of core clause 51.2 is then calculated from the delayed date by when payment is to be made.

Z7.3 The *Contractor* (if registered in South Africa in terms of the companies Act) is required to comply with the requirements of the Value Added Tax Act, no 89 of 1991 (as amended) and to

include the *Employer*'s VAT number 4740101508 on each invoice he submits for payment.

Z8 Notifying compensation events

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

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

Z9 *Employer's* limitation of liability

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

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

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

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

Z11 Ethics

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

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 Action means a Committing Party unlawfully or illegally destroying, falsifying, altering or concealing information or making false statements to materially impede an investigation into allegations of Prohibited Action, and

Prohibited Action means any one or more of a Coercive Action, Collusive Action Corrupt Action, Fraudulent Action or Obstructive Action.

Z11.1 A Comm
itting 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 *Contractor* to the *Employer*'s property	The replacement cost where not covered by the *Employer*'s insurance. The *Employer*'s policy deductible as at Contract Date, where covered by the *Employer*'s insurance.
Loss of or damage to Plant and Materials	The replacement cost where not covered by the *Employer*'s insurance. The *Employer*'s policy deductible as at Contract Date, where covered by the *Employer*'s insurance.
Loss of or damage to Equipment	The replacement cost where not covered by the *Employer*'s insurance. The *Employer*'s policy deductible as at Contract Date, where covered by the *Employer*'s insurance.
The *Contractor*'s liability for loss of or damage to property (except the *Employer*'s property, Plant and Materials	Loss of or damage to property The replacement cost

and Equipment) and liability for bodily injury to or death of a person (not an employee of the *Contractor*) arising from or in connection with the *Contractor*'s Providing the Service	<u>Bodily injury to or death of a person</u> The amount required by the applicable law.
Liability for death of or bodily injury to employees of the *Contractor* arising out of and in the course of their employment in connection with this contract	The amount required by the applicable law

<u>Z 12.2 Replace core clause 86 with the following:</u>

Insurance by the *Employer*

86

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

INSURANCE TABLE B

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

Z13 Nuclear Liability

Z13.1 The *Employer* is the operator of the Koeberg Nuclear Power Station (KNPS), a nuclear installation, as designated by the National Nuclear Regulator of the Republic of South Africa, and is the holder of a nuclear licence in respect of the KNPS.

Z13.2 The *Employer* is solely responsible for and indemnifies the *Contractor* or any other person against any and all liabilities which the *Contractor* or any person may incur arising out of or resulting from nuclear damage, as defined in Act 47 of 1999, save to the extent that any liabilities are incurred due to the unlawful intent of the *Contractor* or any other person or the presence of the *Contractor* or that person or any property of the *Contractor* or such person at or in the KNPS or on the KNPS site, without the permission of the *Employer* or of a person acting on behalf of the *Employer*.

Z13.3 Subject to clause Z13.4 below, the *Employer* waives all rights of recourse, arising from the aforesaid, save to the extent that any claims arise or liability is incurred due or attributable to the unlawful intent of the *Contractor* or any other person, or the presence of the *Contractor* or that person or any property of the *Contractor* or such person at or in the KNPS or on the KNPS site, without the permission of the *Employer* or of a person acting on behalf of the *Employer*.

Z13.4 The *Employer* does not waive its rights provided for in section 30 (7) of Act 47 of 1999, or any replacement section dealing with the same subject matter.

Z13.5 The protection afforded by the provisions hereof shall be in effect until the KNPS is decommissioned.

Z14 Asbestos

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

AAIA means approved asbestos inspection authority.

ACM means asbestos containing materials.

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

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

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

OEL means occupational exposure limit.

Parallel Measurements means measurements performed in parallel, yet separately, to existing measurements to verify validity of results.

Safe Levels means airborne asbestos exposure levels conforming to the Standard's requirements for safe processing, handling, storing, disposal and phase-out of asbestos and asbestos containing material, equipment and articles.

Standard means the *Employer*'s Asbestos Standard 32-303: Requirements for Safe Processing, Handling, Storing, Disposal and Phase-out of Asbestos and Asbestos Containing Material, Equipment and Articles.

SANAS means the South African National Accreditation System.

TWA means the average exposure, within a given workplace, to airborne asbestos fibres, normalised to the baseline of a 4 hour continuous period, also applicable to short term exposures, i.e. 10-minute TWA.

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.

C1.2b 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)[3] 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 *Contractor* is (Name): Address Tel No. Fax No.	
11.2(8)	The *direct fee percentage* is The *subcontracted fee percentage* is	**10%** **%**
11.2(14)	The following matters will be included in the Risk Register	
11.2(15)	The Service Information for the *Contractor*'s 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	

[3] Available from Engineering Contract Strategies Tel 011 803 3008 Fax 086 5391902 or 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 *price list* is in	**PART C2: PRICING DATA**
11.2(19)	The tendered total of the Prices is	**Rates based contract**

C1.3 Proforma Guarantees

NOT APPLICABLE FOR THIS CONTRACT

Pro formas for Bonds & Guarantees

For use with the NEC3 Term Service Contract (TSC3)

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

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

Option X4: Parent company guarantee
Option X13: Performance Bond

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

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

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

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

PART C2: PRICING DATA

TSC3 Option A

Document reference	Title	No of pages
C2.1	Pricing assumptions: Option A	37
C2.2	The *price list*	39

C2.1 Pricing assumptions: Option A

How work is priced and assessed for payment

Clause 11 in the core clauses and Option C clauses of the NEC3 Term Service Contract (TSC3) state:

Identified and defined terms	11 11.2	(12) The Price List is the *price list* unless later changed in accordance with this contract. (18) The Price for Services Provided to Date is the Defined Cost which the *Contractor* has paid plus the Fee. (20) 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.

Payments are made at Defined Cost plus Fee (See core clauses 11.2(5), 11.2(6) and 11.2(8)). At the dates stated in the Contract Data, the *Service Manager* calculates the *Contractor*'s share in terms of clause 53. If the *Contractor* has been paid more than the equivalent Prices in the Price List for the same work he pays the *Employer* a portion of the over-run (the pain) but if he has been paid less than the equivalent Prices in the Price List he is paid a portion of the under-run (the gain). The Prices in the Price List 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

In this Option the Price List is used as a means of arriving at a target price. Clause 54.1 in Option C 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.

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 related to items of service priced in the *price list*.

