



**NEC3 Engineering & Construction Contract**

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

**and**

**(Reg No. \_\_\_\_\_)**

**for Provision of Maintenance and Breakdown to 66kV and  
132kV Feeder and Cable Contract in the Cape Coastal Cluster  
for Three Years (Eastern Cape)**

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**CONTRACT No.**

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## Part C1: Agreements & Contract Data

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[to be inserted from Returnable Documents at award stage]	
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[to be inserted from Returnable Documents at award stage]	

# C1.1 Form of Offer & Acceptance

## Offer

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

### Provision of Maintenance and Breakdown to 66kV and 132kV Feeder and Cable Contract in the Cape Coastal Cluster (Eastern Cape)

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>Rate based Contract</b>
	Value Added Tax @ 15% is	<b>Rate based Contract</b>
	The offered total of the amount due inclusive of VAT is <sup>1</sup>	<b>Rate based Contract</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)

## Acceptance

<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 of Maintenance and Breakdown to 66kV and 132kV Feeder and Cable Contract

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)		
Capacity		
<b>for the Employer</b>	Eskom Holdings SOC Limited	
Name & signature of witness		Date

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

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

Note:

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

No.	Subject	Details
1		
2		
3		
4		
5		
6		
7		

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

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

**For the tenderer:**

**For the Employer**

Signature .....

Name .....

Capacity .....

On behalf of .....

Name & signature of witness .....

Date .....

.....

.....

.....

Eskom Holdings SOC Limited

.....

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## C1.2 ECC3 Contract Data

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

Clause	Statement	Data
1	<b>General</b>	
	The <i>conditions of contract</i> are the core clauses and the clauses for main Option	
	dispute resolution Option and secondary Options	<p><b>B: Priced contract with bill of quantities</b></p> <p><b>W1: Dispute resolution procedure</b></p> <p><b>X1: Price adjustment for inflation</b></p> <p><b>X2 Changes in the law</b></p> <p><b>X5: Sectional Completion</b></p> <p><b>X7: Delay damages</b></p> <p><b>X16: Retention</b></p> <p><b>X18: Limitation of liability</b></p> <p><b>Z: Additional conditions of contract</b></p>
	of the NEC3 Engineering and Construction Contract, April 2013 (ECC3)	
10.1	The <i>Employer</i> is (Name):	<b>Eskom Holdings SOC Ltd (reg no: 2002/015527/30), a state-owned company incorporated in terms of the company laws of the Republic of South Africa</b>
	Address	<b>Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg</b>
10.1	The <i>Project Manager</i> is: (Name)	
	Address	
	Tel	
	Fax	
	e-mail	

10.1	The <i>Supervisor</i> is: (Name)	<b>The supervisor will be the Clerk of Works appointed for a particular project and will be specified in the task order.</b>
	Address	
	Tel No.	
	Fax No.	
	e-mail	
11.2(13)	The <i>works</i> are	<ul style="list-style-type: none"> <li>• <b>Provision of Maintenance and Breakdown to 66kV and 132kV Feeder and Cable Contract in the Cape Coastal Cluster (Eastern Cape)</b></li> </ul>
11.2(14)	The following matters will be included in the Risk Register	<ul style="list-style-type: none"> <li>• <b>LIVE UNDERGROUND CABLES</b></li> <li>• <b>WORK IN LIVE CHAMBERS/RESTRICTED AREAS</b></li> <li>• <b>LIVE OVERHEAD CONDUCTORS/CROSSINGS</b></li> <li>• <b>CLOSE PROXIMITY WORK TO LIVE EQUIPMENT</b></li> <li>• <b>OPERATING OF CRANES/VEHICLE MOUNTED</b></li> <li>• <b>STATIC ELECTRICITY/INDUCTION</b></li> <li>• <b>WORK WITH CHAINSAWS/MECHANICAL CUTTERS</b></li> <li>• <b>MATERIALS HANDLING/ HEAVY EQUIPMENT HANDLING</b></li> <li>• <b>VEHICLE RISKS</b></li> <li>• <b>WORK IN OPEN TRENCHES/EXCAVATIONS</b></li> <li>• <b>BIOLOGICAL/HEALTH RISKS (CAMPS)</b></li> <li>• <b>WEATHER RELATED RISKS (UV, HEAT, COLD, WIND, RAIN, SNOW, ETC.)</b></li> <li>• <b>ENVIRONMENTAL RISKS</b></li> <li>• <b>ERGONOMIC RISKS (BODY POSITION, FATIGUE)</b></li> <li>• <b>WORK ON/DISMANTLING OF RUSTED &amp; ROTTEN POLES AND STRUCTURES</b></li> <li>• <b>FIRE RISKS</b></li> <li>• <b>PUBLIC SAFETY RISKS</b></li> <li>• <b>WORK CLOSE TO PUBLIC ROADS</b></li> <li>• <b>WORKING IN ENVIRONMENTAL SENSITIVE AREA</b></li> <li>• <b>HISTORICAL EVENTS THAT COULD INFLUENCE THE PROJECT,</b></li> <li>• <b>I.E. CURRENT STRUCTURE DESIGNS, AGE OF STRUCTURES TO BE WORKED ON, ETC</b></li> <li>• <b>DEMOGRAPHICS OF THE AREA</b></li> </ul>
11.2(15)	The <i>boundaries of the site</i> are	<b>Provision of Maintenance and Breakdown to 66kV and 132kV Feeder and Cable Contract in the Cape Coastal Cluster (Eastern Cape )</b>

11.2(16)	The Site Information is in	<b>The Site Information will form part of the Task Order to be issued as part of the contract.</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>2 Working Days</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>TBC</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>
		<b>1</b> Any key date and conditions will be specified in the Task Order for any project executed in terms of this contract	
30.1	The <i>access dates</i> are:	<b>Part of the Site</b>	<b>Date</b>
		<b>1</b> Access dates will be specified in the Task Order for any project executed in terms of this contract.	
31.1	The Contractor is to submit a first programme for acceptance within	<b>1 week of the Contract Date.</b>	
31.2	The <i>starting date</i> is	<b>TBC</b>	
32.2	The Contractor submits revised programmes at intervals no longer than	<b>The period between project progress meetings.</b>	

35.1 The *Employer* is not willing to take over the *works* before the Completion Date.

#### 4 Testing and Defects

42.2 The *defects date* is **52 weeks after Completion of the whole of the works.**

43.2 The *defect correction period* is **Within 1 week upon notification of defect**

#### 5 Payment

50.1 The *assessment interval* is **25<sup>th</sup> of every month or as agreed with Employer's representative (per works/purchase order)**

