

**Provision for Supply and Install; Repair and Servicing of HVAC Systems within the Various Substations and Commercial Buildings within Southern Grid on an As and When Required Basis for a Period of 3 years.**



## NEC3 Engineering & Construction Contract

**Between NTCSA SOC Ltd  
(Reg No. 2021/539129/30)**

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

**for Provision for Supply and Install; Repair and Servicing of HVAC Systems within the Various Substations and Commercial Buildings within Southern Grid on an As and When Required Basis for a Period of 3 years.**

<b>Contents:</b>	<b>No of pages</b>
<b>Part C1 Agreements &amp; Contract Data</b>	<b>[•]</b>
<b>Part C2 Pricing Data</b>	<b>[•]</b>
<b>Part C3 Scope of Work</b>	<b>[•]</b>
<b>Part C4 Site Information</b>	<b>[•]</b>

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

**Provision for Supply and Install; Repair and Servicing of HVAC Systems within the Various Substations and Commercial Buildings within Southern Grid on an As and When Required Basis for a Period of 3 years.**

## Part C1: Agreements & Contract Data

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

**Provision for Supply and Install; Repair and Servicing of HVAC Systems within the Various Substations and Commercial Buildings within Southern Grid on an As and When Required Basis for a Period of 3 years.**

## 1.1 Form of Offer & Acceptance

### Section 1.01 Offer

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

**Provision for Supply and Install; Repair and Servicing of HVAC Systems within the Various Substations and Commercial Buildings within Southern Grid on an As and When Required Basis for a Period of 3 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 B	The offered total of the Prices exclusive of VAT is	<b>Rates based</b>
	Value Added Tax @ 15% is	<b>Rates based</b>
	The offered total of the amount due inclusive of VAT is <sup>1</sup>	<b>Rates based</b>
	(in words) [•]	

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

Signature(s)

Name(s) \_\_\_\_\_

Capacity \_\_\_\_\_

**For the  
tenderer:**

\_\_\_\_\_  
(Insert name and address of organisation)

Name &  
signature of  
witness

Date

Tenderer's CIDB registration number (if applicable)

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

**Provision for Supply and Install; Repair and Servicing of HVAC Systems within the Various Substations and Commercial Buildings within Southern Grid on an As and When Required Basis for a Period of 3 years.**

**Section 1.02 Acceptance**

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

The terms of the contract, are contained in:

Part C1	Agreements and Contract Data, (which includes this Form of Offer and Acceptance)
Part C2	Pricing Data
Part C3	Scope of Work: Works Information
Part C4	Site Information

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

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

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

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

Unless the tenderer (now *Contractor*) within five working days of the date of such receipt notifies the Employer in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the Parties.

Signature(s)

Name(s)	Lena Mothata	_____
Capacity	Senior Manager- Southern Grid	_____
for the Employer	120 Henry Street, Bloemfontein, 9301	_____
	(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.

**Provision for Supply and Install; Repair and Servicing of HVAC Systems within the Various Substations and Commercial Buildings within Southern Grid on an As and When Required Basis for a Period of 3 years.**

**Section 1.03 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.

**(i) For the tenderer:**

**(ii) For the Employer**

Signature	_____	_____
Name	_____	Lena Mothata
Capacity	_____	Senior Manager- Southern Grid
On behalf of	(Insert name and address of organisation)	120 Henry Street, Bloemfontein, 9301
Name & signature of witness	_____	_____
Date	_____	_____

**Provision for Supply and Install; Repair and Servicing of HVAC Systems within the Various Substations and Commercial Buildings within Southern Grid on an As and When Required Basis for a Period of 3 years.**

## C1.2 ECC3 Contract Data

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

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

Clause	Statement	Data
1	<b>General</b>	
	The <i>conditions of contract</i> are the core clauses and the clauses for main Option	
		<b>B: Priced contract with bill of quantities</b>
	dispute resolution Option	<b>W1: Dispute resolution procedure</b>
	and secondary Options	
		<b>X1: Price adjustment for inflation</b>
		<b>X2: Changes in the law</b>
		<b>X7: Delay damages</b>
		<b>X16: Retention</b>
		<b>X17: Low performance damages</b>
		<b>X18: Limitation of liability</b>
		<b>Z: Additional conditions of contract</b>
	of the NEC3 Engineering and Construction Contract, April 2013 (ECC3)	
10.1	The <i>Employer</i> is (Name):	<b>NTCSA SOC Ltd (reg no: 2021/539129/30), a state owned company incorporated in terms of the company laws of the Republic of South Africa</b>
	Address	<b>Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg</b>
10.1	The <i>Project Manager</i> is: (Name)	<b>Nqabakazi Njoloza</b>
	Address	<b>Mutual Place, Cnr Cape &amp; CJ Langenhoven Road, Greenacres, Port Elizabeth, 6070</b>
	Tel	<b>076 512 9635</b>
	e-mail	<a href="mailto:NjolozaN@NTCSA.co.za">NjolozaN@NTCSA.co.za</a>
10.1	The <i>Supervisor</i> is: (Name)	<b>Pranesh Sewkumar</b>
	Address	<b>120 Henry Street, Bloemfontein, 9301</b>
	Tel No.	<b>082 923 8234</b>

**Provision for Supply and Install; Repair and Servicing of HVAC Systems within the Various Substations and Commercial Buildings within Southern Grid on an As and When Required Basis for a Period of 3 years.**

e-mail

[Sewkump@NTCSA.co.za](mailto:Sewkump@NTCSA.co.za)

11.2(13)	The <i>works</i> are	<b>Provision for Supply and Install; Repair and Servicing of HVAC Systems within the Various Substations and Commercial Buildings within Southern Grid on an As and When Required Basis for a Period of 3 years.</b>	
11.2(14)	The following matters will be included in the Risk Register	<ul style="list-style-type: none"> <li>▪ Late material delivery</li> <li>▪ Theft of material on Eskom site</li> <li>▪ Design Alterations</li> </ul>	
11.2(15)	The <i>boundaries of the site</i> are	<b>National Transmission Company of South Africa Southern Grid Substations and Commercial Buildings</b>	
11.2(16)	The Site Information is in	<b>Part 4: Site Information</b>	
11.2(19)	The Works Information is in	<b>Part 3: Scope of Work and all documents and drawings to which it makes reference.</b>	
12.2	The <i>law of the contract</i> is the law of	<b>the Republic of South Africa</b>	
13.1	The <i>language of this contract</i> is	<b>English</b>	
13.3	The <i>period for reply</i> is	<b>1 week</b>	
<b>2</b>	<b>The Contractor's main responsibilities</b>	<b>Data required by this section of the core clauses is provided by the Contractor in Part 2 and terms in italics used in this section are identified elsewhere in this Contract Data.</b>	
<b>3</b>	<b>Time</b>		
11.2(3)	The <i>completion date</i> for the whole of the <i>works</i> is	<b>The works will be on an as and when required basis</b>	
11.2(9)	The <i>key dates</i> and the <i>conditions</i> to be met are:	<b>Condition to be met</b>	<b>key date</b>
		Any key date and conditions will be specified in the Project Specific Agreement for any project executed in terms of this contract	
30.1	The <i>access dates</i> are:	<b>Part of the Site Access dates will be specified in the Project Specific Agreement for any project executed in terms of this contract</b>	<b>Date</b>

**Provision for Supply and Install; Repair and Servicing of HVAC Systems within the Various Substations and Commercial Buildings within Southern Grid on an As and When Required Basis for a Period of 3 years.**

31.1	The <i>Contractor</i> is to submit a first programme for acceptance within	<b>4 weeks of the Contract Date.</b>
31.2	The <i>starting date</i> is	<b>TBA</b>
32.2	The <i>Contractor</i> submits revised programmes at intervals no longer than	<b>The period between project progress meetings</b>
35.1	The <i>Employer</i> is not willing to take over the <i>works</i> before the Completion Date.	[No data needed if this statement is included]

#### **4 Testing and Defects**

42.2	The <i>defects date</i> is	<b>52 weeks after Completion of the whole of the works</b>
43.2	The <i>defect correction period</i> is	<b>2 weeks is the response time within which the <i>Contractor</i> assess the defect and submit a defect correction plan inclusive of schedule for access purpose</b>
	except that the <i>defect correction period</i> for	<ul style="list-style-type: none"> <li>• <b>Emergency occupations/permit to work for critical defects impacting operations</b></li> <li>• <b>All defects that may require Employers planned and forced outages</b></li> </ul>
	and the <i>defect correction period</i> for	<b>Any other defects shall be remedied withing 1 week, unless evidence can be provided by the <i>Contractor</i> substantiating why a particular defect cannot be remedied within a week, upon which the parties will endeavour to agree an alternative defects period for such defects.</b>