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 C 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 C;
- Understands the Price List is only used as a means of arriving at a target and that work done is paid for at Defined Cost and the resulting Fee;
- 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*

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 *price list* includes 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 *price list* includes 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 *price list* includes 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*

TRANSFORMER MAINTENANCE COST

PRICING SCHEDULE(per unit)			5MVA		4MVA	3.5MVA	3.15MVA		2MVA	2.5MVA			1MVA	1.25MVA		750KVA		500KVA	
S/Lines	TRANSFORMERS		22-11kV	22-6.6kV	22-11kV	22-11kV	22-11kV	11-04kV	22-11kV	33-22kV	22-11kV	22-6.6kV	22-11kV	22-6.6kV	22-11kV	22-11kV	22-6.6kV	22-11 kV	22-6.6 kV
10	UNTANKING	3000018723	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
1	Off load transformer from transport and wash.																		
2	Conduct the following electrical tests:																		
2.A	• 380V AC (Ratio and polarity, Magnetization & Impedance);																		
2.B	• Resistance; and																		
2.C	• Megger (Insulation resistance test)																		
3	Mark and disconnect cabling and CT's.																		
4	Disconnect and remove insulators and turrets and CT brackets and send to Bushing Section.																		
5	Remove cabling and disconnect																		

	pipe work.																		
6	Mark tapping leads and disconnects tap changer.																		
7	Remove tap changer and send to Tap Changer Section.																		
8	Gouge open or Unbolt top cover and untank active part.																		
9	Place active part in bay and repeat electrical tests if necessary as per recommendation.																		
10	Inspect active part and provide recommendations.																		
20	**DISMANTLE ACTIVE PART**	**3000018724**	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
11	Take measurement, make sketches of active part.																		
12	Take pictures on all sides and record top yoke condition.																		
13	Mark harness, undo connections and Remove harness.																		
14	Release pressure from active part and take pressure readings.																		
15	Unpack top yoke and remove top core clamps.																		
16	Mark all top blocking press																		

	frames and shunts																		
17	Remove top blocking, press frames and shunts.																		
18	Remove all rewindings, wrappers and slats, make sketches of set up.																		
19	Take paper samples for DP analysis.																		
20	Compile Engineering report with recommendations and repair SOW.																		
30	**REWINDINGS**	**3000018725**	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
21	Manufacture three new HV rewindings as rewinding specs.																		
22	Manufacture three new LV rewindings as rewinding specs.																		
23	Manufacture three new Regulating rewindings as rewinding specs.																		
24	Manufacture associated rewinding insulation as rewinding specs.																		
25	Place rewindings under Hydraulic press and apply compacting pressure.																		
26	Conduct continuity and parallel path tests.																		
27	Place rewindings in a pot for dry out.																		
28	Remove rewindings from																		

	the pot and place under Hydraulic press again.																		
29	Apply assembly pressure and make adjustments as per rewinding spec.																		
30	Conduct final inspection and deliver rewindings to the assembly section.																		
40	**REASSEMBLE ACTIVE PART**	**3000018726**	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
31	Megger core insulation ((Insulation resistance test for core insulation).																		
32	Replace or clean blocking, press frames and insulation.																		
33	Fit bottom blocking and support structures.																		
34	Fit rewindings to core referring to drawings																		
35	Fit all top blocking and press-rings.																		
36	Fit top core clamps.																		
37	Inspect, clean and retape HV, LV and Tapping harnesses.																		
38	Pre dry active part in oven or vapour phase as required.																		
39	Retention rewindings to original specifications.																		
40	Replace top core																		

	insulation as required.																		
41	Pack 25% of top core.																		
42	Conduct pre-test to ensure correct ratios.																		
43	Complete packing of top core.																		
44	Arrange 380V tests after packing full top yoke (Ratio, Magnetization & Megger (Insulation resistance)).																		
45	Fit harnessing and make temporary connections.																		
46	Arrange 380V test on temporary connections.																		
47	Make and tape final connections.																		
48	Conduct all low voltage tests (Ratio & polarity, Magnetization, Impedance, Resistance and Megger (Insulation resistance)).																		
49	Deliver active part in a pot for final dry out.																		
50	Remove active part from the pot after dry out and place in a Bay.																		
51	Final jack, tighten all parts and Megger (Insulation resistance) test active part.																		
50	**REFURBISH TANK AND PARTS**	**3000018727**	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R

52	Clean and inspect tank and regasket tank.																		
53	Clean and inspect all pipe work and headers and seal.																		
54	Replace breathers with Envirogel																		
55	Replace junction boxes with Marshalling interface box housing Temp instruments																		
56	Replace WTI and OTI with Messko																		
57	Replace cable work																		
58	Replace radiator valve.																		
59	Replace drain and filtration valves.																		
60	Clean and flush radiators.																		
61	Pressure tests all radiators (supply test certificates).																		
62	Replace Buchholz relay (supply test certificate).																		
63	Replace PRV (supply test certificates).																		
64	Replace bolts and nuts where required.																		
65	Clean and regasket conservator tank																		
60	**SERVICE BUSHINGS**	**3000018728**	incl. in tank	incl. in tank	incl. in tank	incl. in tank	incl. in tank	incl. in tank	incl. in tank	incl. in tank	incl. in tank	incl. in tank	incl. in tank	incl. in tank	incl. in tank	incl. in tank	incl. in tank	incl. in tank	incl. in tank
66	Off load all bushings.																		
67	Conduct 10kV test on all bushings.																		
68	Take oil samples																		

	from bushings and have analysed.																		
69	Supply new bushings if required with RIP type																		
70	Modify exit leads to suit new bushings.																		
71	Modify turrets to suit new bushings																		
72	Overhaul and regasket HV turrets.																		
70	**HV TEST ORIGINAL BUSHINGS (OPTIONAL)**	**3000018729**	incl. in untank	incl. in untank	incl. in untank	incl. in untank	incl. in untank	incl. in untank	incl. in untank	incl. in untank	incl. in untank	incl. in untank	incl. in untank	incl. in untank	incl. in untank	incl. in untank	incl. in untank	incl. in untank	incl. in untank
73	Top up oil level and prepare bushings for HV test																		
74	Install 1 bushing at a time in test tank.																		
75	HV test bushing and supply test certificates.																		
76	Remove bushing and pack in crate.																		
80	**RING TYPE CT's**	**3000018730**	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb
77	Mark all connections as per nameplate.		incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	0	0	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb
78	Remove CT's from turrets or active part.		incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	0	0	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb
79	Carry out electrical tests to determine if serviceable, replace CT's if faulty.		incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	0	0	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb

80	Clean and retape CT's.		incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	0	0	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb
81	Final test and dry out CT's		incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	0	0	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb
82	Refit during final tanking of active part ensuring correct polarity.		incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	0	0	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb
90	**SERVICE INSULATORS**	**3000018731**	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb	incl. Refurb
83	Check and inspect insulators.																		
84	Clean insulator shells.																		
85	Renew all seals and gaskets.																		
86	Assemble insulator.																		
87	Paint flanges and parts.																		
100	**TAPCHANGER (ON LOAD) Box type:**	**3000018732**	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
88	Open front cover and inspect for defects.																		
89	Remove all contact epoxy boards and inspect for cracks or any other defects.																		
90	Remove barrier board and inspect for cracks/defects.																		
91	Inspect all contacts, shafts and flexibles for wear/defects.																		