51.1 The *currency of this contract* is the **South African Rand.**

51.2 The period within which payments are made is **14 Days.**

51.4 The *interest rate* is **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**

**(ii) the LIBOR rate applicable at the time for amounts due in other currencies. LIBOR is the 6 month London Interbank Offered Rate quoted under the caption "Money Rates" in The Wall Street Journal for the applicable currency or if no rate is quoted for the currency in question then the rate for United States Dollars, and if no such rate appears in The Wall Street Journal then the rate as quoted by the Reuters Monitor Money Rates Service (or such service as may replace the Reuters Monitor Money Rates Service) on the due date for the payment in question, adjusted *mutatis mutandis* every 6 months thereafter and as certified, in the event of any dispute, by any manager employed in the foreign exchange**

**department of The Standard Bank of South Africa Limited, whose appointment it shall not be necessary to prove.**

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**6 Compensation events**

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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 established 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 established site</b></p> <p><b>The nearest weather station of the South African Weather Service to the 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>
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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>
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<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>
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**8 Risks and insurance**

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80.1	<p>These are additional <i>Employer's</i> risks</p>	<p><b>Inclement weather, Resident Complaints, Theft and vandalism, Material shortage, Political unrest</b></p>
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**9 Termination**

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**10 Data for main Option clause**

**B Priced contract with bill of quantities**

60.6	<p>The <i>method of measurement</i> is</p>
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<b>11</b>		<b>Data for Option W1</b>
W1.1	The <i>Adjudicator</i> is	
W1.2(3)	The <i>Adjudicator nominating body</i> is:	<b>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.</b>
W1.4(2)	The <i>tribunal</i> is:	<b>arbitration.</b>
W1.4(5)	The arbitration procedure is	the latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.
	The place where arbitration is to be held is	Decided within South Africa
	The person or organisation who will choose an arbitrator	The Chairman for the time being or his nominee of the Association of Arbitrators (Southern Africa) or its successor body.
	- if the Parties cannot agree a choice or	
	- if the arbitration procedure does not state who selects an arbitrator, is	
<b>12</b>		<b>Data for secondary Option clauses</b>
<b>X1</b>	<b>Price adjustment for inflation</b>	
X1.1(a)	The <i>base date</i> for indices is	<b>1 month prior to Tender Closing Date</b>
X1.1(c)	The proportions used to calculate the Price Adjustment Factor are:	<b>Contract Price Adjustment (CPA)</b> <b>The panel will be an enabling contract, which will be utilised “as and when” there is a need in the business. The price will be fixed and firm for the first 12 months and thereafter be escalated as follows:</b>  <b>Material rates will be compensated at cost plus 5%, suppliers will be required to submit 3 quotations.</b>  <b>Labour rates 65% in the Pricing Data will be adjusted as per SEIFSA TABLE C3.</b>

		<p><b>Transport rates 20% in the Pricing Data will be adjusted as per SEIFSA TABLE L1. Fixed portion will be 15% in the pricing data.</b></p> <p><b>Contracting party to submit supporting documentation evidencing the CPA calculations made. Under no circumstances is Eskom employees to initiate any CPA claim by providing the contracting party with CPA values and calculations to be verified by the contracting party.</b></p>
<b>X2</b>	<b>Changes in the law</b>	There is no reference to Contract Data in this Option and terms in italics are identified elsewhere in this Contract Data.
<b>X5</b>	<b>Sectional Completion</b>	
X5.1	The <i>completion date</i> for each <i>section</i> of the <i>works</i> is:	The completion date for each section of the work will be specified in the Task Order for any project executed in terms of this contract.
<b>X5 &amp; X7</b>	<b>Sectional Completion and delay damages used together</b>	The delay damage for each section of the work will be specified in the Task Order for any project executed in terms of this contract and will be relevant to the specific project being executed.
X7.1 X5.1	Delay damages for late Completion of the <i>sections</i> of the <i>works</i> are:	5% of the Task Order value per day. Limited to the total value of the Task Order
<b>X16</b>	<b>Retention</b>	
X16.1	The <i>retention free amount</i> is	nil
	The <i>retention percentage</i> is	5% on all task orders 2.5% SDL&I performance retention on all task orders
<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	<b>the amount of the deductibles relevant to the event</b>

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	damage to the <i>Employer's</i> property is limited to:	
X18.3	The <i>Contractor's</i> liability for Defects due to his design which are not listed on the Defects Certificate is limited to	<p><b>The greater of</b></p> <ul style="list-style-type: none"> <li>• the total of the Prices at the Contract Date and</li> <li>• the amounts excluded and unrecoverable from the <i>Employer's</i> 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:	<p><b>the total of the Prices other than for the additional excluded matters.</b></p> <p><b>The <i>Contractor's</i> total liability for the additional excluded matters is not limited.</b></p> <p><b>The additional excluded matters are amounts for which the <i>Contractor</i> is liable under this contract for</b></p> <ul style="list-style-type: none"> <li>• Defects due to his design 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	<p><b>(i) seven years after the <i>defects date</i> for latent Defects and</b></p> <p><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 matter.</b></p> <p><b>A latent Defect is a Defect which would not have been discovered on reasonable inspection by the <i>Employer</i> or the <i>Supervisor</i> before the <i>defects date</i>,</b></p>

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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.

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<b>Z</b>	<b>The <i>Additional conditions of contract</i> are</b>	<b>Z1 to Z15 always apply.</b>
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**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 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.

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 4740101508 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:

**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,

<b>Collusive Action</b>	means where two or more parties co-operate to achieve an unlawful or illegal purpose, including to influence an Affected Party to act unlawfully or illegally,
<b>Committing Party</b>	means, as the context requires, the <i>Contractor</i> , or any member thereof in the case of a joint venture, or its employees, agents, or Subcontractor or the Subcontractor's employees,
<b>Corrupt Action</b>	means the offering, giving, taking, or soliciting, directly or indirectly, of a good or service to unlawfully or illegally influence the actions of an Affected Party,
<b>Fraudulent Action</b>	means any unlawfully or illegally intentional act or omission that misleads, or attempts to mislead, an Affected Party, in order to obtain a financial or other benefit or to avoid an obligation or incurring an obligation,
<b>Obstructive Action</b>	means a Committing Party unlawfully or illegally destroying, falsifying, altering or concealing information or making false statements to materially impede an investigation into allegations of Prohibited Action, and
<b>Prohibited Action</b>	means any one or more of a Coercive Action, Collusive Action Corrupt Action, Fraudulent Action or Obstructive Action.

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.

### 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.

- 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.