#### **5 Payment**

50.1	The <i>assessment interval</i> is	<b>between the 20<sup>th</sup> day of each successive month.</b>
51.1	The <i>currency of this contract</i> is the	<b>South African Rand.</b>
51.2	The period within which payments are made is	<b>Four (4) weeks.</b>
51.4	The <i>interest rate</i> is	<p>the publicly quoted prime rate of interest (calculated on a 365-day year) charged from time to time by the Standard Bank of South Africa Limited (as certified, in the event of any dispute, by any manager of such bank, whose appointment it shall not be necessary to prove) for amounts due in Rands and</p> <p>(ii) the LIBOR rate applicable at the time for amounts due in other currencies. LIBOR is the 6 month London Interbank Offered Rate quoted under the caption "Money Rates" in The Wall Street Journal for the applicable currency or if no rate is quoted for the currency in question then the rate for United States Dollars, and if no such rate appears in The Wall Street Journal then the rate as quoted by the Reuters Monitor Money Rates Service (or such service</p>



**Provision for Supply and Install; Repair and Servicing of HVAC Systems within the Various Substations and Commercial Buildings within Southern Grid on an As and When Required Basis for a Period of 3 years.**

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(13)	<p>The place where weather is to be recorded is:</p> <p>The <i>weather measurements</i> to be recorded for each calendar month are,</p> <p>The <i>weather measurements</i> are supplied by</p> <p>The <i>weather data</i> are the records of past <i>weather measurements</i> for each calendar month which were recorded at:</p> <p>and which are available from:</p>	<p><b>The project site</b></p> <p><b>the cumulative rainfall (mm)</b></p> <p><b>the number of days with rainfall more than 10 mm</b></p> <p><b>the number of days with minimum air temperature less than 0 degrees Celsius</b></p> <p><b>the number of days with snow lying at 09:00 hours South African Time</b></p> <p><b>and these measurements:</b></p> <p><b>The contractor using actual weather readings from the project site</b></p> <p><b>The contractor using actual weather readings from the project site</b></p> <p><b>the South African Weather Bureau and included in Annexure A to this Contract Data provided by the <i>Employer</i></b></p>
60.1(13)	<p>Assumed values for the ten year return <i>weather data</i> for each <i>weather measurement</i> for each calendar month are:</p>	<p><b>As stated in Annexure A to this Contract Data provided by the <i>Employer</i>.</b></p> <p><b>Note: If this arrangement is used, delete the rows above for 60.1(13) and delete this note.</b></p>

<b>7</b>	<b>Title</b>	<p><b>There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data.</b></p>
----------	--------------	--

## **8 Risks and insurance**

80.1	<p>These are additional <i>Employer's</i> risks</p>	<ol style="list-style-type: none"> <li><b>1. Inclement weather</b></li> <li><b>2. Resident Complaints</b></li> <li><b>3. Theft and vandalism</b></li> <li><b>4. Political Unrest</b></li> <li><b>5. Local Business Forum</b></li> </ol>
------	---	---

**Provision for Supply and Install; Repair and Servicing of HVAC Systems within the Various Substations and Commercial Buildings within Southern Grid on an As and When Required Basis for a Period of 3 years.**

## 6. Community Unrest

<b>9</b>	<b>Termination</b>	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data.
<b>10</b>	<b>Data for main Option clause</b>	
<b>B</b>	<b>Priced contract with bill of quantities</b>	
60.6	The <i>method of measurement</i> is	as stated in Part C2.1, Pricing Assumptions.
<b>11</b>	<b>Data for Option W1</b>	
W1.1	The <i>Adjudicator</i> is	the person selected from the ICE-SA Division (or its successor body) of the South African Institution of Civil Engineering Panel of Adjudicators by the Party intending to refer a dispute to him. (see <a href="http://www.ice-sa.org.za">www.ice-sa.org.za</a> ). If the Parties do not agree on an Adjudicator the Adjudicator will be appointed by the Arbitration Foundation of Southern Africa (AFSA).
W1.2(3)	The <i>Adjudicator nominating body</i> is:	the Chairman of ICE-SA a joint Division of the South African Institution of Civil Engineering and the London Institution of Civil Engineers. (See <a href="http://www.ice-sa.org.za">www.ice-sa.org.za</a> ) or its successor body.
W1.4(2)	The <i>tribunal</i> is:	arbitration.
W1.4(5)	The <i>arbitration procedure</i> is	the latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.
	The place where arbitration is to be held is	The City within which the Head Office for the relevant Southern Grid is situated within South Africa
	The person or organisation who will choose an arbitrator	
	- if the Parties cannot agree a choice or	the Chairman for the time being or his nominee
	- if the arbitration procedure does not state who selects an arbitrator, is	of the Association of Arbitrators (Southern Africa) or its successor body.
<b>12</b>	<b>Data for secondary Option clauses</b>	

**Provision for Supply and Install; Repair and Servicing of HVAC Systems within the Various Substations and Commercial Buildings within Southern Grid on an As and When Required Basis for a Period of 3 years.**

X1	Price adjustment for inflation				
X1.1(a)	The <i>base date</i> for indices is		1 month prior to Tender Closing Date		
X1.1(c)	<div><div><div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div>&lt;</div></div></div></div>				

**Provision for Supply and Install; Repair and Servicing of HVAC Systems within the Various Substations and Commercial Buildings within Southern Grid on an As and When Required Basis for a Period of 3 years.**

		executed
<b>X15</b>	<b>Limitation of the <i>Contractor's</i> liability for his design to reasonable skill &amp; care</b>	There is no reference to Contract Data in this Option and terms in italics are identified elsewhere in this Contract Data.
<b>X16</b>	<b>Retention (not used with Option F)</b>	
X16.1	The <i>retention free amount</i> is	<b>R0,00</b>
	The <i>retention percentage</i> is	<b>5 %</b>
<b>X18</b>	<b>Limitation of liability</b>	
X18.1	The <i>Contractor's</i> liability to the <i>Employer</i> for indirect or consequential loss is limited to:	<b>R0.0 (zero Rand)</b>
X18.2	For any one event, the <i>Contractor's</i> liability to the <i>Employer</i> for loss of or damage to the <i>Employer's</i> property is limited to:	<b>the amount of the deductibles relevant to the event</b>
X18.3	The <i>Contractor's</i> liability for Defects due to his design which are not listed on the Defects Certificate is limited to	<b>The greater of</b> <ul style="list-style-type: none"> <li>• the total of the Prices at the Contract Date and</li> <li>• the amounts excluded and unrecoverable from the <i>Employer's</i> assets policy for correcting the Defect (other than the resulting physical damage which is not excluded) plus the applicable deductible as at contract date.</li> </ul>
X18.4	The <i>Contractor's</i> total liability to the <i>Employer</i> for all matters arising under or in connection with this contract, other than excluded matters, is limited to:	<b>the total of the Prices other than for the additional excluded matters.</b>  <b>The <i>Contractor's</i> total liability for the additional excluded matters is not limited.</b>  <b>The additional excluded matters are amounts for which the <i>Contractor</i> is liable under this contract for</b> <ul style="list-style-type: none"> <li>• Defects due to his design which arise before the Defects Certificate is issued,</li> <li>• Defects due to manufacture and fabrication outside the Site,</li> <li>• loss of or damage to property (other than the <i>works</i>, Plant and Materials),</li> <li>• death of or injury to a person and</li> <li>• infringement of an intellectual property right.</li> </ul>
X18.5	The <i>end of liability date</i> is	<b>7 years after the <i>defects date</i> for latent Defects and</b>  <b>(ii) the date on which the liability in question prescribes in accordance with the Prescription Act No. 68 of 1969 (as amended or in terms of any replacement legislation) for any other</b>

**Provision for Supply and Install; Repair and Servicing of HVAC Systems within the Various Substations and Commercial Buildings within Southern Grid on an As and When Required Basis for a Period of 3 years.**

matter.

A latent Defect is a Defect which would not have been discovered on reasonable inspection by the *Employer* or the *Supervisor* before the *defects date*, without requiring any inspection not ordinarily carried out by the *Employer* or the *Supervisor* during that period. If the *Employer* or the *Supervisor* do undertake any inspection over and above the reasonable inspection, this does not place a greater responsibility on the *Employer* or the *Supervisor* to have discovered the Defect.

**Z The Additional conditions of contract are**

**Z1 to Z15 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 *Project 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 *Project Manager* within thirty days of the notification or as otherwise instructed by the *Project 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 Works.
- 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

**Provision for Supply and Install; Repair and Servicing of HVAC Systems within the Various Substations and Commercial Buildings within Southern Grid on an As and When Required Basis for a Period of 3 years.**

termination are P1, P2 and P3 as stated in clause 92, and the amount due is A1 and A3 as stated in clause 93.

**Z4 Confidentiality**

- Z4.1 The *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 *Project 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 *works* or any portion thereof, in the course of Providing the Works and after Completion, requires the prior written consent of the *Project 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 *Project Manager*, the *Supervisor*, 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 *works*. 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 Site;
  - 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 *works*; and
  - undertakes, in and about the execution of the *works*, 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.

**Provision for Supply and Install; Repair and Servicing of HVAC Systems within the Various Substations and Commercial Buildings within Southern Grid on an As and When Required Basis for a Period of 3 years.**

- Z6.2 The *Contractor*, in and about the execution of the *works*, 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 *Project 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 Works 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 4710303126 on each invoice he submits for payment.

**Z8 Notifying compensation events**

- Z8.1 Delete from the last sentence in core clause 61.3, "unless the *Project Manager* should have notified the event to the *Contractor* but did not".

**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 83.1 is provided for in 60.1(14) and the *Employer's* liability under the indemnity is limited.