92	Record transitional resistor values and compare with nameplate information where applicable.																		
93	Inspect mechanical drive mechanism for defects.																		
94	Replace all gaskets and seals.																		
95	Replace all defective parts.																		
96	Re-assemble tap changer.																		
97	Mechanically operate tap changer to check for correct operation.																		
98	Oil leak test tap changer.																		
99	Dry out tap changer.																		
100	Fit tap changer to transformer and carry out speed trace.																		
110	**TAPCHANGER (OFF LOAD)**	**3000018733**	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
101	Mark all connections.																		
102	Remove off load tap changer.																		
103	Inspect all contacts, spring tensions and shafts.																		
104	Operate to check free movement.																		
105	Refit Tapchanger.																		
120	**VAPOUR PHASE**	**3000018734**	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
106	Pre-dry out active part in a pot or																		

	vapour phase.																		
107	Final dry out active part in a pot.																		
108	Purchase Uninhibited virgin and polish oil to Eskom spec.																		
109	Take oil sample for quality before filling.																		
110	Draw vacuum for 12hrs after final tanking active part.																		
111	Fill transformer with oil under vacuum.																		
112	Circulate oil for 12hrs and allow 12hrs standing time.																		
113	Bleed transformer, take oil samples for kV, moisture and DGA.																		
114	Request Test department to perform final and HV test on the transformer.																		
115	Take oil sample for DGA after HV test.																		
116	Partial drain oil from transformer and hand over to Tanking bay.																		
130	**FINAL TANKING**	**3000018735**	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
117	Final tank active part and Megger (Insulation resistance) test core.																		
118	Fit all parts (bushings, tap changer, ancillary parts and connect																		

	ring type CT's, test for polarity																		
119	Bolt main cover or fit temporary clamps.																		
120	Arrange 380V test on transformer after final tanking (ratio, polarity, impedance and magnetization, resistance and Megger (Insulation resistance)).																		
121	Hand over the transformer to Vapour phase for HV test preparation																		
122	Remove parts after HV testing and blank off.																		
123	Arrange fitting of Impact recorder																		
124	Arrange Megger (Insulation resistance) test core to earth before and after loading on transport.																		
125	Load transformer and parts on transport and dispatch to site.																		
140	**BOILERSHOP**	**R**	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
126	Manufacture various blanking plates																		
127	Make flange alterations to comply with new bushings																		
128	Gouge top cover during untanking (If top cover is welded)																		
129	Tag weld top																		

	cover after final tanking (if top cover is welded)																		
130	Weld top cover after HV testing (if top cover is welded)																		
150	**TESTING OF TRANSFORMER**	**3000018737**	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
131	Perform the following tests with 25% top yoke packed:																		
129.A	• Ratio;																		
129.B	• Magnetization; and																		
129.C	• Megger (Insulation resistance)																		
132	Perform the following tests with full top yoke;																		
130.A	• Ratio and vector group;																		
130.B	• Magnetization;																		
130.C	• Impedance; and																		
130.D	• Megger (Insulation resistance)																		
133	Perform 380V ratio and vector group tests with temporary connections;																		
134	Perform the following tests with on permanent connections;																		
132.A	• Ratio and vector group;																		
132.B	• Magnetization;																		

132.C	• Impedance;																		
132.D	• Resistance; and																		
132.E	• Megger (Insulation resistance)																		
135	Perform Megger (Insulation resistance) test after final dry out.																		
136	Perform final Tan delta test on bushings.																		
137	Perform Speed trace test on tap changer.																		
138	Perform the following tests after final tanking:																		
136.A	• Ratio and vector group;																		
136.B	• Magnetization;																		
136.C	• Impedance;																		
136.D	• Resistance;																		
136.E	• Megger (Insulation resistance); and																		
139	• CT ratio, polarity and megger (Insulation resistance).																		
140	Obtain DGA results and request to HV test transformer.																		
141	Conduct the following low voltage tests after oil filling:																		
139.A	• Ratio and vector group;																		
139.B	• Magnetization																		
139.C	• Impedance																		

139.D	• Resistance																		
139.E	• Megger (Insulation resistance)																		
139.F	• SFRA																		
142	Conduct the following HV tests:																		
140.A	• Tan delta test;																		
140.B	• Separate source;																		
140.C	• Induced overvoltage test;																		
140.D	• Lightning impulse test;																		
140.E	• No load loss;																		
140.F	• Load loss;																		
143	Arrange oil samples for DGA.																		
144	Perform megger (Insulation resistance) test prior and after loading on transport.																		
160	**PAINTING OF TRANSFORMER AND PARTS**	**3000018738**																	
145	Check that all parts are sealed as required before cleaning.																		
146	Tilt or lift tank to enable base painting.																		
147	Clean and abrade surfaces prior to painting.																		

148	Apply Cloud grey coatings to transformer and parts.																		
149	Check paint thickness.																		
150	Bring tank to upright position again.																		
151	Clean and abrade surfaces prior to painting.																		
152	Apply Cloud grey coatings to transformer and parts.																		
153	Check paint thickness and remove all protection applied (masking tape, etc.).																		

TRANSFORMER REPLACEMENT COST

PRICING SCHEDULE (PER ITEM) REPLACEMENT COST		5MVA		4MVA	3.5MVA	3.15MVA		2MVA	2.5MVA			1.6MVA		1MVA	1.25MVA		750KVA		500KVA	
Item	TRANSFORMERS	22-11kV	22-6.6kV	22-11kV	88-11kV	22-11Kv	11-0.4 Kv	88-11kV	33-22kV	22-11kV	22-6.6kV	22-11kV	11-6.6kV	22-22kV	22-6.6kV	22-11kV	22-11 kV	22-6.6 kV	22-11 kV	22-6.6 kV
1	Off-load tap changer replacement	R	R																	
2	On-load tap changer	R																		
3	Bushings	R																		
4	Oil and Winding temperature meter	R																		
5	Buchholz sizes 25mm,50mm,80mm	R																		
6	Gauge glass	R																		
7	Nameplate	R																		
8	LED Light	R																		
9	Heater	R																		
10	24 Way Module	R																		
11	12 way module	R																		
12	Aux box	R																		

NB: **The above replacement costs is inclusive of labour**

NECRT MAINTENANCE COST

PRICING SCHEDULE (per item)						
	NECRT	**44kV**	**33kV**	**22kV**	**11kV**	**6.6kV**
10	**UNTANKING**	R	R	R	R	R
1	Off load transformer from transport and wash.					
2	Conduct the following electrical tests:					
2.A	• 380V AC (Ratio and polarity, Magnetization & Impedance);					
2.B	• Resistance; and					
2.C	• Megger (Insulation resistance test).					
3	Mark and disconnect cabling and CT's.					
4	Disconnect and remove insulators and turrets and CT brackets and send to Bushing Section.					
5	Remove cabling and disconnect pipe work.					
6	Mark tapping leads and disconnects tap changer.					
7	Remove tap changer and send to Tap Changer Section.					
8	Gouge open or Unbolt top cover and untank active part.					
9	Place active part in bay and repeat electrical tests if necessary as per recommendation.					
10	Inspect active part and provide recommendations.					
20	**DISMANTLE ACTIVE PART**	R	R	R	R	R
11	Take measurement, make sketches of active part.					
12	Take pictures on all sides and record top yoke condition.					
13	Mark harness, undo connections and Remove harness.					

14	Release pressure from active part and take pressure readings.					
15	Unpack top yoke and remove top core clamps.					
16	Mark all top blocking press frames and shunts					
17	Remove top blocking, press frames and shunts.					
18	Remove all rewindings, wrappers and slats, make sketches of set up.					
19	Take paper samples for DP analysis.					
20	Compile Engineering report with recommendations and repair SOW.					
30	**REWINDINGS**	R	R	R	R	R
21	Manufacture three new HV rewindings as rewinding specs.					
22	Manufacture three new LV rewindings as rewinding specs.					
23	Manufacture three new Regulating rewindings as rewinding specs.					
24	Manufacture associated rewinding insulation as rewinding specs.					
25	Place rewindings under Hydraulic press and apply compacting pressure.					
26	Conduct continuity and parallel path tests.					
27	Place rewindings in a pot for dry out.					
28	Remove rewindings from the pot and place under Hydraulic press again.					
29	Apply assembly pressure and make adjustments as per rewinding spec.					
30	Conduct final inspection and deliver rewindings to the assembly section.					
40	**REASSEMBLE ACTIVE PART**	R	R	R	R	R
31	Megger core insulation.					
32	Replace or clean blocking, press frames and insulation.					
33	Fit bottom blocking and support structures.					