**INSURANCE TABLE A**

<b>Insurance against</b>	<b>Minimum amount of cover or minimum limit of indemnity</b>
Loss of or damage to the <i>works</i> , Plant and Materials	The replacement cost where r covered by the <i>Employer's</i> insurance  The <i>Employer's</i> policy deducti as at 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 <i>works</i> , 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 prope</u></b> <b><u>Employer's property</u></b> The replacement cost where r covered by the <i>Employer's</i> insurance  The <i>Employer's</i> policy deducti as at 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**

<b>Insurance against or name of policy</b>	<b>Minimum amount of cover or minimum of indemnity</b>
Assets All Risk	Per the insurance policy document
Contract Works insurance	Per the insurance policy document
Environmental Liability	Per the insurance policy document
General and Public Liability	Per the insurance policy document

Transportation (Marine)	Per the insurance policy document
Motor Fleet and Mobile Plant	Per the insurance policy document
Terrorism	Per the insurance policy document
Cyber Liability	Per the insurance policy document
Nuclear Material Damage and Business Interruption	Per the insurance policy document
Nuclear Material Damage Terrorism	Per the insurance policy document

#### 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:

**AAIA** means approved asbestos inspection authority.

**ACM** means asbestos containing materials.

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

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

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

### **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.

Month	<i>Weather measurement</i>				
	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.

## C1.2 Contract Data

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

#### 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.

Clause	Statement	Data
10.1	The <i>Contractor</i> is (Name): Address Tel No. Fax No.	
11.2(8)	The <i>direct fee percentage</i> is The <i>subcontracted fee percentage</i> is	% %
11.2(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: Experience:	

<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)

		<b>CV's (and further key persons data including CVs) are appended to Tender Schedule entitled .</b>		
11.2(3)	The <i>completion date</i> for the whole of the <i>works</i> is			
11.2(14)	The following matters will be included in the Risk Register			
11.2(19)	The Works Information for the <i>Contractor's</i> design is in:			
31.1	The programme identified in the Contract Data is			
<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>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:	%		
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>Minus</b> %		
22 in SSCC	The rates of other Equipment are:	<b>Equipment</b>	<b>Size or capacity</b>	<b>Rate</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>	<b>Category of employee</b>		<b>Hourly rate</b>

62 in SSCC	The percentage for design overheads is	%
63 in SSCC	The categories of design employees whose travelling expenses to and from the Working Areas are included in Defined Cost are:	

## PART 2: PRICING DATA

### ECC3 Option B

Document reference	Title	No of pages
C2.1	Pricing assumptions: Option B	3
C2.2	The <i>bill of quantities</i>	13

## C2.1 Pricing assumptions: Option B

### 1. 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	<p>(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.</p> <p>(28) The Price for Work Done to Date is the total of</p> <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> <p>Completed work is work without Defects which would either delay or be covered by immediately following work.</p> <p>(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.</p>
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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.

### 2. 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.

### 3. 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.

## 1. Measurement and payment

### 4.1. Symbols

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

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)

### 4.2. General assumptions

- 4.2.1. Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance has been made in the quantities for waste.
- 4.2.2. 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.
- 4.2.3. An item against which no Price is entered will be treated as covered by other Prices or rates in the *bill of quantities*.
- 4.2.4. 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.
- 4.2.5. 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.

### 4.3. Departures from the *method of measurement*

#### 4.4. 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.

## C2.2 the *bill of quantities*

Use this page as a summary page or as a cover page to the *bill of quantities*.

DESCRIPTION	UNIT	QTY	RATE	AMOUNT
Site visits per task order issued	1 Site Visit per Task Order			
HV/MV authorised operator switching per day. (Operating sheets as proof)	Per day			
Buy-outs (Material ) only from accredited suppliers	R			
LDV per km <b>(Include Tracking Records)</b>	km			
Crane Truck per km <b>(Include Tracking Records)</b>	km			
Compressor	Per day			
TLB (Digger loader)	Per day			
Helicopter	Per day			
Rock drilling (1m -1.5m)	per/ metre			
Rock drilling (1.6m -2m)	per/ metre			
Rock drilling (2,1m - 2,5m)	per/ metre			
Rock drilling (2,5m - 3m)	per/ metre			
Health and Safety	R			
Teams	per day			
Lost time per approved and cancelled outage LDV team	per day			
Lost time per approved and cancelled outage truck	per day			
Crush stoning activity: Weeding	per/sq meter			
Crush stoning activity: ground leveling including any type of soil	per/sq meter			
Crush stoning activity: Treat the soil for weeding - apply herbicide	per/sq meter			
Crush stoning activity: Apply crush stone as per the standard	per/sq meter			
Crush stoning activity: Level crush stone after crushstone has been applied.	per/sq meter			
Crush stoning activity: Removing of existing crush stone.	per/sq meter			
Crush stoning activity: Applying of soft soil or Isabhunga and compacting	per/sq meter			
Crush stoning (including any other type of soil)	per/sq meter			
Aircondition replacement/installation labour only (including any alterations)	per/hour			
Major Services - 1 (one) from Monday to Friday between 8 am and 4 pm) Domestic units	Per service			

Provision of Maintenance and Breakdown to 66kV and 132kV Feeder and Cable Contract

Minor Services - 1 (one) for work to be done after normal working hours and Saturdays) Domestic units	Per service			
Package Plants	Per service			
Minor Services - 1 (one) for work to be done on Sundays and public holidays) Domestic units	Per service			
Major Services - 1 ( one ) for work to be done Sundays and public holidays) Domestic units	Per service			
Back to Back Materials: Galvanised 650mm brackets, Grey trunking & Materials. Copper pipes, sleeving, drain pipes) Max 5m pipe runs (For Installation only)				
9000 Btu	Ea			
12000 Btu	Ea			
18000 Btu	Ea			
24000 Btu	Ea			
30000 Btu	Ea			
36000 Btu	Ea			
36000 Btu - 56000 Btu	Ea			
Additional material (For installation only)				
Outside trunking Grey ( 75mm x 75mm per length )	p/meter			
Outside trunking White (100mm x 40mm per length )	p/meter			
3/8 "copper pipe c/w insulation ( p/m )	p/meter			
1/2 "copper pipe c/w insulation ( p/m )	p/meter			
Drain Pipe (p/m)	p/meter			
Labour Technician & Assistant - per hour	per hour			
Travelling Cost	Per km			
Accommodation	Per Night			
Aircondition Supply (Buyout %)	Each			
Electrical work labour only (single /3ph installation and master electrician for DC installation)	per/hour			
Flood light structure repair or replace	Each			
Plumbing work: should be an approved plumber with PiBR	per/hour			
Plumbing work: chassing of the wall and plastering	per/sq meter			
Earth mat installation or earth straps brazing	per/unit			
Earth strap installation: Digging per cubic meter and back filling	cubic/meters			
Earth strap installation: Remove stone and backfilling	per/sq meter			
Earth strap installation: Paint the strapping	per/unit			
Substation breaker/transformer plinths replacement	per/sq meter			
Substation breaker/transformer plinths replacement : remove existing trfm/breaker	per/unit			