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

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

**Z11 Addition to secondary Option X7 Delay damages (if applicable in this contract)**

- Z11.1 If the amount due for the *Contractor's* payment of delay damages reaches the limits stated in this Contract Data for Option X7 or Options X5 and X7 used together, the *Employer* may terminate the *Contractor's* obligation to Provide the Works using the same procedures and payment on termination as those applied for reasons R1 to R15 or R18 stated in the Termination Table.

**Z12 Ethics**

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

**Provision for Supply and Install; Repair and Servicing of HVAC Systems within the Various Substations and Commercial Buildings within Southern Grid on an As and When Required Basis for a Period of 3 years.**

- 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 Subcontractor or the Subcontractor's employees,
- Corrupt Action** means the offering, giving, taking, or soliciting, directly or indirectly, of a good or service to unlawfully or illegally influence the actions of an Affected Party,
- Fraudulent Action** means any unlawfully or illegally intentional act or omission that misleads, or attempts to mislead, an Affected Party, in order to obtain a financial or other benefit or to avoid an obligation or incurring an obligation,
- Obstructive Action** means a Committing Party unlawfully or illegally destroying, falsifying, altering or concealing information or making false statements to materially impede an investigation into allegations of Prohibited Action, and
- Prohibited Action** means any one or more of a Coercive Action, Collusive Action Corrupt Action, Fraudulent Action or Obstructive Action.

- Z12.1 A Committing Party may not take any Prohibited Action during the course of the procurement of this contract or in execution thereof.
- Z12.2 The *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.
- Z12.3 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.
- Z12.4 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.

### **Z13 Insurance**

#### **Z 13.1 Replace core clause 84 with the following:**

#### **Insurance cover 84**

- 84.1** When requested by a Party, the other Party provides certificates from his insurer or broker stating that the insurances required by this contract are in force.
- 84.2** The *Contractor* provides the insurances stated in the Insurance Table A.



**Provision for Supply and Install; Repair and Servicing of HVAC Systems within the Various Substations and Commercial Buildings within Southern Grid on an As and When Required Basis for a Period of 3 years.**

- 84.3** The insurances provide cover for events which are at the *Contractor's* risk from the *starting date* until the earlier of Completion and the date of the termination certificate.

**(a) INSURANCE TABLE A**

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

**Z 13.2**

**Replace core clause 87 with the following:**

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

**INSURANCE TABLE B**

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

**Provision for Supply and Install; Repair and Servicing of HVAC Systems within the Various Substations and Commercial Buildings within Southern Grid on an As and When Required Basis for a Period of 3 years.**

Cyber Liability	Per the insurance policy document
Nuclear Material Damage and Business Interruption	Per the insurance policy document
Nuclear Material Damage Terrorism	Per the insurance policy document

#### **Z14 Nuclear Liability**

- Z14.1 The *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.
- Z14.2 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*.
- Z14.3 Subject to clause Z14.4 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*.
- Z14.4 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.
- Z14.5 The protection afforded by the provisions hereof shall be in effect until the KNPS is decommissioned.

#### **Z15 Asbestos**

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

<b>AAIA</b>	means approved asbestos inspection authority.
<b>ACM</b>	means asbestos containing materials.
<b>AL</b>	means action level, i.e. a level of 50% of the OEL, i.e. 0.1 regulated asbestos fibres per ml of air measured over a 4 hour period. The value at which proactive actions is required in order to control asbestos exposure to prevent exceeding the OEL.
<b>Ambient Air</b>	means breathable air in area of work with specific reference to breathing zone, which is defined to be a virtual area within a radius of approximately 30cm from the nose inlet.
<b>Compliance Monitoring</b>	means compliance sampling used to assess whether or not the personal exposure of workers to regulated asbestos fibres is in compliance with the Standard's requirements for safe processing, handling, storing, disposal and phase-out of asbestos and asbestos containing material, equipment and articles.
<b>OEL</b>	means occupational exposure limit.

**Provision for Supply and Install; Repair and Servicing of HVAC Systems within the Various Substations and Commercial Buildings within Southern Grid on an As and When Required Basis for a Period of 3 years.**

<b>Parallel Measurements</b>	means measurements performed in parallel, yet separately, to existing measurements to verify validity of results.
<b>Safe Levels</b>	means airborne asbestos exposure levels conforming to the Standard's requirements for safe processing, handling, storing, disposal and phase-out of asbestos and asbestos containing material, equipment and articles.
<b>Standard</b>	means the <i>Employer's</i> Asbestos Standard 32-303: Requirements for Safe Processing, Handling, Storing, Disposal and Phase-out of Asbestos and Asbestos Containing Material, Equipment and Articles.
<b>SANAS</b>	means the South African National Accreditation System.
<b>TWA</b>	means the average exposure, within a given workplace, to airborne asbestos fibres, normalised to the baseline of a 4 hour continuous period, also applicable to short term exposures, i.e. 10-minute TWA.

- Z15.1 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.
- Z15.2 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 Z15.1. Control measures conform to the requirements stipulated in the AAIA-approved asbestos work plan.
- Z15.3 The *Employer* manages asbestos and ACM according to the Standard.
- Z15.4 In the event that any asbestos is identified while Providing the Services, a risk assessment is conducted and if so required, with reference to possible exposure to an airborne concentration of above the AL for asbestos, immediate control measures are implemented and relevant air monitoring conducted in order to declare the area safe.
- Z15.5 The *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.
- Z15.6 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.
- Z15.7 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.

**Provision for Supply and Install; Repair and Servicing of HVAC Systems within the Various Substations and Commercial Buildings within Southern Grid on an As and When Required Basis for a Period of 3 years.**

**Article III.**

**Article IV.**

**Article V.**

**Article VI.**

**Article VII.**

**Provision for Supply and Install; Repair and Servicing of HVAC Systems within the Various Substations and Commercial Buildings within Southern Grid on an As and When Required Basis for a Period of 3 years.**

**Article VIII. Annexure A: One-in-ten-year-return *weather data* obtained from SA Weather Bureau for [weather station]**

If any one of these *weather measurements* recorded within a calendar month, before the Completion Date for the whole of the *works* and at the place stated in this Contract Data is shown to be more adverse than the amount stated below then the *Contractor* may notify a compensation event.

	<i>Weather measurement</i>				
Month	Cumulative rainfall (mm)	Number of days with rain more than 10mm	Number of days with min air temp < 0 deg.C	Number of days with snow lying at 08:00 CAT	[Other measurements if applicable]
January	[•]	[•]	[•]	[•]	
February	[•]	[•]	[•]	[•]	
March	[•]	[•]	[•]	[•]	
April	[•]	[•]	[•]	[•]	
May	[•]	[•]	[•]	[•]	
June	[•]	[•]	[•]	[•]	
July	[•]	[•]	[•]	[•]	
August	[•]	[•]	[•]	[•]	
September	[•]	[•]	[•]	[•]	
October	[•]	[•]	[•]	[•]	
November	[•]	[•]	[•]	[•]	
December	[•]	[•]	[•]	[•]	

Only the difference between the more adverse recorded weather and the equivalent measurement given above is taken into account in assessing a compensation event.

**Provision for Supply and Install; Repair and Servicing of HVAC Systems within the Various Substations and Commercial Buildings within Southern Grid on an As and When Required Basis for a Period of 3 years.**

## C1.2 Contract Data

### Article IX. 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. If not required select and delete the whole row, otherwise insert the required Data.]

#### Notes to a tendering contractor:

1. Please read both the NEC3 Engineering and Construction Contract (April 2013) and the relevant parts of its Guidance Notes (ECC3-GN)<sup>2</sup> in order to understand the implications of this Data which the tenderer is required to complete. An example of the completed Data is provided on pages 156 to 158 of the ECC3 (April 2013) Guidance Notes.
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.

Section 9.02 Statement clause	Section 9.02 Statement	Section 9.03 Data
10.1	The <i>Contractor</i> is (Name):  Address  Tel No.  Fax No.	
11.2(8)	The <i>direct fee percentage</i> is  The <i>subcontracted fee percentage</i> is	%  %
11.2(18)	The <i>working areas</i> are the Site and	
24.1	The <i>Contractor's</i> key persons are:  1 Name:  Job:  Responsibilities:  Qualifications:  Experience:  2 Name:  Job  Responsibilities:  Qualifications:	

<sup>2</sup> Available from Engineering Contract Strategies Tel 011 803 3008, Fax 011 803 3009 or see [www.ecs.co.za](http://www.ecs.co.za)

**Provision for Supply and Install; Repair and Servicing of HVAC Systems within the Various Substations and Commercial Buildings within Southern Grid on an As and When Required Basis for a Period of 3 years.**