34	Fit rewindings to core referring to drawings					
35	Fit all top blocking and press-rings.					
36	Fit top core clamps.					
37	Inspect, clean and retape HV, LV and Tapping harnesses.					
38	Pre dry active part in oven or vapour phase as required.					
39	Retention rewindings to original specifications.					
40	Replace top core insulation as required.					
41	Pack 25% of top core.					
42	Conduct pre-test to ensure correct ratios.					
43	Complete packing of top core.					
44	Arrange 380V tests after packing full top yoke (ratio, magnetization & Megger (Insulation resistance test)).					
45	Fit harnessing and make temporary connections.					
46	Arrange 380V test on temporary connections.					
47	Make and tape final connections.					
48	Conduct all low voltage tests (ratio & polarity, magnetization, impedance, resistance and Megger (Insulation resistance test)).					
49	Deliver active part in a pot for final dry out.					
50	Remove active part from the pot after dry out and place in a Bay.					
51	Final jack, tighten all parts and Megger (Insulation resistance test) test active part.					
50	**REFURBISH TANK AND PARTS**	R	R	R	R	R
52	Clean and inspect tank and regasket tank.					
53	Clean and inspect all pipe work and headers and seal.					
54	Replace breathers with Envirogel					

55	Replace junction boxes with Marshalling interface box housing Temp instruments					
56	Replace WTI and OTI with Messko					
57	Replace cable work					
58	Replace radiator valve.					
59	Replace drain and filtration valves.					
60	Clean and flush radiators.					
61	Pressure tests all radiators (supply test certificates).					
62	Replace Buchholz relay (supply test certificate).					
63	Replace PRV (supply test certificates).					
64	Replace bolts and nuts where required.					
65	Clean and regasket conservator tank					
60	**SERVICE BUSHINGS**	N/A	N/A	N/A	N/A	N/A
66	Off load all bushings.					
67	Conduct 10kV test on all bushings.					
68	Take oil samples from bushings and have analysed.					
69	Supply new bushings if required with RIP type					
70	Modify exit leads to suit new bushings.					
71	Modify turrets to suit new bushings					
72	Overhaul and regasket HV turrets.					
70	**HV TEST ORIGINAL BUSHINGS (OPTIONAL)**	N/A	N/A	N/A	N/A	N/A
73	Top up oil level and prepare bushings for HV test					
74	Install 1 bushing at a time in test tank.					

75	HV test bushing and supply test certificates.					
76	Remove bushing and pack in crate.					
80	**RING TYPE CT's**	N/A	N/A	N/A	N/A	N/A
77	Mark all connections as per nameplate.					
78	Remove CT's from turrets or active part.					
79	Carry out electrical tests to determine if serviceable, replace CT's if faulty.					
80	Clean and retape CT's.					
81	Final test and dry out CT's					
82	Refit during final tanking of active part ensuring correct polarity.					
90	**SERVICE INSULATORS**	N/A	N/A	N/A	N/A	N/A
83	Check and inspect insulators.					
84	Clean insulator shells.					
85	Renew all seals and gaskets.					
86	Assemble insulator.					
87	Paint flanges and parts.					
100	**TAPCHANGER (ON LOAD) Box Type**	N/A	N/A	N/A	N/A	N/A
88	Open front cover and inspect for defects.					
89	Remove all contact epoxy boards and inspect for cracks or any other defects.					
90	Remove barrier board and inspect for cracks/defects.					
91	Inspect all contacts, shafts and flexibles for wear/defects.					
92	Record transitional resistor values and compare with nameplate information where applicable.					
93	Inspect mechanical drive mechanism for defects.					

94	Replace all gaskets and seals.					
95	Replace all defective parts.					
96	Re-assemble tap changer.					
97	Mechanically operate tap changer to check for correct operation.					
98	Oil leak test tap changer.					
99	Dry out tap changer.					
100	Fit tap changer to transformer and carry out speed trace.					
110	**TAPCHANGER (OFF LOAD)**	R	R	R	R	R
101	Mark all connections.					
102	Remove off load tap changer.					
103	Inspect all contacts, spring tensions and shafts.					
104	Operate to check free movement.					
105	Refit Tapchanger.					
120	**VAPOUR PHASE**	R	R	R	R	R
106	Pre-dry out active part in a pot or vapour phase.					
107	Final dry out active part in a pot.					
108	Purchase Uninhibited virgin and polish oil to Eskom spec.					
109	Take oil sample for quality before filling.					
110	Draw vacuum for 12hrs after final tanking active part.					
111	Fill transformer with oil under vacuum.					
112	Circulate oil for 12hrs and allow 12hrs standing time.					
113	Bleed transformer, take oil samples for kV, moisture and DGA.					

114	Request Test department to perform final and HV test on the transformer.					
115	Take oil sample for DGA after HV test.					
116	Partial drain oil from transformer and hand over to Tanking bay.					
130	**FINAL TANKING**	R	R	R	R	R
117	Final tank active part and Megger test core.					
118	Fit all parts (bushings, tap changer, ancillary parts and connect ring type CT's, test for polarity					
119	Bolt main cover or fit temporary clamps.					
120	Arrange 380V test on transformer after final tanking (ratio, polarity, impedance and magnetization, resistance and Megger).					
121	Hand over the transformer to Vapour phase for HV test preparation					
122	Remove parts after HV testing and blank off.					
123	Arrange fitting of Impact recorder					
124	Arrange Megger test core to earth before and after loading on transport.					
125	Load transformer and parts on transport and dispatch to site.					
140	**BOILERSHOP**	R	R	R	R	R
126	Manufacture various blanking plates					
127	Make flange alterations to comply with new bushings					
128	Gouge top cover during untanking (If top cover is welded)					
129	Tag weld top cover after final tanking (if top cover is welded)					
130	Weld top cover after HV testing (if top cover is welded)					
150	**TESTING OF TRANSFORMER**	R	R	R	R	R
131	Perform the following tests with 25% top yoke packed:					
129.A	• Ratio;					

129.B	• Magnetization; and					
129.C	• Megger (Insulation resistance test)					
132	Perform the following tests with full top yoke;					
130.A	• Ratio and vector group;					
130.B	• Magnetization;					
130.C	• Impedance; and					
130.D	• Megger (Insulation resistance test)					
133	Perform 380V ratio and vector group tests with temporary connections;					
134	Perform the following tests with on permanent connections;					
132.A	• Ratio and vector group;					
132.B	• Magnetization;					
132.C	• Impedance;					
132.D	• Resistance; and					
132.E	• Megger (Insulation resistance test)					
135	Perform Megger (Insulation resistance test) after final dry out.					
136	Perform final Tan delta test on bushings.					
137	Perform Speed trace test on tap changer.					
138	Perform the following tests after final tanking:					
136.A	• Ratio and vector group;					
136.B	• Magnetization;					
136.C	• Impedance;					
136.D	• Resistance;					

136.E	• Megger (Insulation resistance test); and					
139	• CT ratio, polarity and megger.					
140	Obtain DGA results and request to HV test transformer.					
141	Conduct the following low voltage tests after oil filling:					
139.A	• Ratio and vector group;					
139.B	• Magnetization					
139.C	• Impedance					
139.D	• Resistance					
139.E	• Megger (Insulation resistance test)					
139.F	• SFRA					
142	Conduct the following HV tests:					
140.A	• Tan delta test;					
140.B	• Separate source;					
140.C	• Induced overvoltage test;					
140.D	• Lightning impulse test;					
140.E	• No load loss;					
140.F	• Load loss;					
143	Arrange oil samples for DGA.					
144	Perform megger test prior and after loading on transport.					
160	**PAINTING OF TRANSFORMER AND PARTS**	R	R	R	R	R
145	Check that all parts are sealed as required before cleaning.					
146	Tilt or lift tank to enable base painting.					