## Provision of Maintenance and Breakdown to 66kV and 132kV Feeder and Cable Contract

Substation breaker/transformer plinths replacement : excavation, backfilling and compaction	per/cubic/meter			
Substation breaker/transformer plinths replacement : removal of plinth	per/unit			
Substation breaker/transformer plinths replacement : cast on site and boxing	per/cubic/meter			
Substation breaker/transformer replacement : Erect structure	per/unit			
Substation breaker/transformer plinths replacement : Drilling & stitching (plinth modification)	per/unit			
Substation paving maintenance (laying of the paving).	per/sq meter			
Substation paving removal	per/sq meter			
Substation kerbing repairs	per/ meter			
Substation wall bund (trfm) and relay room wall : Break and Building	per/sq meter			
Weeding, grass cutting and herbicide application	per/sq meter			
Concrete trench covers (supply and install)	Each			
Concrete trench covers: Remove and disposal of old units	per/unit			
Concrete trench covers: handling of asbestos units and disposal	per/unit			
Transformer earthing: Earth straps brazing	per/meter			
Relay room activities: Painting of walls, ceiling and floors	per/sq meter			
Relay room activities: Prepare the surface by sanding and apply polyfiller	per/sq meter			
Installation of ceilings,glass windows and roofing.	per/sq meter			
Installation of cornice, guttering, fascia boards, ceiling straps	per/meter			
Installation of water Jojo Tanks	per/unit			
Maintanance/ repair of the roof	per/sq meter			
Replacing of doors	Each			
Installation of galvanised steel doors	Each			
Honey sucker	per litre			
Septic tanks maintenance and repairs	per/sq meter			
Mobile toilet rental and maintain	Each/per day			
Repairing of doors, and door components	each			
Substation fencing - install and supply galvininsed palisade including security gates	per/meter			
Substation fencing : Excavation and backfilling	per/hole			
Substation fencing : Repair/maintain of Palisade fencing	per/meter			
Substation yard signs replacement	each			
Substation fencing removal	per/meter			
MV authorised operator switching per day. (Operating sheets as proof)	per/day			
TLB (Digger loader)	per/day			

Provision of Maintenance and Breakdown to 66kV and 132kV Feeder and Cable Contract

Access roads work: Filling/topping G5 soil.	per/meter			
Access roads work: excavation, level and compact	cubic/metre			
Access roads work: direct water flow	sq meter			
Access roads work: Install concrete pipes	per/meter			
Access roads work: Gabion baskets installation to prevent soil erosion				
Access roads work: Gabion baskets and fill with approved stones	per/unit			
Line Bore – <b>(Drill under through Roads and Pathways)</b>	per/meter			
Install or Remove Voltage Regulator				
Demolishing HV <b>(66kV and 132kV) Line - Including Poles)</b>	per/structure			
Planting of HV poles (66kV and 132kV) Five pole structure	per/structure			
Planting of HV poles (66kV and 132kV) Lattice structure	per/structure			
Planting of HV poles (66kV and 132kV) Mono pole structure	per/structure			
X-arm - HV poles (66kV and 132kV)	per/structure			
Pole numbering HV	per/structure			
Planting or Removing Pole <b>(NO crane vehicle access – Plant/Remove by manual labour)</b>	per/structure type			
Stays and hardware Installation	per/hardware			
Replace insulators 66kV to 132kV Lines <b>(Up to all Insulators on 1 Phase- Costing per phase and excludes when stringing is done)</b>	per/hardware			
MV & HV Line Inspection (All Line Inspections shall be done as per 34-1441 - ROUTINE INSPECTION AND MAINTENANCE OF SUBTRANSMISSION AND DISTRIBUTION LINES. <b>(All lines inspection reports shall be accompanied by the inspectors Training certificate for Line Inspections.)</b> )	line length			
Fusing philosophy (Fuse replacing or solid replacing)	per/hardware			
Guard wire - Remove/replace/ install	per/hardware			
Remove and replace other loose attachments (SA, Dead-ends, wreplock etc) MV/HV	per/hardware			
Removal of illegal connections (per airdac)	per/structure			

## Provision of Maintenance and Breakdown to 66kV and 132kV Feeder and Cable Contract

Flood light in Substation	per/unit			
Remove and replace other loose attachments (SA, Dead-ends, wrelock etc)	per/hardware			
Streetlight repairing ( <b>Photocell / MCB / Contactor / Bulb</b> )	per/structure			
Line Inspection LV ( <b>All Line Inspections shall be done as per 240-69499676 MAINTENANCE STANDARD FOR LOW VOLTAGE NETWORKS. All lines inspection reports shall be accompanied by the inspectors Training certificate for Line Inspections.</b> )	line length			
Prepaid meter programming	per/unit			
Gabion rocks bags/baskets per ton (supply)	cubic/metre			
Installation of Gabion rocks bags/baskets per ton	ton			
Installation of vibration dampers	per/unit			
Installation of anti-patching device HV	per/unit			
Installation of anti-patching device MV	per/unit			
String fox, mink, acasia, pine, ACC ( <b>Includes all activities</b> )	3 phase linear km			
String hare, greased oak ( <b>Includes all activities</b> )	3 phase linear km			
String CHIKADEE conductor ( <b>Includes all activities</b> )	3 phase linear km			
String centipede other 20mm -25mm	3 phase linear km			
String hornet other 26mm -30mm	3 phase linear km			
Removal of conductors on 66kV/132kV ( <b>Damaged or to replace with new and includes guard/Earth Wire where applicable</b> )	linear m			
Laying of 66kV/132kV Cables ( <b>Includes laying the cables, the danger tape and closing the trench - Depth approx.1m</b> )	linear m			
Digging of trenches for 66kV/132kV Cables ( <b>Depth Approx. 1m</b> )	linear m			
Foundation for 66kV/132kV Monopole ( <b>Includes digging and concrete All Activities</b> )	each			
Foundation for 66kV/132kV Lattice Tower (Includes digging and concrete All Activities)	each			
11kV /22kV cable termination	each			
66kV Single Core Termination - PAX Cable – Indoor	each			
66kV Single Core Termination - PILC – Indoor	each			
66kV Single Core Termination - Gas Insulated Cable – Indoor	each			
66kV Single Core Termination - Oil Insulated Cable – Indoor	each			