	Experience:	CV's (and further key persons data including CVs) are appended to Tender Schedule entitled .		
<b>B</b>	<b>Priced contract with bill of quantities</b>			
11.2(21)	The <i>bill of quantities</i> is in	<b>(in figures)</b>  <b>(in words), excluding VAT</b>		
11.2(31)	The tendered total of the Prices is			
	<b>Section 9.04 Data for Schedules of Cost Components</b>	<i>Note "SCC" means Schedule of Cost Components starting on page 60, and "SSCC" means Shorter Schedule of Cost Components starting on page 63 of ECC3 (April 2013).</i>		
<b>B</b>	<b>Priced contract with bill of quantities</b>	<b>Data for the Shorter Schedule of Cost Components</b>		
41 in SSCC	The percentage for people overheads is:	<b>5% (Only applicable for compensation events)</b>		
21 in SSCC	The published list of Equipment is the last edition of the list published by  The percentage for adjustment for Equipment in the published list is	<b>2% (Only applicable for compensation events)</b>		
22 in SSCC	The rates of other Equipment are:  <b><u>Not Applicable</u></b>	<b><u>Not Applicable</u></b>		
61 in SSCC	The hourly rates for Defined Cost of design outside the Working Areas are  <b>Note: Hourly rates are estimated 'cost to company of the employee' and not selling rates.</b>  Please insert another schedule if foreign resources may also be used  <b><u>NOT APPLICABLE</u></b>	<b><u>Not Applicable</u></b>		
61 in SCC & SSCC	The hourly rates for Defined Cost of design outside the Working Areas are  <b><u>NOT APPLICABLE</u></b>	<b><u>Not Applicable</u></b>		

PART 2: PRICING DATA

ECC3 Option B

Document reference	Title	No of pages
C2.1	Pricing assumptions: Option B	
C2.2	The <i>bill of quantities</i>	



**Provision for Supply and Install; Repair and Servicing of HVAC Systems within the Various Substations and Commercial Buildings within Southern Grid on an As and When Required Basis for a Period of 3 years.**

## C2.1 Pricing assumptions: Option B

### Article X. How work is priced and assessed for payment

Clause 11 in NEC3 Engineering and Construction Contract (ECC3) Option B states:

<b>Identified and defined terms</b>	11	
	11.2	(21) The Bill of Quantities is the <i>bill of quantities</i> as changed in accordance with this contract to accommodate implemented compensation events and for accepted quotations for acceleration.
		(28) The Price for Work Done to Date is the total of
		<ul style="list-style-type: none"> <li>the quantity of the work which the <i>Contractor</i> has completed for each item in the Bill of Quantities multiplied by the rate and</li> <li>a proportion of each lump sum which is the proportion of the work covered by the item which the <i>Contractor</i> has completed.</li> </ul>
		Completed work is work without Defects which would either delay or be covered by immediately following work.
		(31) The Prices are the lump sums and the amounts obtained by multiplying the rates by the quantities for the items in the Bill of Quantities.

This confirms that Option B is a re-measurement contract and the bill comprises only items measured using quantities and rates or stated as lump sums. Value related items are not used. Time related items are items measured using rates where the rate is a unit of time.

### Article XI. Function of the Bill of Quantities

Clause 55.1 in Option B states, "Information in the Bill of Quantities is not Works Information or Site Information". This confirms that specifications and descriptions of the work or any constraints on how it is to be done are not included in the Bill, but in the Works Information. This is further confirmed by Clause 20.1 which states, "The *Contractor* Provides the Works in accordance with the Works Information". Hence the *Contractor* does **not** Provide the Works in accordance with the Bill of Quantities. The Bill of Quantities is only a pricing document.

### Article XII. Guidance before pricing and measuring

Employers preparing tenders or contract documents, and tendering contractors are advised to consult the sections dealing with the bill of quantities in the NEC3 Engineering and Construction Contract Guidance Notes before preparing the *bill of quantities* or before entering rates and lump sums into the *bill*.

There is no general provision in Option B for payment for materials on Site before incorporation into the *works*. If secondary Option X14 Advanced payment has not been used then the tendering contractor may obtain the same effect by inserting appropriate items in the method related charges where the *method of measurement* allows, or alternatively making allowance in the rates of the *bill of quantities* for the financing of Plant and Materials until they are incorporated in the *works*.

When compensation events arise, the default position is that the Bill of Quantities is not used to calculate the cost effect of the event. Defined Cost and the resulting Fee is used and Defined Cost includes all components of cost which the *Contractor* is likely to incur, including so called P & G items. Rates and lump sums from the Bill of Quantities, or from any other source, may be used instead of Defined Cost and the Fee only if the *Contractor* and *Project Manager* agree. If they are unable to agree, then Defined Cost plus Fee is used.

### Article XIII. Measurement and payment

#### Section 13.01 Symbols

The units of measurement described in the Bill of Quantities are metric units abbreviated as follows:

**Provision for Supply and Install; Repair and Servicing of HVAC Systems within the Various Substations and Commercial Buildings within Southern Grid on an As and When Required Basis for a Period of 3 years.**

Abbreviation	Unit
%	percent
h	hour
ha	hectare
kg	kilogram
kl	kilolitre
km	kilometre
km-pass	kilometre-pass
kPa	kilopascal
kW	kilowatt
l	litre
m	metre
mm	millimetre
m <sup>2</sup>	square metre
m <sup>2</sup> -pass	square metre pass
m <sup>3</sup>	cubic metre
m <sup>3</sup> -km	cubic metre-kilometre
MN	meganewton
MN.m	meganewton-metre
MPa	megapascal
No.	number
sum	Lump sum
t	tonne (1000kg)

## Section 13.02 General assumptions

- (a) Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance has been made in the quantities for waste.
- (b) The Prices and rates stated for each item in the Bill of Quantities shall be treated as being fully inclusive of all work, risks, liabilities, obligations, overheads, profit and everything necessary as incurred or required by the *Contractor* in carrying out or providing that item.
- (c) An item against which no Price is entered will be treated as covered by other Prices or rates in the *bill of quantities*.
- (d) The quantities contained in the Bill of Quantities may not be final and do not necessarily represent the actual amount of work to be done. The quantities of work assessed and certified for payment by the *Project Manager* at each assessment date will be used for determining payments due.
- (e) The short descriptions of the items of payment given in the *bill of quantities* are only for the purposes of identifying the items. Detail regarding the extent of the work entailed under each item is provided in the Works Information.

## Section 13.03 Departures from the *method of measurement*

- (a)

## Section 13.04 Amplification of or assumptions about measurement items

The following is provided to assist in the interpretation of descriptions given in the *method of measurement*. In the event of any ambiguity or inconsistency between the statements in the *method of measurement* and this section, the interpretation given in this section shall be used.

**Provision for Supply and Install; Repair and Servicing of HVAC Systems within the Various Substations and Commercial Buildings within Southern Grid on an As and When Required Basis for a Period of 3 years.**

**(a)**

# C2.2 the *bill of quantities*

Note: All quantities are provisional and the final quantities will be re-measured on site upon completion

<b>Document reference</b>	<b>Title</b>	<b>No of pages</b>
	This cover page	1
C3.1	<i>Employer's Works Information</i>	
C3.2	<i>Contractor's Works Information</i>	
	Total number of pages	

## C3.1: EMPLOYER'S WORKS INFORMATION

### Contents

When the document is complete, insert a 'Table of Contents'. To do this go to: Insert, → Reference, → Index and tables → Table of Contents. Three levels and the title (but not the subtitle) may be shown if the formats used in this template are retained.

Part 3: Scope of Work	2
C3.1: Employer's works Information	3
1 Description of the works	5
1.1 Executive overview	5
1.2 Employer's objectives and purpose of the works	Error! Bookmark not defined.
1.3 Interpretation and terminology	6
2 Management and start up.	9
2.1 Management meetings	9
2.2 Documentation control	10
2.3 Health and safety risk management	10
2.4 Environmental constraints and management	12
2.5 Quality assurance requirements	13
2.6 Programming constraints	13
2.7 Contractor's management, supervision and key people	14
2.8 Invoicing and payment	14
2.9 Insurance provided by the Employer	15
2.10 Contract change management	Error! Bookmark not defined.
2.11 Provision of bonds and guarantees	15
2.12 Records of Defined Cost, payments & assessments of compensation events to be kept by the Contractor	16
2.13 Training workshops and technology transfer	16
3 Engineering and the Contractor's design	17
3.1 Employer's design	17
3.2 Parts of the works which the Contractor is to design	17
3.3 Procedure for submission and acceptance of Contractor's design	17
3.4 Other requirements of the Contractor's design	17
3.5 Use of Contractor's design	17
3.6 Design of Equipment	17
3.7 Equipment required to be included in the works	17
3.8 As-built drawings, operating manuals and maintenance schedules	17
4 Procurement	18
4.1 People	18
4.1.1 Minimum requirements of people employed on the Site	Error! Bookmark not defined.
4.1.2 BBEE and preferencing scheme	Error! Bookmark not defined.
4.1.3 Accelerated Shared Growth Initiative – South Africa (ASGI-SA)	Error! Bookmark not defined.
4.2 Subcontracting	18
4.2.1 Preferred subcontractors	Error! Bookmark not defined.
4.2.2 Subcontract documentation, and assessment of subcontract tenders	Error! Bookmark not defined.
4.2.3 Limitations on subcontracting	Error! Bookmark not defined.
4.2.4 Attendance on subcontractors	Error! Bookmark not defined.
4.3 Plant and Materials	Error! Bookmark not defined.
4.3.1 Quality	Error! Bookmark not defined.
4.3.2 Plant & Materials provided "free issue" by the Employer	Error! Bookmark not defined.
4.3.3 Contractor's procurement of Plant and Materials	Error! Bookmark not defined.
4.3.4 Spares and consumables	Error! Bookmark not defined.
4.4 Tests and inspections before delivery	Error! Bookmark not defined.