147	Clean and abrade surfaces prior to painting.					
148	Apply Cloud grey coatings to transformer and parts.					
149	Check paint thickness.					
150	Bring tank to upright position again.					
151	Clean and abrade surfaces prior to painting.					
152	Apply Cloud grey coatings to transformer and parts.					
153	Check paint thickness and remove all protection applied (masking tape, etc.).					

NECRT REPLACEMENT COST

PRICING SCHEDULE NECRT (per item) REPLACEMENT COST

Item	NECRT	44kV	33kV	22kV	11kV	6.6kV
1	**Off-load tap changer replacement**	R				
2	**On-load tap changer**	R				
3	**Bushings**	R				
4	**Oil and Winding temperature meter**	R				
5	**Buchholz sizes 25mm,50mm,80mm**	R				
6	**Gauge glass**	R				
7	**Nameplate**	R				
8	**24 way module**	R				
9	**12 way module**	R				
10	**Aux box**	R				

NB: **The above replacement costs MUST be inclusive of labour**

TRANSPORTATION

Item no	Description	Unit	Price per unit
1	LDV 4x2	km	
2	Transport Truck 9-14 ton	km	
3	Transport Truck 9-14 ton with crane	km	

PART C3: SCOPE OF WORK

Document reference	Title	No of pages
C3.1	*Employer*'s Service Information	41

C3.1: EMPLOYER'S SERVICE INFORMATION

Description of the *service*

Executive overview

C3.1: EMPLOYER'S SERVICE INFORMATION

1 Description of the *service*

Currently the maintenance of these transformers and NECRT's are being done by Power Plant Maintenance in accordance with the following documentation:

• 240-65216748- TEST PROCEDURE FOR POWER TRANSFOMERS
• 240-69387838- MAINTENANCE STANDARD FOR POWER TRANSFORMERS AND REACTORS (>1MVA AND >1000V)
• 240-68701233- DISMANTLING / DECANTING TRANSFORMER
• PPM QUALITY CHECK/REPAIR PROCESS

Power Plant Maintenance have two sections that carry out the tasks stipulated in these documents, one section is responsible for the on-site inspections and maintenance and the other is called upon to carry out the auxiliary maintenance. The auxiliary maintenance section consists of three working teams. Due diligence is taken in identifying transformers and NECRT's that require full winding, by contacting Plant once the transformer or NECRT is stripped. Plant then factors in the unit's lifespan (age-analysis is considered) and conducts a feasibility study to determine whether replacement or repair would be required. With the increase in failures and/or periodic maintenance and repairs that is required for transformers and NECRT's, PPM is unable to fulfil this mandate due to limited resources. The Cluster does not have the equipment to conduct full winding of the transformers and NECRT's.

2.1Scope

Full rewinding and testing of transformers and NECRTs in Limlanga Cluster (500Kva, 750Kva, 1000Kva,1250kVA, 1600Kva, 2000Kva, 2500Kva, 3150kVA, 3500kVA, 4000Kva and 5000Kva) and NECRTs from 6,6kV, 11Kv, 22Kv, 33Kv and 44Kv and provide for auxiliary box, 24 way module, 12 way module, nameplate, LED light and heater on an "as and when required" basis over period of 5 years

PRICING SCHEDULE (per item)
TRANSFORMERS
MAINTENANCE
ITEM 10 UNTANKING

1. Off load transformer from transport and wash.
2. Conduct the following electrical tests:
   a) 380V AC (Ratio and polarity, Magnetization & Impedance);
   b) Resistance; and
   c) Megger (Insulation resistance test)
3. Mark and disconnect cabling and CT's.
4. Disconnect and remove insulators and turrets and CT brackets and send to Bushing Section.
5. Remove cabling and disconnect pipe work.
6. Mark tapping leads and disconnects tap changer.
7. Remove tap changer and send to Tap Changer Section.
8. Gouge open or Unbolt top cover and untank active part.
9. Place active part in bay and repeat electrical tests if necessary as per recommendation.
10. Inspect active part and provide recommendations.

ITEM 20 DISMANTLE ACTIVE PART

11. Take measurement, make sketches of active part.
12. Take pictures on all sides and record top yoke condition.
13. Mark harness, undo connections and Remove harness.

14. Release pressure from active part and take pressure readings.
15. Unpack top yoke and remove top core clamps.
16. Mark all top blocking press frames and shunts
17. Remove top blocking, press frames and shunts.
18. Remove all rewindings, wrappers and slats, make sketches of set up.
19. Take paper samples for DP analysis.
20. Compile Engineering report with recommendations and repair SOW.

ITEM 30 REWINDINGS

21. Manufacture three new HV rewindings as rewinding specs.
22. Manufacture three new LV rewindings as rewinding specs.
23. Manufacture three new Regulating rewindings as rewinding specs.
24. Manufacture associated rewinding insulation as rewinding specs.
25. Place rewindings under Hydraulic press and apply compacting pressure.
26. Conduct continuity and parallel path tests.
27. Place rewindings in a pot for dry out.
28. Remove rewindings from the pot and place under Hydraulic press again.
29. Apply assembly pressure and make adjustments as per rewinding spec.
30. Conduct final inspection and deliver rewindings to the assembly section.

ITEM 40 REASSEMBLE ACTIVE PART

31. Megger core insulation ((Insulation resistance test for core insulation).
32. Replace or clean blocking, press frames and insulation.
33. Fit bottom blocking and support structures.
34. Fit rewindings to core referring to drawings.
35. Fit all top blocking and press-rings.
36. Fit top core clamps.
37. Inspect, clean, and retape HV, LV and Tapping harnesses.
38. Pre dry active part in oven or vapour phase as required.
39. Retention rewindings to original specifications.
40. Replace top core insulation as required.
41. Pack 25% of top core.
42. Conduct pre-test to ensure correct ratios.
43. Complete packing of top core.
44. Arrange 380V tests after packing full top yoke (Ratio, Magnetization & Megger (Insulation resistance)).
45. Fit harnessing and make temporary connections.
46. Arrange 380V test on temporary connections.
47. Make and tape final connections.
48. Conduct all low voltage tests (Ratio & polarity, Magnetization, Impedance, Resistance and Megger (Insulation resistance)).
49. Deliver active part in a pot for final dry out.
50. Remove active part from the pot after drying out and place in a Bay.
51. Final jack, tighten all parts and Megger (Insulation resistance) test active part.

ITEM 50 REFURBISH TANK AND PARTS

52. Clean and inspect tank and regasket tank.
53. Clean and inspect all pipe work and headers and seal.
54. Replace breathers with Envirogel
55. Replace junction boxes with Marshalling interface box housing Temp instruments.