## Provision of Maintenance and Breakdown to 66kV and 132kV Feeder and Cable Contract

66kV Single Core Termination - PAX Cable – Outdoor	each			
66kV Single Core Termination - PILC – Outdoor	each			
66kV Single Core Termination - Gas Insulated Cable – Outdoor	each			
66kV Single Core Termination - Oil Insulated Cable – Outdoor	each			
66kV Single Core Joint - Pax Cable	each			
66kV Single Core Joint – PILC	each			
66kV Single Core Joint - Gas Insulated Cable	each			
66kV Single Core Joint - Oil insulated Cable	each			
66kV 3 Phase Joint - Pax Cable	each			
66kV 3 Phase Joint – PILC	each			
66kV 3 Phase Joint - Gas Insulated Cable	each			
66kV 3 Phase Joint - Oil insulated Cable	each			
132kV Single Core Termination - PAX Cable – Indoor	each			
132kV Single Core Termination - PILC – Indoor	each			
132kV Single Core Termination - Gas Insulated Cable - Indoor	each			
132kV Single Core Termination - Oil Insulated Cable – Indoor	each			
132kV Single Core Termination - PAX Cable – Outdoor	each			
132kV Single Core Termination - PILC – Outdoor	each			
132kV Single Core Termination - Gas Insulated Cable - Outdoor	each			
132kV Single Core Termination - Oil Insulated Cable - Outdoor	each			
132kV Single Core Joint - Pax Cable	each			
132kV Single Core Joint – PILC	each			
132kV Single Core Joint - Gas Insulated Cable	each			
132kV Single Core Joint - Oil insulated Cable	each			
132kV 3 Phase Joint - Pax Cable	each			
132kV 3 Phase Joint – PILC	each			
132kV 3 Phase Joint - Gas Insulated Cable	each			
132kV 3 Phase Joint - Oil insulated Cable	each			
Planting or Removing 5 Pole structure	each			
Planting or Removing 5 Pole structure				
Demolishing/Removing 66kV/132kV Lattice Structure	each			
Demolishing/Removing 66kV/132kV Monopole (steel structure)	each			
Demolishing/Removing 66kV/132kV Monopole (woodpole structure)				
Erect /Install 66kV/132kV Lattice Structure	each			

Provision of Maintenance and Breakdown to 66kV and 132kV Feeder and Cable Contract

Erect /Install 66kV/132kV Monopole	each			
Demolishing 66kV/132kV Feeder - Woodpole (Including Guard/Earth Wire)	linear m			
Demolishing 66kV/132kV Feeder - Monopole (Including Guard/Earth Wire)	linear m			
Demolishing 66kV/132kV Feeder - Lattice Structure (Including Guard/Earth Wire)	linear m			
Install Stay - include all hardware	each			
Install wrapped Durapole fire protection covering (to D-DT-0051)	each			
Tensioning of Stays <b>(Includes the loosening and re-tensioning)</b>	each			
Replace insulators 66kV/132kv (Up to all Insulators on 1 Phase- Costing per phase)	each			
Inspection of link box	each			
Replace 6Way earth link box	each			
Replace 6Way cross-bonded link box with 6 SVLs	each			
Replace Earth link	each			
Replace Cross bonding link	each			
Replace SVL	each			
Replace bonding lead	each			
Waterproofing/sealing link box	each			
Perform sheathing integrity test	each			
Sheath-bonding verification	each			
Testing of contact resistances for earth and bonding connections	each			
Anti-climbing device Replace/Remove	each			
Replacing/installation of steel structure members	each			
Install OPGW (optical groundwire)	per/m			
Pole numbering HV	each			
Bonding lead circulating current and sheath standing voltage measurements	each			
X-arm - HV poles (66kV and 132kV)	each			
MV & HV Line Inspection (All Line Inspections shall be done as per 34-1441 - ROUTINE INSPECTION AND MAINTENANCE OF SUBTRANSMISSION AND DISTRIBUTION LINES. <b>(All lines inspection reports shall be accompanied by the inspectors Training certificate for Line Inspections.)</b> )	km			

<b>MV SECTION</b>				
Access roads	metre			
Vegetation management (tree cutting and shrubs)	sq/m			
String of MV aerial bundle <b>(includes attachments)</b>	per/m			
Re-tension conductors per phase <15mm square (Includes all activities)	per/m			

## Provision of Maintenance and Breakdown to 66kV and 132kV Feeder and Cable Contract

Re-tension conductors per phase >= 15mm square (Includes all activities)	per/m			
Install or Remove Regulator / Capacitor/Metering unit	per unit			
Install or Remove Transformer / Recloser 16 - 64kVA	per unit			
Install or Remove Transformer / Recloser 100 - 200kVA	per unit			
Install or Remove Transformer / Recloser 315 - 500kVA	per unit			
Install or Remove MV Auxiliaries (CoS,LBS, Tri-switch,)	each			
Trench digging, laying of cables, and close the trench (depth = 1m)	per/m			
Removing old cable from trench	per/m			
Dig Holes for Pole and Stay Holes	per/m			
Hole auger / Drilling Holes	per/m			
Line Bore – (Drill under through Roads and Pathways)	per/m			
Demolishing HV (66kV and 132kV) Line - Including Poles)	per/m			
Planting of HV poles (66kV and 132kV) Five pole structure	each			
Planting of HV poles (66kV and 132kV) Lattice structure	each			
Planting of HV poles (66kV and 132kV) Mono pole structure	each			
X-arm - HV poles (66kV and 132kV)	each			
Pole numbering LV & MV	each			
Demolishing MV (11kV and 33kV) Line - Including poles	km			
Planting or Removing MV Pole (Steel/Concrete/Wood) - strain	each			
Planting or Removing MV Pole (Steel/Concrete/Wood) - intermediate/ suspension	each			
X-arm Remove or replace MV Pole (Steel/Concrete/Wood) -	each			
Planting or Removing Pole (NO crane vehicle access – Plant/Remove by manual labour)	each			
Stays and hardware Installation	each			
Strut pole and hardware Installation	each			
Tensioning of Stays (Includes the loosening and re-tensioning)	each			
Replace insulators 11kV to 33kV Lines (Up to all insulators on 1 Phase-Costing per phase and excludes when stringing is done)	each			
Change Intermediate pole to Strain Pole	each			
MV Line Inspection (All Line Inspections shall be done as per 34-1441 - ROUTINE INSPECTION AND MAINTENANCE OF SUBTRANSMISSION AND DISTRIBUTION LINES. (All lines inspection reports shall be accompanied by the inspectors	km			