4.5	Marking Plant and Materials outside the Working Areas.....	19
4.6	<i>Contractor's</i> Equipment (including temporary works).....	19
4.7	Cataloguing requirements.....	19
5	Construction 20	
5.1	Temporary works, Site services & construction constraints .....	20
5.1.1	<i>Employer's</i> Site entry and security control, permits, and Site regulations 20	
5.1.2	Restrictions to access on Site, roads, walkways and barricades 20	
5.1.3	People restrictions on Site; hours of work, conduct and records 20	
5.1.4	Health and safety facilities on Site 20	
5.1.5	Environmental controls, fauna & flora, dealing with objects of historical interest 20	
5.1.6	Title to materials from demolition and excavation 20	
5.1.7	Cooperating with and obtaining acceptance of Others 20	
5.1.8	Publicity and progress photographs 21	
5.1.9	<i>Contractor's</i> Equipment 21	
5.1.10	Equipment provided by the <i>Employer</i> 21	
5.1.11	Site services and facilities 21	
5.1.12	Facilities provided by the <i>Contractor</i> 21	
5.1.13	Existing premises, inspection of adjoining properties and checking work of Others 21	
5.1.14	Survey control and setting out of the <i>works</i> 21	
5.1.15	Excavations and associated water control 21	
5.1.16	Underground services, other existing services, cable and pipe trenches and covers 21	
5.1.17	Control of noise, dust, water and waste 21	
5.1.18	Sequences of construction or installation 21	
5.1.19	Giving notice of work to be covered up 21	
5.1.20	Hook ups to existing works 21	
5.2	Completion, testing, commissioning and correction of Defects .....	22
5.2.1	Work to be done by the Completion Date 22	
5.2.2	Use of the <i>works</i> before Completion has been certified 22	
5.2.3	Materials facilities and samples for tests and inspections 22	
5.2.4	Commissioning 22	
5.2.5	Start-up procedures required to put the <i>works</i> into operation 22	
5.2.6	Take over procedures 22	
5.2.7	Access given by the <i>Employer</i> for correction of Defects 22	
5.2.8	Performance tests after Completion 22	
5.2.9	Training and technology transfer 23	
5.2.10	Operational maintenance after Completion 23	
6	Plant and Materials standards and workmanship 24	
6.1	Investigation, survey and Site clearance .....	24
6.2	Building works.....	24
6.3	Civil engineering and structural works.....	24
6.4	Electrical & mechanical engineering works .....	24
6.5	Process control and IT works .....	24
6.6	Other [as required].....	24
7	List of drawings 26	
7.1	Drawings issued by the <i>Employer</i> .....	26
C3.2	<i>Contractor's</i> Works Information 27	

## 1. Description of the works

### 1.1 Executive overview

The purpose of this contract is to appoint a suitable qualified Contractor for the maintenance; repairs, supply and installation of heating, ventilation and air conditioning (HVAC) equipment. The appointed Contractor/s will render a 36months service to NTCSA Southern Grid, Substations and Commercial buildings located in the Eastern Cape and the Free State Province on an as and when required basis.

The Southern Grid currently consists of five (5) Customer Load Network (CLN) namely Welkom, Sasolburg, Bloemfontein, East London and Port Elizabeth. The total number of substations within the grid is 25, and are listed below. Future substations might be added to the grid.

Number	Grid	Province	CLN	Substation name
1	Southern Grid	Free State	Bloemfontein	Harvard
2	Southern Grid	Free State	Bloemfontein	Beta
3	Southern Grid	Free State	Bloemfontein	Merapi
4	Southern Grid	Free State	Bloemfontein	Perseus
5	Southern Grid	Free State	Bloemfontein	Luckhoff
6	Southern Grid	Free State	Bloemfontein	Serumula
7	Southern Grid	Free State	Bloemfontein	Boundary
8	Southern Grid	Free State	Welkom	Everest
9	Southern Grid	Free State	Welkom	Leander
10	Southern Grid	Free State	Welkom	Theseus
11	Southern Grid	Free State	Welkom	Sorata
12	Southern Grid	Free State	Sasolburg	Makalu
13	Southern Grid	Free State	Sasolburg	Scafell
14	Southern Grid	Free State	Sasolburg	Mercury
15	Southern Grid	Free State	Sasolburg	Lethabo
16	Southern Grid	Eastern Cape	East London	Buffalo
17	Southern Grid	Eastern Cape	East London	Delphi
18	Southern Grid	Eastern Cape	East London	Neptune
19	Southern Grid	Eastern Cape	East London	Pembroke
20	Southern Grid	Eastern Cape	East London	Vuyani
21	Southern Grid	Eastern Cape	East London	Port Rex HV Yard
22	Southern Grid	Eastern Cape	Port Elizabeth	Dedisa
23	Southern Grid	Eastern Cape	Port Elizabeth	Grassridge
24	Southern Grid	Eastern Cape	Port Elizabeth	Poseidon
25	Southern Grid	Eastern Cape	Port Elizabeth	Iziko



The scope will include and is not limited to the following:

- Minor service
- Major service
- Air filters
- Periodical Checks
- Fault Finding and repairs
- Supply and install

All required material, equipment, labour, transportation and PPE will be supplied by the contractor.

No free issue material to be issued by NTCSA.

## 1.2 Employer's objectives and purpose of the works

The purpose of this contract is to appoint a suitable qualified Contractor for the maintenance; repairs, supply and installation of heating, ventilation and air conditioning (HVAC) equipment. The appointed Contractor/s will render a 36months service to NTCSA Southern Grid, Substations and Commercial buildings located in the Eastern Cape and the Free State Province on an as and when required basis.

## Employer's requirements for the service

Maintenance is to be executed as per maintenance standard TOPAC 001 and/or TOPAC 004.  
Installation of HVAC equipment is to be executed as per HVAC installation standard TOPAC-002.

Distance travelled to each substation is to be calculated in km starting from the base office as stated below:

- Port Elizabeth CLN – Mutual Place, Cnr Cape Road and Langenhoven Drive, Greenacres, PE
- East London CLN – Palm Square Business Park, Bonza Bay Road, Beacon Bay, East London
- Bloemfontein CLN – Havard Substation, Koppie Street, Bloemfontein
- Sasolburg CLN – Makalu Substation, Sasolburg
- Welkom CLN – Leander Substation, 1 Bleinheim Ave, Riebeeckstad, Welkom

## 1.4 Interpretation and terminology

The following abbreviations are used in this Works Information:

Abbreviation	Meaning given to the abbreviation
AFC	Approved for construction
SEA	Senior Engineering Assistant
EA	Engineering Assistant
MWP	Megawatt Park
QS	Quantity Surveyor
PM	Project Manager
SS	Site Supervisor
AME	Asset Management Execution
P/CSS	Project/Construction Site Supervisor (AME)
RP	Responsible Person (As authorized by Eskom in ORHVS)
EMP	Environmental Management Plan

ORHVS	Operating Regulations for High Voltage Systems
GIS	Gas Insulated Switchgear
SOW	Scope of Work
DL	Design Leader
LES	Lines Engineering Services
OHL	Overhead Line
OHS	Occupational Health and Safety
SHEQS	Safety, Health, Environment, Quality and Security
CLN	Customer Load Network
BOM	Bill of Material
TPD	Transmission Project Delivery
Tx	Transmission
BOQ	Bill of Quantity
NTCSA	National Transmission Company South Africa
OBL	Outside battery limits

### Acknowledgement by *Contractor*

I/WE, ..... DO HEREBY ACKNOWLEDGE HAVING READ AND UNDERSTOOD THE ABOVE ANNEXED DOCUMENTS FROM 1 TO 25 IN SECTION 1.3.2 OF THIS CONTRACT.

I/WE UNDERTAKE TO STUDY AND ABIDE BY THESE REQUIREMENTS AT ALL TIME.









SIGNED AT: ..... ON THE ..... DAY OF .....20.....





**Note:** Please return the above pages with the other tender returnables to the Eskom office that issued this enquiry after complying with the above.