56. Replace WTI and OTI with Messko
57. Replace cable work.
58. Replace radiator valve.
59. Replace drain and filtration valves.
60. Clean and flush radiators.
61. Pressure tests all radiators (supply test certificates).
62. Replace Buchholz relay (supply test certificate).
63. Replace PRV (supply test certificates).
64. Replace bolts and nuts where required.
65. Clean and regasket conservator tank

ITEM 60 SERVICE BUSHINGS

66. Off load all bushings.
67. Conduct 10kV test on all bushings.
68. Take oil samples from bushings and have analysed.
69. Supply new bushings if required with RIP type.
70. Modify exit leads to suit new bushings.
71. Modify turrets to suit new bushings.
72. Overhaul and regasket HV turrets.

ITEM 70 HV TEST ORIGINAL BUSHINGS (OPTIONAL)

73. Top up oil level and prepare bushings for HV test.
74. Install 1 bushing at a time in test tank.
75. HV test bushing and supply test certificates.
76. Remove bushing and pack in crate.

ITEM 80 RING TYPE CT's

77. Mark all connections as per nameplate.
78. Remove CT's from turrets or active part.
79. Carry out electrical tests to determine if serviceable, replace CT's if faulty.
80. Clean and retape CT's.
81. Final test and dry out CT's
82. Refit during final tanking of active part ensuring correct polarity.

ITEM 90 SERVICE INSULATORS

83. Check and inspect insulators.
84. Clean insulator shells.
85. Renew all seals and gaskets.
86. Assemble insulator.
87. Paint flanges and parts.

ITEM 100 TAPCHANGER (ON LOAD) Box type:

88. pen front cover and inspect for defects.
89. Remove all contact epoxy boards and inspect for cracks or any other defects.
90. Remove barrier board and inspect for cracks/defects.
91. Inspect all contacts, shafts, and flexibles for wear/defects.
92. 9Record transitional resistor values and compare with nameplate information where applicable.
93. Inspect mechanical drive mechanism for defects.
94. Replace all gaskets and seals.
95. Replace all defective parts.
96. Re-assemble tap changer.

97. Mechanically operate tap changer to check for correct operation.
98. Oil leak test tap changer.
99. Dry out tap changer.
100. Fit tap changer to transformer and carry out speed trace.

ITEM 110 TAPCHANGER (OFF LOAD)

101. Mark all connections.
102. Remove off load tap changer.
103. Inspect all contacts, spring tensions and shafts.
104. Operate to check free movement.
105. Refit Tapchanger.

ITEM 120 VAPOUR PHASE

106. Pre-dry out active part in a pot or vapour phase.
107. Final dry out active part in a pot.
108. Purchase Uninhibited virgin and polish oil to Eskom spec.
109. Take oil sample for quality before filling.
110. Draw vacuum for 12hrs after final tanking active part.
111. Fill transformer with oil under vacuum.
112. Circulate oil for 12hrs and allow 12hrs standing time.
113. Bleed transformer, take oil samples for kV, moisture and DGA.
114. Request Test department to perform final and HV test on the transformer.
115. Take oil sample for DGA after HV test.
116. Partial drain oil from transformer and hand over to Tanking Bay.

ITEM 130 FINAL TANKING

117. Final tank active part and Megger (Insulation resistance) test core.
118. Fit all parts (bushings, tap changer, ancillary parts and connect ring type CT's, test for polarity
119. Bolt main cover or fit temporary clamps.
120. Arrange 380V test on transformer after final tanking (ratio, polarity, impedance and magnetization, resistance, and Megger (Insulation resistance)).
121. Hand over the transformer to Vapour phase for HV test preparation.
122. Remove parts after HV testing and blank off.
123. Arrange fitting of Impact recorder.
124. Arrange Megger (Insulation resistance) test core to earth before and after loading on transport.
125. Load transformer and parts on transport and dispatch to site.

ITEM 140 BOILERSHOP

126. Manufacture various blanking plates.
127. Make flange alterations to comply with new bushings.
128. Gouge top cover during untanking (If top cover is welded)
129. Tag weld top cover after final tanking (if top cover is welded)
130. Weld top cover after HV testing (if top cover is welded)

ITEM 150 TESTING OF TRANSFORMER

131. Perform the following tests with 25% top yoke packed:
    a) Ratio.
    b) Magnetization; and
    c) Megger (Insulation resistance)
132. Perform the following tests with full top yoke.
    a) Ratio and vector group.

b) Magnetization.
c) Impedance; and
d) Megger (Insulation resistance)

133. Perform 380V ratio and vector group tests with temporary connections.
134. Perform the following tests with on permanent connections.
a) Ratio and vector group.
b) Magnetization.
c) Impedance.
d) Resistance; and
e) Megger (Insulation resistance)
135. Perform Megger (Insulation resistance) test after final dry out.
136. Perform final Tan delta test on bushings.
137. Perform Speed trace test on tap changer.
138. Perform the following tests after final tanking:
a) Ratio and vector group.
b) Magnetization.
c) Impedance.
d) Resistance.
e) Megger (Insulation resistance); and
139. CT ratio, polarity and megger (Insulation resistance).
140. Obtain DGA results and request to HV test transformer.
141. Conduct the following low voltage tests after oil filling:
a) Ratio and vector group.
b) Magnetization
c) Impedance
d) Resistance
e) Megger (Insulation resistance)
f) SFRA
142. Conduct the following HV tests:
a) Tan delta test.
b) Separate source.
c) Induced overvoltage test.
d) Lightning impulse test.
e) No load loss.
f) Load loss.
143. Arrange oil samples for DGA.
144. Perform megger (Insulation resistance) test prior and after loading on transport.

ITEM 160 PAINTING OF TRANSFORMER AND PARTS

145. Check that all parts are sealed as required before cleaning.
146. Tilt or lift tank to enable base painting.
147. Clean and abrade surfaces prior to painting.
148. Apply Cloud grey coatings to transformer and parts.
149. Check paint thickness.
150. Bring tank to upright position again.
151. Clean and abrade surfaces prior to painting.
152. Apply Cloud grey coatings to transformer and parts.
153. Check paint thickness and remove all protection applied (masking tape, etc.

2. REPLACEMENT

ITEM 1. OFF-LOAD TAP CHANGER REPLACEMENT
ITEM 2. ON-LOAD TAP CHANGER
ITEM 3. BUSHINGS
ITEM 4. OIL AND WINDING TEMPERATURE METER
ITEM 5. BUCHHOLZ SIZES 25MM,50MM,80MM
ITEM 6. GAUGE GLASS

2 Executive overview

The Supervisor or the end user need to be assured that all requested work was executed in accordance with the scope and that the report's, invoices, certificates and accompanying documentation is handed over to him before signing off the Task Order.

The Start and Completion date must be agreed upon prior to signing the Task Order. Late completion may result in penalty clause being applied as per contract document.

Original tax invoices must be submitted to the contract owner containing all the relevant mentioned above. On completion of each task, the Tax Invoice with a copy of the Task Order, Completion Certificate and the Completion certificate attachment must be submitted to the contract owner. Any deviation from the planned work must be adjusted on the Tax Invoice.

The Contractor must ensure that his invoice is according to the exact work completed on site. No work may be claimed that has not been completed. If work is claimed which is not complete this will be seen as a fraudulent claim which may lead to termination of the contract.

The Contractor will submit the claim as per agreed upon date as per the NEC Payment Certificate format attached to this contract, supporting Bill of Quantities. The contract number must be clearly visible on the Tax Invoice. The contract owner will assess Payment certificates on actual work completed. Any possible issues regarding the claim will be addressed by the contract owner to the Contractor. On acceptance of the Payment Certificate by the contract owner, the Contractor submits his invoice as agreed upon with the contract owner. Payment will take place as per the Eskom Procurement's Invoice Payment Processes.