<b>Training certificate for Line Inspections.)</b>				
Trench digging 1m deep ( <b>Manual Labour</b> ) ( <b>See Note D in Clarification Sheet</b> )	per/m			
Install/Remove Mini-Substation/Ground Mounted Trfr <=1MVA	per/unit			
Fusing philosophy (Fuse replacing or solid replacing)	per/unit			
Guard wire - Remove/replace/ install	km			
Remove and replace other loose attachments (SA, Dead-ends, wreplock etc) MV/HV	each			
Labour per hour (normal)	Hr			
Labour per hour (overtime)	Hr			
Labour per hour (Sunday)	Hr			
Labour per hour (normal)	Hr			
Labour per hour (overtime)	Hr			
Labour per hour (Sunday)	Hr			
Labour per hour (normal)	Hr			
Labour per hour (overtime)	Hr			
Labour per hour (Sunday)	Hr			

**PART 3: SCOPE OF WORK**

<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	1

## C3.1: EMPLOYER'S WORKS INFORMATION

### 1. Description of the works

#### 1.1 Executive overview

This contract will be used to provide for planned and breakdown maintenance on the Employer's 66kV and 132kV Feeders on an as-and-when required basis and according to the Employer's discretion.

#### PLANNED MAINTENANCE

When one of the Employer's CNCs has a shortage of staff and needs the assistance of a Contractor to get the CNC's maintenance program up to date or to do specific ad-hoc tasks, the CNC Senior Supervisor or his delegate will arrange with the Employer's Representative to allocate a Contractor to assist the CNC with the identified tasks with a Task Order that was submitted by CNC or Department.

The Senior Supervisor or his delegate will compile the Task Order (change to estimate) for the works to be done and submit to Technical Support.

Where the site conditions require the use of specialized equipment or activities which cannot reasonably be covered by those on the price list, a Compensation Event in terms of clause 60 of the NEC3 ECSC conditions of contract can be considered to allow for payment of such activities or equipment. Such site conditions need to be discussed with and approved by the Employer's Representative before creating estimate.

Technical Support will issue the Task Order to a contractor that agreed to do the work and they (change to Contractor) will engage with the CNC for work discussion on the work to be executed.

Once the Employer's Representative or his delegate is satisfied with the estimate, he (change to Technical Support) will create a purchase order number for the works.

The Contractor is not allowed to provide any works prior to the purchase order being created and issued to the Contractor.

The Contractor is not allowed to provide any works outside of the agreed scope of work for which the purchase order has been issued. A new purchase order needs to be re-submitted and created for any additional work or scope changes prior to executing of any (add additional work) prior to the purchase order being created and issued to the Contractor.

The Contractor shall start and complete the works on the dates and times as agreed with the CNC Supervisor or his delegate.

After completion of the works, the Contractor must issue an invoice for the actual works provided to the CNC Senior Supervisor or his delegate for his approval. (add Invoice to be issued by the contractor within 5 days)

#### BREAKDOWN MAINTENANCE

During a breakdown, the CNC Senior Supervisor or his delegate will on his discretion decide if he needs the assistance of a Contractor. He will then contact Technical Support and explain the scope of the required works.

The Employer's Representative or his delegate (delete and replace with Technical Support) will advise the CNC Supervisor or his delegate and the Contractor (delete) on any restrictions on the Contractor and may decide to allocate a different Contractor to do the work.

## Provision of Maintenance and Breakdown to 66kV and 132kV Feeder and Cable Contract

Only the works necessary to restore supply will be allowed under breakdown conditions, unless first approved by the Employer's Representative. (Add This refers to breakdown outside normal working hours

Where the site conditions require the use of specialized equipment or activities which cannot reasonably be covered by those on the price list, a Compensation Event in terms of clause 60 of the NEC3 ECC conditions of contract can be considered to allow for payment of such activities or equipment. Such conditions need to be discussed with and approved by the Employer's Representative (replace with Technical Support) before proceeding.

For a purchase order to be issued to the Contractor, an estimate for the required scope of work must be sent to Technical Support not later than the next working day after the Contractor arrives on site. Technical Support to revise PO (Delete or ) (add create new PO) and email Task Order on the first business day.

### **Interpretation and terminology**

The following abbreviations are used in this Works Information:

#### **1.2 High Level Scope of Work**

- Provision of Maintenance and Breakdown to 66kV and 132kV Feeder and Cable Contract in the Cape Coastal Cluster (Eastern Cape Complete all quality documentation and mark up any changes to drawings.

#### **1.3. Task Order Process:**

- Task orders shall be issued to the applicable Contractor by the Employer's Representative.
- Task order shall include:
  - Detail of the project
  - Site Location of the project
  - Required start and completion dates of the project.
  - Site specific risk assessment (Health and Safety) and an Environmental Management Plan (EMP). The Contractor will be expected to return the task order with the safety file within the period for reply.(delete)
- Purchase Order Number (i.e., 45-number)
- WBS Number
- SAP ID number of Employer's Representative (delete)
- Construction execution checklist (delete)
- Any discrepancies picked up by the Contractor regarding the Works/Purchase Order must immediately be brought to the attention of the Employer.
- Should any changes be required during the construction (delete and replace with work execution period) period, the Contractor should bring this to the attention of the Employer(delete and replace with CNC Snr Supervisor)/Project Manager. Only once approval has been granted via a written instruction(delete and replace with signed revised task order), can the Contractor proceed with these changes.
- Work can only commence once the Contractor is given a valid 45 number

The Contractor shall accept or negotiate task orders within the period for reply (2 working days). All work indicated on the task order shall be completed by the completion date as

## 2. General

- Material for the proposed projects supplied by the *Contractor* shall be in accordance with the latest revision of Eskom's Distribution Standards (Buyer's Guide), project drawings and specified Bill of Materials
- The onus is on the *Contractor* to obtain the latest revision of standards and procedures applicable.
- Damage caused to Eskom or public property as a result of negligence and/or non-compliance by the *Contractor* will be for the *Contractor's* own account.
- The *Contractor* should at all times inform the Employer's Representative and the Clerk of Works of any activity that he will be carrying out on site i.e. excavations etc
- Specialised Services may be required during the term of this contract. These services may be acquired via Subcontracting. The Contractor is to note the conditions for subcontracting contained in this contract.
- The *Contractor's* invoice(s) reflecting the cost of specialist services provided shall have a copy of the specialist services provider's invoice attached.
- The *Contractor's* invoice(s) shall reflect all the invoice(s) for material purchased attached.
- Proof of any cost on the *Contractor's* invoice(s) shall be submitted to the *Employer's* Representative.
- All penetrations through walls and slabs shall be sealed with an approved fire-retardant sealer as per SANS 10400 T 2004 once the Works has been completed and approved by the Employer's Representative.