### Acceptance of Eskom SHEQ Policies and Procedures

The attached documents form part of this legal binding contract, the *Contractor* confirms that he has familiarized himself with all the embedded documents from 1 to 25 as indicated

No	UNIQUE IDENTIFIER	REVISION	DOCUMENT TITLE
1	32 - 727	0	SAFETY, HEALTH, ENVIRONMENT AND QUALITY (SHEQ) POLICY 32-727

2	32 - 136	0	CONSTRUCTION SAFETY HEALTH AND ENVIRONMENTAL MANAGEMENT
3	ESKOM LIFE SAVING RULES	1	ESKOM LIFE SAVING RULES 240-62196227
4	CONSTRUCTION REG 3		NOTIFICATION OF CONSTRUCTION WORK TO DEPARTMENT OF LABOUR
5	CONSTRUCTION REG 4 & 5		APPOINTMENT LETTERS FOR CLIENT REPRESENTATIVE, PRINCIPAL CONTRACTOR & CONTRACTOR
6 & 7	OHS ACT	1	WRITTEN AGREEMENT ON OHS ACT SECTION 37(2) & STANDARD CLAUSE
8 & 9	34 - 1063	0	EXPANDED PUBLIC WORKS REPORT 34-1063.  10_34-1063 EPWP Works Instruction.pdf  11_EPWP Guidelines Second edition 2005.  Eskom EPWP report template rev 7.xlsx
10	<u>DST 34-961</u>	0	LEGAL APPOINTMENTS AND AUTHORIZATIONS  13_Legal Appointments and Au
11	TPC 41-55		TRANSPORTING PERSONS ON BACK OF VEHICLES  14_Transporting of Passengers on the ba
12	LTIR	MASTER	LOST TIME INJURY REPORT  LTIR Master.xls
13	1. Contractor Performance Evaluation	MASTER	 Single Evaluator Template for Contrac
14	2. Supplier Contract Quality Requirements	MASTER	
15	3. Hard Hat Specifications OHS 01/12/	MASTER	 OHS 01 12 Hard Hat Specifications.pdf

16	4. Identifying, Analysing, Documenting and Observing Tasks according to Criticality.	REV 1	 DPC_34-380.pdf
17	5. Health & Safety Representatives inspection reports and guidelines	REV 1	 DPC_34-228Health_Safety_REp.pdf
18	6. Work at Heights Procedure	REV 1	 32-418 Work at Height Procedure.pdf
19	7. SHE Requirements for the Eskom Commercial Process	REV 1	
20	8. Vehicle Safety	REV 0	
21	9. 32-95 Environmental Occupational Health and Safety Incident Management Procedure	REV 5	
22	10. Risk Audit System Template	REV 0	 Audit Input Form Contractor RM 29 Sep

## 2. Management and start up.

### 2.1 Management meetings

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

Title and purpose	Approximate time interval	Location	Attendance by:
Risk register and compensation events	Weekly on Mondays	On site or On Microsoft Teams	PM, LES, Contractor, NTCSA SS, RP, SHEQ Department All Workers involved in the work
Overall contract feedback	After completion	On site or On Microsoft Teams	PM, Contractor, SS & QS.
Kick off Meeting	1 week after contract is	On site or On Microsoft	PM, LES, Contractor,

	awarded	teams	<i>NTCSA SS, RP, SHEQ Department All Workers involved in the work</i>
Progress Meeting	Weekly	On site or Microsoft Teams	<i>PM, LES, Contractor, NTCSA SS, RP, SHEQ Department All Workers involved in the work</i>
Compensation Clarification Meeting	Whenever required	On site or Microsoft Teams	<i>PM, Contractor, SS &amp; QS.</i>
Audits (Safety & Environmental)	Periodically as determined by Eskom	Mainly on site	<i>Contractor, SS &amp; PM or Grid personnel</i>
Emergency Meetings	Whenever necessary	On site or Microsoft Teams	<i>Contractor, SS &amp; other concerned parties</i>

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

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

## Documentation control

All Contractual Documents must have relevant Contract Number and Purchase Order Number as reference per the NTCSA Standards. All correspondence shall be dated and sequence numbered and distributed in accordance with a procedure as agreed and accepted by the service manager. The use of SMS, WhatsApp, and Ms Teams do not override the use of applicable and relevant NEC standards templates, forms, and Eskom Holding SOC Limited procedures. All invoices and service delivery notes must be in PDF format

## Health and safety risk management

No work will commence on site before all the Access Permits and the relevant Health and Safety files are in place – according to the Eskom Standard TST41-61, as amended: (Occupational Health and Safety Requirements to be met by Eskom Transmission Employees, Contractors and Sub-Contractors during maintenance and construction work.)

The Contractor are to compile the complete Safety file according to Annexure I – Audit form in the Eskom Standard TST41-61, as amended Document and submit to Transmission Services Risk and Safety Department at Simmerpan, Germiston, Gauteng Province. Contact Person: Mr. Buks De Klerk Tel: 011 871 2419 Fax: 011 871 2219 or Mr Brando Cupido in Bellville Tel: 021-915 9240 Fax 021-915 9264.

Please note that only after approval for the Safety file has been granted by Transmission Services Risk and Safety Department will arrangements for an Inaugural Meeting be made to facilitate the commencement of construction work on site.

The Contractor must have an Eskom Certified and Authorized ORHVS person (Valid as requested by ESKOM) available on site at all times in accordance with Eskom Transmission Standard TST0015 - Training, Assessment and Authorisation of persons for the Operation and Maintenance of the Power System. The contractors Responsible Person has to be interviewed and authorised by the relevant Regional High Voltage Plant Personnel before any work can commence on Site. Copies of the Valid Eskom ORHVS Certificates are to be submitted with the Tender Documents.

The Contractor is responsible for setting out the works as shown on the drawings. Before any excavations are to commence, it will be the responsibility of the Contractor to ascertain from the "Engineering Assistant" the position of any existing services on site. Once these are indicated to the Contractor, they shall be deemed as "known". Any costs incurred for repairs to any "known" services shall be for the Contractor's account.

The Contractor shall establish a refuse control system. All waste is to be collected and disposed of as required by Eskom's Environmental Policies and the Local Authority. All Hazardous waste is to be stored separately and all waste must be disposed of at a registered waste site and certificates confirming the classification and quantity are to be submitted to Eskom. Separate bins must be provided on site for general and hazardous waste and must be clearly marked.

The Contractor shall make his own arrangements for the provision of accommodation for his employees. No accommodation or camping will be allowed on site.

The Contractor shall control his activities and processes in accordance with the Occupational Health & Safety Act No. 85 of 1993, and Eskom's Safety Standard TST41-61, as amended: Occupational Health and Safety Requirements to be met by Eskom Transmission Employees, Contractors and Sub-Contractors during maintenance and construction work. Safety meetings are to be held regularly and copies of the minutes must be maintained and submitted to Eskom at the monthly progress meetings when requested.

The Contractor shall comply with the health and safety requirements contained in Annexure A to this Works Information.

The Contractor shall conform and comply with the following standards and legislation below:

#### Legal and Regulatory Compliance:

##### Local Authority Legislation

- Ngwathe Local Municipality: Fire and Emergency Services By-law
- Chris Hani District Municipality: Community Fire Safety By-law

##### National Legislation

- Basic Conditions Of Employment Act 75 Of 1997
- Compensation For Occupational Injuries And Diseases Act 130 Of 1993
- Employment Equity Act 55 Of 1998
- Labour Relations Act 66 Of 1995
- Fire Brigade Services Act 99 Of 1987
- Occupational Health And Safety Act 85 Of 1993
- Disaster Management Act 57 Of 2002
- Constitution Of The Republic Of South Africa, 1996
- National Key Points Act 102 Of 1980

##### Regulations

- Ohsa: General Administration Regulations 2003

- Ohsa: General Safety Regulations 1986
- Ohsa: Ergonomics Regulations 2019
- Ohsa: Electrical Installation Regulations 2009
- Ohsa: General Machinery Regulations 1983
- Ohsa: Environmental Regulations For Workplaces 1987
- Ohsa: Noise Induced Hearing Loss Regulations
- Ohsa: Electrical Machinery Regulations 2011

Other Relevant Information Legislation

- Health and Safety Plan
- Baseline Risk Assessment
- Valid Letter of Good standing
- OHS Policy

The Contractor shall conform with all standards and procedures for operation at the Eskom' site, e.g., Life Saving Rules, and comply with all applicable legislations on site for the OHSA Act 85 of 1993.

**The five Eskom Life Saving Rules are as follows:**

Rule 1:\*Open, isolated, tests, earth, and bond and/or insulate before touch\*

Rule 2:\*Hook up at height\*

Rule 3:\*Buckle Up\*

Rule 4\*Be Sober\*

Rule 5:\*Ensure that you have a permit to work\*

**Environmental constraints and management**

The Contractor shall control his activities and processes in accordance with Eskom's Environmental Policies: TST41-120 and conform to all applicable Legislation(s), EPC32-727 and Environmental Management Plan, Eskom SHEQ Policy 32-726 (Eskom commercial procedure). The EMP will provide the Aspects and Impacts that will require Management and must be followed strictly during the construction of the Civil Works on various servitude access roads. The contractor shall prepare a separate mitigation plan for all environmental concerns raised through the EMP and in any other relevant forum.

Environmental meetings between Eskom and the Contractor may be held regularly and copies of the minutes may be submitted to Eskom on request. The contractor is to provide monthly Environmental Reports and to send a Flash Report for any Environmental Incidences that has occurred on site as soon as possible or within 24 hours to the SS and PM clearly stating any Impact to the Environment.

The Contractor shall conform and comply with the following standards and legislation below:

- Issued Health and Safety and Environment Specification
- National Environmental Management Act 107 of 1998.
- National Environmental Management Waste Act 59 of 2008.
- Environmental Incident Management Procedure 240-133087117
- Waste Management Standard 32-245
- 32-727 SHEQ Policy
- ISO 14001: Environmental Management System
- The Contractor to clean up hazardous material spillages (battery spillages and oil spillages)

The Contractor shall conform with all standards and procedures for operation at the Eskom' site and comply with all applicable legislation on site for the NEMA and NEMWA.