3 *Employer*'s requirements for the *service*

Once a Task Order is issued:

1. To collect and transport identified units from Eskom MOU site to the contractors workshop in accordance with 240-56178825; Requirements for Transportation and Movement of Large Electrical Equipment Standard.
2. Conduct Untanking, task list 1-10 as per 240-147757439: TECHNICAL EVALUATION CRITERIA FOR THE FULL REWINDING AND TESTING OF TRANSFORMERS (FROM 500KVA TO 5MVA) AND NECRT'S UP TO 33kV IN MPUMALANGA (MOU) Appendix A: Scope of Work.
3. Engage with Eskom MOU to conduct site visit and confirm findings prior to quotation being issued.
4. Based on findings conduct tasks as stipulated in 240-147757439: TECHNICAL EVALUATION CRITERIA FOR THE FULL REWINDING AND TESTING OF TRANSFORMERS (FROM 500KVA TO 5MVA) AND NECRT'S UP TO 33kV IN MPUMALANGA (MOU) Appendix A: Scope of Work.
5. Engage with Eskom MOU to witness final testing.
6. To return the identified unit back to Eskom MOU site once the unit has passed all associated tests after full rewinding. In accordance with 240-56178825; Requirements for Transportation and Movement of Large Electrical Equipment Standard.
7. Provide weekly status feedback report to be sent to Eskom MOU contract owner throughout the service period.
8. Schedule on-site meetings as and when required by either party, a notification thereof to be provided within a reasonable period.

Use of standard:

- 240-56178825; Requirements for Transportation and Movement of Large Electrical Equipment Standard.

- H-1541 (Rev 0); Transformer and Switchgear Services Engineering Scope of Work

Interpretation and terminology

The following abbreviations are used in this Service Information:

Abbreviation	Meaning given to the abbreviation
	None

Management strategy and start up.

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

Management strategy and start up.

Management meetings

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

Title and purpose	Approximate time & interval	Location	Attendance by:
Risk register and compensation events	As required	Service Manager's office	Both parties
Overall contract progress and feedback	As required	Service Manager's office	Both parties

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

N/A

Provision of bonds and guarantees

N/A

Documentation control

All contractual Documentation must have relevant contract number and Purchase Order Number as reference as per Eskom Holdings SOC Ltd Standards . Contractual communications will be in the form of properly compiled letters, letters attached to emails, emails, NEC3 template and urgent contractor meetings

can be in the form of sms. The use of sms's, emails does not override the use of applicable and relevant NEC3 standard templates, forms and Eskom Holdings SOC Limited procedures.

Invoicing and payment

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)
Within one week of receiving a payment certificate from the *Service Manager* 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.

Contract change management

For any change in scope, such changes must be treated as Compensation Events.

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

In order to substantiate the Defined Cost of compensation events, the *Employer* may require the *Contractor* to keep records of amounts paid by him for people employed by the *Contractor*, Plant and Materials, work subcontracted by the *Contractor* and Equipment. A site diary will be required.

Insurance provided by the *Employer*

The insurance provided by the Employer, is addressed under the contract data.

Training workshops and technology transfer

To be advised by the Service Manager, as required

Design and supply of Equipment

N/A

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

Equipment

As per Task Order

Information and other things

As per Task Order

Management of work done by Task Order

NB: No work that falls outside the approved scope of works will be undertaken without a Task Order.

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 WHATHEVER 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:

· Distribution: Alex Stramrood

The *Contractor* shall comply with the health and safety requirements contained in Below Form to this Service Information.

Environmental constraints and management

The *Contractor* shall comply with the environmental criteria and constraints stated in Annexure _____
Guidelines of Compiling an Environmental Policy
Environmental policy
The environmental policy is the driver for implementing and improving the organization's environmental management system so that it can maintain and potentially improve its environmental performance. The policy should therefore reflect the commitment of top management to comply with applicable laws and to demonstrate continual improvement. The policy forms the basis upon which the organization sets its objectives and targets. The policy should be sufficiently clear to be capable of being understood by internal and external interested parties and should be periodically reviewed and revised to reflect changing conditions and information.
Top management shall define the organization's environmental policy and ensure that it:
Top management includes people on site, at head office, or any member of a controlling group designated to be management of the organization.

A site or an operating unit does not need to document its formal adoption of a corporate environmental policy if the corporate policy, as defined by its scope, applies to the site or operating unit. In addition, the corporate policy will need to be adequately specific to the site or operating unit.
If the site or corporate policy is modified to suit the site or operating unit, then these changes must be documented.

a) is appropriate to the nature, scale and environmental impacts of its activities, products or services;

for example, an organization involved in activities with a high environmental risk (for example, scheduled processes) would be expected to provide more specific undertakings in its environmental policy than an organization involved in low risk activities. The environmental policy should also address the different types of environmental impacts of the organization's activities, products or services.

This does not imply that all environmental impacts be addressed in the policy but that the framework of the policy covers all significant impacts (see 4.2 d).

b) includes a commitment to continual improvement and prevention of pollution;

The words "continual improvement" and "pollution prevention" do not need to be explicitly mentioned as long as similar words are used or there are clear statements in the policy that directly address pollution reduction (for example, waste minimization, source reduction and cleaner technologies) and continual improvement. Pollution prevention is more than just pollution control and requires preventive measures, instead of only control.

c) includes a commitment to comply with relevant environmental legislation and regulations,

Compliance with all relevant legislated and other requirements (National, provincial and local) is a minimum requirement for certification.
Exceptions to this are where:

a) The authorities have been informed of the non-compliance in writing;
b) A corrective action programme is in place;
c) Evidence is available that the authorities have accepted the corrective action programme;
d) Evidence is available that the corrective action programme is being implemented.

Where a permit for a process of the organization has expired and the organization can provide evidence of due diligence, for example, records of telephone calls, faxes to the regulator or minutes of meetings with the regulator showing that they are in the process of applying for new permits.
The word comply does not need to be explicitly mentioned in the environmental policy, as long as there are similar words (for example, adhere to, in accordance with) clearly communicating commitment to compliance with legislation and regulations.

d and with other requirements to which the organization subscribes;

The "*other requirements*" may include:

a) Industry initiatives, non-regulatory guidelines or codes of practice such as Responsible Care or more general environmental initiatives such as the business Charter for Sustainable Development to the extent that the organization has formally adopted them;
b) Agreements with public authorities;
c) Formal management systems such as SABS ISO 9001/2, NOSA and ISRS; and
d) Corporate or Head office requirements.

If an organization subscribes to other requirements (as in 4.2(c) a) and b) above in their environmental policy then:

1) The certification body will verify compliance with these requirements;
2) Compliance with those requirements will not be included in the scope of the certificate; and
3) Non-compliance with these requirements could provide grounds for not granting certification.