**The *Contractor* shall refer to the detailed drawings, specifications and works information as attached to this contract and is responsible to ensure work is completed with the latest revision of these relevant documents.**

## 3. Compensation Events and Overtime

- Compensation events and overtime will only be applicable when a written approval was issued by the *Employer's representative*. The *Employer* will instruct the *Contractor* to provide a quotation for a valid compensation.
- The *Employer* will accept (as per Event Register) or reject the compensation event.
- Compensation rates shall not be used for *works* that are already listed and priced for in the Activity Price List
- Overtime will be applied as a compensation only when instructed and agreed by the *Employer*

The following where stated in the Pricelist, will only be reimbursed when proof of payment is provided;

- Re –imbursement for Accommodation shall be based on actual cost
- Re –imbursement for material shall be based on actual cost
- Re –imbursement for PPE shall be based on actual cost

## 4. Inspections

- The *Contractor* shall complete the standard Eskom quality check sheets in conjunction with the *Employer*, Clerk of Works and Project Engineer and ensure compliance prior to requesting the *Employer*, Clerk of Works and Project Engineer to inspect.
- All additional costs for non-compliance requiring additional inspections will be borne by the *Contractor*.

- The *Contractor* shall notify the *Employer* and Clerk of Works at least 5 working days prior to requiring an inspection. A date and time will be arranged to meet on site and conduct such an inspection. The *Employer* and Clerk of Works will keep a formal signed off checklist of the inspection on record.

### **5. Employer's objectives and purpose of the works**

The Eskom Project Manager will contact the allocated Contractor and issue the Contractor with the design package for the project to be executed. A Task Order will be issued as well, which will detail all the project specific requirements for execution of the project. The Task Order issued will form the basis of the agreement between Eskom and the Contractor for each project to be executed in terms of this contract.

The terms and conditions contained in the Task Order will be in accordance with the terms and conditions of this contract but specific to the requirements of the project to be executed.

The allocated Contractor will do a site visit with the Eskom project representatives and verify the scope of work to be executed contained in the design package, assess the Site conditions, the Project Specific SHEQ requirements and SD&L requirements before the quotation for the works is finalised. The Project Manager will then request a quotation from the Contractor for the execution of the works as verified. The quotation must be submitted to the Project Manager by the Contractor within 7 days. The Project Manager will request the Quantity Surveyor to verify the quotation for correctness and confirm the cost according to the agreed negotiated rates.

Should the quotation require adjustment, the Project Manager will request the allocated Contractor to amend the quotation. Once the quotation has been accepted by Eskom, the Project Manager will issue the allocated Contractor with a Task Order for the project which will contain a Task Order Number. The Task Order will then be signed off by the Project Manager and the Contractor and work may then commence on the project.

Note: No work may commence on a project unless the Task Order has been issued and signed, the Contractor Safety File has been approved by Eskom, the 37(2) agreement has been signed and Site Access has been granted to the allocated Contractor. Eskom will not be liable to pay for any work unless a valid Task Order Number has been issued and Task Order signed.

The Contractor is to submit the Project Specific Safety File within seven days upon being requested to do so by the Project Manager for approval by Eskom. The Safety File is to conform to all Eskom and OHS requirements. Should there be a need to rectify the safety file an additional opportunity will be granted to conform to the recommendations made by the Eskom SHE representative, and must be resubmitted within seven days for approval. Should the Project Specific Safety File fail upon resubmission the works will be allocated to another Contractor.

The Contractor will compile a Risk Register as per the terms and conditions of the ECC for discussion at regular Risk Reduction Meetings or as per agreement with the Project Manager.

It is expected from the Contractor to do the whole of the work as per time frame set in the Task Order, and agreed Program of the Works.

The Contractor will be responsible for the collection and transporting of all necessary material from any and/or all Eskom warehouses and delivery of the material to site as well as return any material to Eskom stores from the site upon instruction from the Project Manager. Payments will be made based on the distance from the site to the relevant Eskom store and back to site.

Minimum recommended working hours to be observed on site are from 07h30 to 16h00 and these hours constitute normal working hours in terms of this contract.

The contractor is to ensure that all required documentation prescribed by Law is kept on file at the site office. All OHS and Construction Regulation requirements are to be adhered to by the contractor.

The Contactor will also ensure that all plant and equipment dedicated to the project will not be removed from site until there is no use for the intended plant and equipment. No moving of plant and equipment between projects will be allowed as it will have impact on completion of the project and lead to delays in completion.

The Contractor is to ensure that all Site Managers are competent and trained in the use of the ECC and are fully conversant and familiar with the usage and procedures thereof. Adherence to the terms and conditions of the ECC are essential and a requirement of all Contractor Site Managers dedicated to each project as per the Construction Regulations.

Payment Assessments will only be done for work done to date. No material on site will be paid for until it has been installed. Records of defined costs are to be kept on file on site whereby the *Project Manager* has access to this file at all times. Storage of material for any project will be done at the earmarked project site, however where this is not practical for safety reasons i.e. high risk of theft, the material will be stored off site at the Contractors premises. Note that the same material management procedure would apply to material stored off site.

## **6. Constraints on how the Contractor Provides the Works**

### **Insurances**

- The contractor shall ensure that they submit a copy of their company Insurances at tender stage, this should include, Contractor All risk, public liability and third-party insurances.

### **Authorisations**

- The nature of this contract scope requires authorisation as works will be performed within or close proximity of "live" conditions. It is therefore the responsibility of the Contractor to ensure that he maintains his authorisation for the full duration of this Contract. There are limited projects that do NOT require authorisation and as a result, should the supplier not have authorisation, there is no guarantee that works/purchase order request will be issued.

### **Material and Bill of Quantities**

- The Contractor shall supply all required materials to complete the works and deliver it to site or Contractor's store unless otherwise agreed. All dismantled and unused material, unless otherwise instructed by the Employer, shall be disposed at a registered waste site.

### **Supply of ad hoc material by Contractor:**

- In the event that Eskom cannot procure material for any of the projects executed under this contract within the required timeframes, the Contractor will be requested to submit a quotation/s in order to supply this material. The Employer will assess the quotation and provide an instruction to proceed with the procurement of such material. Contractor will only be reimbursed for material purchases upon submission

of the actual supplier invoice. This should be submitted with the Contractor's progress claims.

### **Storage of all material.**

- Contractors should have sufficient space and capacity at their facilities to store all material related to this project.
- Contractors take full accountability of all materials (as well as the replacement and management thereof).
- Contractor to adhere to good housekeeping practises when storing material.