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

### **Quality assurance requirements**

The Contractor shall Comply to the Eskom supplier quality management specification 240-105655800 (QM 58), Clause 5 Post Contract Award and Clause 6 Standard conditions.

The Notification period for Eskom attendance to Witness & Hold Points is 48 hours. The Witness & Hold Points must be Clearly Indicated in the Work Programme submitted at the commencement of the work or after every progress or review meeting. The Site Supervisor will be responsible for the verification and signature of the Quality Inspection and Test Plans (ITPs) which must be maintained by the Contractor and presented for signing promptly and regularly

The Contractor shall conform with the following standards and documents below:

- Quality Management Specification
- ISO 9001 Quality Management Systems – Requirements
- 32-727: Safety, Health, Environment, and Quality (SHEQ) Policy
- 240-12248652 Supplier Quality Management: List of Tender Returnables

### **Programming constraints**

A high level Construction Program indicating the various durations of the Scope of Work is to be submitted by the Contractor with the Tender Documents.

A detailed program with the relevant Completion date will be discussed with the Contractor and Approved by Eskom at the kick off meeting. The Contractor shall submit a comprehensive and fully detailed program within 2 weeks before the Starting date. The programme shall be discussed with the contractor. The program shall be revised weekly and submitted to the PM for approval. If changes take place which affect the Completion date then a revised program must be submitted within 2 days. The Employer's key and Milestone dates shall be indicated. Note: Only MS Project format will be accepted.

The following dates shall be clearly reflected on the programme:

Site inaugural date, starting and completion date for all activities as well as relevant key dates for hold or witness points. All relevant significant activities shall be shown in order to monitor the progress on site. The programme shall also reflect a 2-weekly period for inspection and corrections of Defects before the Completion date.

Updated programmes must be available at all site meetings reflecting progress to date

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

The Contractor is required to hire experienced supervisor with a proven track record in specialized Soil Erosion Rehabilitation environments. Prior to deployment on-site to oversee activities, the qualifications,

training records, and curriculum vitae of the supervisor must be submitted to the project Manager for approval. Specialized training is a prerequisite for the supervisory position.



The Contractor must always maintain daily attendance registers and make them available to the Projects Manager upon request.

The Contractor shall have an organisation chart on file clearly indicating all key personnel, such as RP, Health and safety & Environmental reps, Site Foreman etc.

All key personnel must be appointed in writing and all appointments must be site specific, valid and kept on the site file at all times

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

The *Contractor* is to submit an organogram showing all key people involved in the contract 7 days after contract award. All key personnel must be appointed in writing, must be current for the specific site and area of work and must be kept on file. This would be essential if the *Contractor* is a Joint Venture.

### **Invoicing and payment**

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

Within one week of receiving a payment certificate from the *Project 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 *Project Manager's* payment certificate.

The *Contractor* shall address the tax invoice to NTCSA SOC Ltd and include on each invoice the following information:

- Name and address of the *Contractor* and the *Project Manager*;
- The contract number and title;
- *Contractor's* VAT registration number;
- The *Employer's* VAT registration number 4710303126;
- 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)

### **Invoices and Additional Information**

- Eskom order number must be clearly indicated on the invoice with the line number on the order for billing.
- Only PDF invoices must be submitted.
- Each PDF file should contain one invoice, one debit, and credit note only as Eskom's SAP system does not support more than one PDF being linked into workflow at a time.
- Only one PDF file per email (one invoice or debit note or credit note).
- Send all invoices in PDF straight from your system to an Eskom email address (see the email address below).
- When it comes to foreign invoices, suppliers will be required to physical deliver the hard copies of original documents to the respective documentation management centers – though invoices emailed. Eskom is still seeking clarity from the South African Reserve Bank for foreign invoices and currency. Current requirements are that these manual invoices should be submitted. Invoice copy can be sent to the email address indicated below.
- All submitted invoices electronically must comply with the Tax Requirements.
- If there is a Cost Price Adjustment on the invoice, Eskom recommends separate invoice for CPA to avoid delays on payment, if there are issues for the CPA.

- Introduction of electronic invoicing does not guarantee payment but will ensure visibility of all invoices and ensure that no invoices get lost. If the goods receipt is not done, the invoice will be parked, and the system will automatically send an email to the end user to do good receipt. This is also tracked by Eskom through the park invoice report.
- The Contractor can request a park invoice report from the Finance Shared Services (FSS) contact centre which can then be followed up and corrected.
- The Contractor is welcome to forward the details of invoices corrected to the FSS contact centre.
- All invoices for payment must be submitted to [invoiceseskomlocal@eskom.co.za](mailto:invoiceseskomlocal@eskom.co.za)

#### **Follow-up with Finance Shared Services (FSS):**

- All queries and follow-up on invoice payments should be made by contacting the FSS Contact Centre at +27 11 800 5060 or email [fss@eskom.co.za](mailto:fss@eskom.co.za)

Introducing electronic invoicing does not guarantee payment, but will ensure visibility of all invoices as well as ensure that no invoices are lost. If the Goods Receipt (GR) is **not** done, the invoice will be parked and the system will automatically send an email to the end user to do the GR. This is also tracked by Eskom through the parked invoice report

#### **2.6.1 Payment Item Descriptions**

The descriptions given for the payment items in the Price List, indicate the work to be allowed for in the tendered rates and prices for such payment items, and are for the guidance of the *Contractor* and do not necessarily repeat all the details of work and materials required by and described in the Service Information.

#### **2.6.2 Prices to be Inclusive**

The *Contractor* shall accept the payment provided in the Contract and represented by the rates and prices tendered by him in the Price List, as payment in full for executing and completing the work as specified.

Where the *Contractor* has priced an item as "nil" or "0-00" it will be deemed that no charges are or will be incurred against such an item. In the event of no price having been entered against any item, the tendered rate, price or sum will be taken as "nil" or "0"

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

Refer to Core Clause 87.1 and to Z12 in Data by Employer document

#### **Contract change management**

- Changes to the contract will be notified and addressed as per the NEC3 – ECC3 and as per Eskom's internal Governance Processes for approval. Modifications to work/service can only resume once Eskom approval is obtained and as instructed by the Eskom Representative (Project Manager).
- Templates in terms of NEC3 as prepared by the Service Manager for payment certificates, early warnings and defect notifications can only be used in this Contract.
- The Contractor shall request this form from the Service Manager.

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

Annual Contractors All Risks Insurance Policy ESK2019/20 ACAR

#### **Provision of bonds and guarantees**

Not Applicable

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

As a control measure, it is required for the Contractor to maintain record keeping of all defined cost items for the purpose of compensation event management. A schedule of these cost components may not be listed in the contract price list should be provided when required.

**Training workshops and technology transfer**

Not applicable

## **Article XIV. Engineering and the *Contractor's* design**

All Construction will be done in Accordance with Eskom's Policies, Standards. No Deviation from any Design or Drawing will be accepted, unless requested through the PM and approved in writing by the Responsible Eskom Designer.

All drawings used must be as per the Drawing Register and Statement of Works.

### ***Employer's* design**

Not Applicable.

Contractor to draft Scope of work and designs and they shall be approved by NTCSA Design Engineer

### **Parts of the *works* which the *Contractor* is to design**

Contractor to draft Scope of work and designs and they shall be approved by NTCSA Design Engineer

### **Procedure for submission and acceptance of *Contractor's* design**

Before commencing with the work, contractor shall provide detailed site specifics cope of work and detailed safe working procedure to be approved by NTCSA Design Engineer

### **Other requirements of the *Contractor's* design**

Not Applicable

### **Use of *Contractor's* design**

Not Applicable

### **Design of Equipment**

Not Applicable

### **Equipment required to be included in the *works***

Not Applicable

### **As-built drawings, operating manuals and maintenance schedules**

As-built drawings will need to be provided by the contractor within two weeks after the work is completed

## **Article XV. Procurement**

All people employed by the *Contractor* to perform supervision of installation and commissioning should have Police Clearance before work can commence. The *Contractor's* employees shall be sober when carrying out their duties and may be subjected to random breathalyser tests.

### **People**

#### **Special Conditions of Contract (Application of other criteria in terms of Section 2(1)(f) of PPPFA)**

**The objective criteria as follow:**

- Transformation of this sector by the appointment of a Black Owned Firm(s) that meet the functionality requirements;
- Development of Black Owned steel fabrication companies;
- Appointment of companies located within the Republic of South Africa

#### **(a) Supplier Development and Localisation**

An SD&L Compliance Matrix for the development of skills and/or the promotion of localised content applicable to the scope of work shall be provided at tender stage. Regular reporting on a monthly basis must be done and handed to the project manager to report on progress of compliance to the targets agreed upon at contract stage. This report must be handed over to the Project Manager on a monthly basis when submitting the assessment claim for payment

#### **(b)**

#### **Expanded Public Work Programme (EPWP)**

- The *Contractor* must report all local/temporary labourers employed in a project
  - The *Contractor* MUST submit a report on a monthly basis
  - The *Contractor* must NOT wait until the end of a project in order to submit reports
  - The *contractor* must submit the REV 7 report together with the assessment claim for payment.
  - The *contractor* is responsible for assisting ESKOM in reporting all work done.
  - Eskom's report feeds back to Parliament and non-reporting of *contractors* affects this report.
  - No payment will be certified without the required report being submitted.
  - **Lost Time Injury Report (LTIR)**
    - The *Contractor* must submit this report monthly with each payment assessment claim
- No payment will be certified unless this report is submitted

### **Subcontracting**

#### **Preferred subcontractors**

The *Contractor* to submit the names of each proposed subcontractor to the *Employer* for acceptance. The *Contractor* does not appoint a subcontractor until the *Employer* has accepted such subcontractor.