If an organization subscribes to other requirements (as in 4.2(c)) c) above then the certification body will only verify compliance with the SABS ISO 14001 requirements and not to those other formal management systems. (An exception to this is where the organization requests a combined SABS ISO 14001 and SABS ISO 9000 certification assessment/audit).

e) Provides the framework for setting and reviewing environmental objectives and targets;

The policy should be sufficiently detailed to provide a yardstick against which the organization's environmental performance can be evaluated.
The policy wording must be specific enough so that specific objectives and targets can be formulated from it by the organization in order to implement the policy.

f) Is documented, implemented and maintained …

The policy can be documented in any form (i.e. paper or electronic).
All the requirements of SABS ISO 14001 shall be addressed and an organization cannot elect to omit any

of these requirements from its environmental management system.
Policies tend to set long-term goals.
The policy should be periodically reviewed and revised in response to new information and changing circumstances.
The policy must be reviewed periodically – at least annually.
It is not expected that the policy be reissued annually. A well-developed policy can effectively drive the organization's environmental management system for several years.

g) … and communicated to all employees;

Communication involves both the transmission and the understanding of the policy.
Communication mechanisms can include posting the policy in common areas, distributing it by memo, and reviewing it at staff or "toolbox talks" meetings.

A person's level of knowledge of the policy should be proportional to his/her level of responsibility in the environmental management system i.e. senior staff responsible for ensuring implementation need a greater knowledge of the policy than personnel at shop-floor level. In the South African context, unskilled, illiterate workers cannot be expected to have in-depth knowledge of the contents of the environmental policy, however all employees are expected to have an idea of the concepts of the environment, why it is important to protect the environment, and of their role in achieving this (see also 4.4.2).

h) is available to the public

The policy must be available to any interested party on request.
The words "is available" do not necessarily mean that the organization has to pro-actively distribute the policy to the public. The organization should however make the public aware of the fact that the policy is available.
A mechanism should be in place to have the policy available to the public.

i) Key component of the policy

The policy provides an environmental purpose and set of values for the organization to follow.
The policy should:
a) Be relevant and straightforward;
b) Relay that protection of the environment is a top priority of the organization;
c) Show commitment to continued improvement of environmental performance and compliance with the laws and regulations;
d) Clearly specify which organizational activities are covered by the statement;
e) Be a natural jumping-off point for setting environmental objectives and targets;
f) Provide a framework for assessing progress made with the targets and objectives that are oriented towards minimizing environmental impacts.

j) Communication, promotion and support of policy

The policy statement will be totally ineffective if the commitment it contains is not communicated, made available, promoted and supported by all. It is important to note that the policy:

a) Should be available to all employees in the organization;
b) Should be communicated repeatedly after a period of time as a reminder;
c) Should be made available to the public;
d) Should be promptly provided whenever a copy is required;
e) Should be signed by top management to show commitment and support.

Repeated exposure is the key to communicating the policy effectively thus it can be posted, communicated through news letters or sent to desktop personal computers.

Quality assurance requirements

As per scope of works.

Procurement

People

Minimum requirements of people employed

N/A

BBBEE and preferencing scheme

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

Subcontracting

Preferred subcontractors

The NEC Engineering & Construction Short Contract refers:
Contractors are requested to submit names of proposed "Subcontractors" to be utilized on this project.
Contractors are advised that only Eskom Approved Consultants and Contractors who have completed the necessary Eskom Contractor Training & Accreditation may be used.

Subcontractor	Section of Work to be Subcontracted	Vendor No.

Subcontract documentation, and assessment of subcontract tenders

As per Terms and Conditions of NEC Term Services Contract

Limitations on subcontracting

Tenderers are not allowed to sub-contract more than 25% of the contract value to another enterprise that does not have equal or higher BBBEE status level, unless the intended sub-contractor is an EME that has the capability and ability to execute the sub-contract.

Attendance on subcontractors

None

Skills development and localization

Sector	Components	Local Content Threshold
Transformer Components and Conversion Activities: Class1	Windings	50%

Plant and Materials

Specifications

As per Task Order

Correction of defects

Defects to be corrected within 1 Week

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

Material to be procured Locally, from Eskom approved Supplier.

Tests and inspections before delivery

The inspection to be done by the Service Manager

Plant & Materials provided "free issue" by the *Employer*

N/A

Working on the Affected Property

The Contractor must adhere the OHSA Act.

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

As per the scope of works.

People restrictions, hours of work, conduct and records

As per the scope of works.

Health and safety facilities on the Affected Property

As per the scope of works.

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.

Equipment provided by the *Employer*

None

Site services and facilities

Provided by the *Employer*

Site

Provided by the *Contractor*

As per Task Order.

Control of noise, dust, water and waste

The Contractor to adhere to Environment Management Act.

Hook ups to existing works

The Contractor to adhere to Eskom life saving rules.

Tests and inspections

Description of tests and inspections

N/A

Materials facilities and samples for tests and inspections

N/A

List of drawings

Drawings issued by the *Employer*

Drawing number	Revision	Title
		N/A

Access to the Eskom Web Page

All contractors must make sure that they can access Eskom Web page at any given time to get the latest drawings and specifications before commencement of any task. Web Access applications can be done through the assistance of Brenda Morrison @ 011 629 5266 or MorrisEF@eskom.co.za

Acknowledgement of Web Access/and or application for Web Access

I ….....……..……do hereby acknowledge having/applied for access to the Eskom Distribution Website with all Distribution Procedures, Standards and Drawings as they will be listed in the index of the Task Order documents.

I undertake to study and abide by these requirements at all times. If for any reason I cannot access or open any of the files on the web, I will contact the *Employer* immediately.

Contractors Signature: ……..…….

Signed at: ..... on the …….. day of .....

SECTION 37(2) AGREEMENT CONCLUDED BETWEEN ESKOM HOLDINGS SOC LIMITED
(Hereinafter referred to as Eskom)

AND
…….
(Name of contractor/supplier)

I, ……..[*(name*)representing ……..... [*insert name of contractor/supplier*], do hereby acknowledge that …….. [*insert name of contractor/supplier*] is an employer in his/her own right, with duties as prescribed in the Occupational Health and Safety Act No. 85 of 1993 ("the Act"), as amended, and agree to ensure that all work will be performed and/or machinery or plant used in accordance with the provisions of the Act.
I undertake that …… [*insert name of contractor/supplier*] shall strictly adhere to, and ensure that his/her employees adhere to, the provisions of the Occupational Health and Safety Act, 1993 (Act 85 of 1993).
I have been provided with SHE specifications for project/service ……[*insert brief details of project/service, for example, name, contract/project number*] …….
and will comply with the requirements set out in these.
I accept and agree that the SHE specifications constitute arrangements and procedures between …….. [*insert name of contractor/supplier*] and Eskom, which will ensure compliance by …… [*insert name of contractor/supplier*] with the provisions of the Act, as contemplated in section 37(2) of the Act.
This agreement constitutes the sole agreement between the parties, and no variation, modification, or waiver of any of the provisions of this agreement or consent to any departure from these shall, in any manner, be of any force or effect, unless confirmed in writing and signed by both parties, and such variation, modification, waiver, or consent shall be effective

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only in the specific instance and for the specific purpose and to the extent for which it was made or given.
This agreement is signed on behalf of the parties, each signatory to this warranting that he/she has the requisite authority to do so.

Signed this …….. day of ……..……..... 20 …… at

……..…….. (*Place*)

(*Full name*)…… (*Signature*) ……on

behalf of …….. **(supplier/contractor)**

Contractor Responsible Manager (*responsible for signing the Eskom contract on behalf of the contractor*)

Witnesses
1. ……
2. ……..……

Signed this …… day of ……...20……

at ……..…….…… (*Place*)

(*Full name*…….. (*Signature*)……on

Behalf of **Eskom Holdings SOC Limited.**
(Contracts and/or Project Manager or Eskom's representative)
Witnesses