- **Subcontract documentation, and assessment of subcontract tenders**

The *Contractor* to indicate the proposed subcontractors together with their BBBEE statuses, and the sources of assets, goods or services when local content and production criteria are applicable. The proposed target will form part of the contractual obligation. The NEC system is compulsory for all subcontract documentation.

- **Limitations on subcontracting**

The *Contractor* is not allowed to sub-contract more than 25% of the contract to another enterprise/supplier that does not have equal or higher BBBEE status, unless the intended subcontractor is an EME that has the capability and ability to execute the sub-contract, in order to claim the points for BBBEE.

- **Attendance on subcontractors**

The *Contractor* is responsible for performing on the provided scope of work as if he had not subcontracted. The appointed *Contractor* will also be liable to the *Subcontractors'* employees, as he legally and liable to this contract.

- **Plant and Materials**

- **Quality**

The *Contractor* shall control his activities and processes in accordance with Eskom's Quality Requirements for Procurement of Assets, Goods & Services, QM-58 and ISO-9001.

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

The *Employer* requires warranties from the *Contractor* to be in favour of the *Employer* and not just to the *Contractor* during the life of the contract.

- **Tests and inspections before delivery**

The contractor is required to confirm, that for contractor supplied material, at the time of purchase, materials comply to Eskom specifications and that the relevant test certification is available for inspection and verification.

### **Marking Plant and Materials outside the Working Areas**

NOT APPLICABLE

### **Contractor's Equipment (including temporary works).**

NOT APPLICABLE

### **Cataloguing requirements by the Contractor**

NOT APPLICABLE

## Construction

### Temporary works, Site services & construction constraints

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

Most of the Site within the Southern Grid Overhead lines are farms. The appointed contractor shall have an Authorised Site supervisor interms of ORHVS who may receive relevant keys to servitudes. The appointed contractor shall get consent form from relevant land owner before commencing with the work

#### **Restrictions to access on Site, roads, walkways and barricades**

Not Applicable.

#### **People restrictions on Site; hours of work, conduct and records**

Restrictions and hours of work may apply on some Sites. It is very important that the *Contractor* keeps records of his people on Site, including those of his Subcontractors which the *Project Manager* or *Supervisor* have access to at any time. These records may be needed when assessing compensation events

#### **Health and safety facilities on Site**

Section 0 deals with contractual H & S requirements in addition to those of the OHSA Act. This section allows the *Employer* to state what measures are to be taken on Site against disease and epidemics and in emergencies. Also describe where First Aid facilities provided by the *Employer* are located and any other emergency arrangements. Do not use if already addressed in 2.3. The cross reference from Clause 27.4 applies

#### **Environmental controls, fauna & flora, dealing with objects of historical interest**

This sub-paragraph may not be required if these matters are dealt with in the general environmental requirements referred to in paragraph 2.4 above.

#### **Title to materials from demolition and excavation**

Clause 73.2 states that the *Contractor* has title to materials from excavation and demolition (e. g. copper) only as stated in the Works Information. Hence state here any special arrangements regarding such title. If nothing is stated then the default position is the *Contractor* has no such title.

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

Appointed contractor shall be cooperative with requirements from land owners and acquire land owner consent before accessing and conducting work on the servitudes. A consent form to be signed as proof thereof.

### **Publicity and progress photographs**

Appointed contractor may be required to provide photographs for progress of work on site

### **Contractor's Equipment**

Appointed contractor to have stickers on vehicles highlighting that they are NTCSA contractors

### **Equipment provided by the Employer**

*NOT APPLICABLE*

### **Site services and facilities**

*NOT APPLICABLE*

### **Facilities provided by the Contractor**

Contractor shall have their own 4x4 transport for site as some servitudes are rock and mountainous, Fire Extinguishers, Toilet facilities, PPE, Waste Bins etc as per SHEQ requirements and Environmental Requirements

### **Existing premises, inspection of adjoining properties and checking work of Others**

Not Applicable

### **Survey control and setting out of the works**

Not Applicable

### **Excavations and associated water control**

Any Excavations shall comply with TRMSCAAC and relevant SANS standards

### **Underground services, other existing services, cable and pipe trenches and covers**

When excavating, contractor to be conversant with any underground services (i.e. pipes, cables etc). Safe work procedure to be drafted and sent to NTCSA Design Engineer for approval.

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

State requirements, if any.

### **Sequences of construction or installation**

Not Applicable

### **Giving notice of work to be covered up**

Not Applicable

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

Not Applicable



## Completion, testing, commissioning and correction of Defects

### Work to be done by the Completion Date

**This is mandatory.** Core clause 11.2(2) defines Completion as when the *Contractor* has done all the work which the Works Information states he is to do by the Completion Date. Rather than list all work to be done by the Completion Date, state that all work is to be done by the Completion Date except for [●]. For example:

On or before the Completion Date the *Contractor* shall have done everything required to Provide the Works except for the work listed below which may be done after the Completion Date but in any case before the dates stated. The *Project Manager* cannot certify Completion until all the work except that listed below has been done and is also free of Defects which would have, in his opinion, prevented the *Employer* from using the *works* and Others from doing their work.

	Item of work	To be completed by
	As built drawings of	Within        days after Completion
	Performance testing of the <i>works</i> in use as specified in paragraph        of this Works Information.	See performance testing requirements.

### Use of the *works* before Completion has been certified

NOT APPLICABLE

### Materials facilities and samples for tests and inspections

NOT APPLICABLE

### Commissioning

NOT APPLICABLE

### Start-up procedures required to put the *works* into operation

NOT APPLICABLE

### Take over procedures

Take over is after or at the same time as Completion. The *Employer* may require the *Contractor* to provide assistance, security personnel on a temporary basis etc.

### Access given by the *Employer* for correction of Defects

Clause 43.4 requires that the *Project Manager* arranges for the *Employer* to allow the *Contractor* access to and use of a part of the *works* which has been taken over if needed to correct a Defect. After the *works* have been put into operation, the *Employer* may require the *Contractor* to undertake certain procedures before such access can be granted (for example barricading a motorway or in a nuclear power station). Include these here.

### Performance tests after Completion

NOT APPLICABLE

**Training and technology transfer**

NOT APPLICABLE

**Operational maintenance after Completion**

NOT APPLICABLE

## Article XVI. Plant and Materials standards and workmanship

All work to be done in accordance with an approved site specific Scope of work, which shall be drafted by the appointed contractor and approved by NTCSA design Engineer. Scope of works and all workmanship to take note and comply with TRMSCAAC and relevant SANS standards.

### Investigation, survey and Site clearance

NOT APPLICABLE

### Building works

Reference could be made to the latest Model Trade Preambles published by the Association of South African Quantity Surveyors. However these have been developed for use with the JBCC series of contracts and an approach where description of the work is made part of the bill of quantities, which is not the case in other forms of contract. Only parts of the Model Trade Preambles could be referenced by an ECC contract, with a covering note dealing with the changes in terminology. Further changes are required depending on which parts are to be selected.

This subsection would typically comprise

- a) Particular specifications provided by the *Employer*
- b) List of standardised specifications applicable to the *works* and
- c) Variations to the standardised specifications

### Civil engineering and structural works

Reference could be made to the SANS1200 series of specifications developed and published by South African National Standards. However these are now very out of date and originally developed for use with SAICE general conditions of contract for works of civil engineering which have themselves been superseded twice.

All SANS 1200 specifications are in the process of being updated to make them more compatible with a wider range of contracts, including NEC, and users should check availability of the new SANS 2000 series of specifications.

Sections 3, 4 and 5 of SANS1200A are probably already covered in section 5 of this Works Information.

This subsection would typically comprise

- a) Particular specifications provided by the *Employer*
- b) List of standardised specifications applicable to the *works* and
- c) Variations to the standardised specifications

If use is made of the 1200 series, users should include a covering note dealing with the changes in terminology, such as the one provided below. Further changes are required depending on which specifications in the 1200 series are selected.

### Electrical & mechanical engineering works

Not applicable

### Process control and IT works

Not applicable

### Other [as required]

Not applicable



List of drawings

Drawings issued by the *Employer*

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

Note: Some drawings may contain both Works Information and Site Information.

Drawing number	Revision	Title

## C3.2 *CONTRACTOR'S WORKS INFORMATION*

This section of the Works Information will always be contract specific depending on the nature of the *works*. It is most likely to be required for design and construct contracts where the tendering contractor will have proposed specifications and schedules for items of Plant and Materials and workmanship, which once accepted by the *Employer* prior to award of contract now become obligations of the *Contractor* per core clause 20.1.

Typical sub headings could be

- a) *Contractor's* design
- b) Plant and Materials specifications and schedules
- c) Other

This section could also be compiled as a separate file.

---