### **Site Establishment and De-establishment**

- The *Contractor* will be required to establish a Site Office on Site where meetings can be held and will ensure that basic amenities are available, such as a table and chairs.
- *Contractor* to clear and de-establish total site on completion of proposed *works*.
- *Contractor* is required to collect, load and cart away all rubble and surplus demolished *works* and dispose thereof at a registered waste site
- Contractor to always apply good housekeeping.
- Contracts shall ensure the safety of site public and all employees through the provision of security guards.
- Where applicable, Site Establishment will make provision for costs to be incurred by the *Contractor* to ensure adherence to the Environmental Management Plans and other Specifications attached to this contract.
- The Site Management Plan to be submitted and approved by the Eskom representative/Project Manager for the specific works order within 7 days after Works/Purchase Order is awarded. NOTE: Only required when there is a physical site establishment. This plan to be signed off with the Works/Purchase Order at the Site Handover meeting. A template for the "site management plan" will be provided to the contractor as the start of this contract.
- Security and safeguarding of the site will form part of site establishment.

### **Interaction with Customers / Parties affected**

- The Contractor may exercise the option to use a Liaison Officer (e.g. CLO – Community Liaison Officer) for interaction with Customers or parties affected. The onus is on the Contractor to liaise with the Ward Councillor to acquire the relevant CLO

- The Contractor will be responsible for external disputes which may occur with regard to the works.

### Carrying out the works

- The Scope of "*Works*" is an extension of the drawings, specifications and bills of quantities listed. The *Contractor* shall notify the *Employer* of any discrepancies before commencement of the *work*.
- The *Contractor* shall familiarize himself with all existing services (water, electricity, sewage, etc) prior to starting of the *works*.
- The onus is on the *Contractor* to obtain the latest revision of standards applicable at the time of issue of the Works Order.
- The *Contractor* is required to supply all labour, plant, equipment, loose tools and transport for the duration and completion of the project.
- The *Contractor* to use local labour at various sites as encouraged by the Department of Public Works in their latest document "**Framework for the Implementation of Labour-Intensive Projects under the Expanded Public Works Programme (EPWP)**". The Contractor to ensure liaising and meeting with the relevant Ward Councillor to obtain Community Liaison Officer (CLO) to assist in acquiring localised labour as required by the EPWP.
- *Contractor* to provide breakdown of all costs for the execution of the *works* of the complete project.
- The *Contractor* must immediately notify the *Employer* in writing of scope and compensation events.
- The *Contractor* will report all obstacles or risks on site that could impact on time, cost, quality, environmental as well as health and safety in writing to the *Employer*. In the event of an emergency, the *Contractor* will report the incident immediately to the *Employer*.
- The *Contractor* shall ensure that all Construction work is carried out in accordance with all other statutory requirements applicable to the area.
- The *Contractor* is responsible for providing all PPE for the duration and completion of this contract per project. Contractor should provide a list of their permanent staff as well as submit copies of the ID docs of the temporary staff whom they will provide PPE for.

### Expanded Public Works Programme (EPWP)

- The contractor must report all local/temporary labourers employed in a project. The cost of employing such labour will be inclusive in the activity/item in the price list. No additional costs will be paid.
- The contractor is to submit the completed EPWP report with the submission of each progress claim.
- The contractor must submit REV 7 EPWP report together with the assessment claim for payment. This template could change during the course of this contract and the latest applicable template should apply at all times.
- The contractor is responsible for assisting Eskom in reporting all work done.
- No payment will be certified without the required report being submitted.

### Lost Time Injury Report (LTIR)/OHS Stats Report of Man Hours and incidents.

- The Contractor must submit this report with each payment assessment claim.
- The Contractor is required to submit a monthly Man-hours report for work done on all task orders.
- No payment will be certified unless this report is submitted.

## Subcontracting

The Contractor should ensure that a vetting/evaluation process is done on all his subcontractors performing work under this contract. This process will determine whether the subcontractor meets the Employers' minimum requirements and has the technical capability to perform the scope. This process will follow after the Employer's acceptance of the said subcontractor and prior to his appointment to perform the scope.

The vetting/evaluation process could include an internal evaluation by the Employer. (Note: In order to determine whether this is a requirement for your subcontractor, please consult with the *Employer's representative/project coordinator*).

**IMPORTANT NOTE: The principal Contractor is not allowed to subcontract 100% of the scope of work to his subcontractor.** In reference to Panel/term contracts; a Principle contractor may not subcontract work to another Contractor on the same panel.

### 8.11.1 Subcontractor requirements

The principal *Contractor* must ensure that his proposed subcontractor has the following documentation on record (for access by the Employer) before the appointment.

- Valid accreditations, authorization and/or Registration necessary to perform the scope
- Signed 37.2 agreement between Principal Contractor and Subcontractor
- Approved H&S plan for the subcontractor's portion of the works.
- Principle contractor to ensure his subcontractor complies with the construction regulations. Eg. Where security services are subcontracted the Contract is to ensure that Eskom Protective Services department has vetted and approve the security subcontractor before they can be mobilized OR in the case of Bush clearing, that this appointment is done via relevant Eskom department (Land Development/Environmental)
- A signed written contract that clearly outlines the roles and responsibilities of each party - must exist between the principal contractor and sub-contractor/s preferably in the NEC Engineering and Construction Subcontract or Short Subcontract form.
- Subcontractor should submit a valid Tax clearance certificate to the principal contractor.
- Subcontractors should comply with relevant requirements of the Skills Levies Act, Unemployment Insurance Fund Act and the Compensation of Occupational Injuries and Diseases Act.
- Have the required CIDB grading in place to execute the scope.
- Compliance to approved Safety, Health, Environmental and Quality plans.

The contractor to indicate the percentage of subcontracting, 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 NEC system is compulsory for all subcontract documentation.

## Retention

Eskom will retain 2.5% of each payment certificate issued under this contract for SDL&I performance. The 2.5% will only be reimbursed to the supplier at the end of the contract term if the contractor fulfilled its SDL&I obligations. Every contract should be accompanied by the SDL&I implementation schedule which must be completed by the supplier and returned to SDL&I within 30 days of contract award.

It shall be used as a reference document for monitoring, measuring and reporting on the supplier's progress in delivering on their stated SDL&I commitments. Contract Manager shall provide a copy of the plan and the contract at contract award.

**7. Invoicing and payment****PAYMENT PROCESS****Invoice Inclusions:**

The *Contractor* includes the following information on each tax invoice:

- Name and address of the Contractor
- Project name
- The contract number (46...) and title as well as Purchase Order Number (45...);
- The total Price for Work Done to Date which the Contractor has completed;
- Other amounts to be paid to the Contractor;
- Less amounts to be paid by or retained from the Contractor;
- The change in the amount due since the previous payment being the invoiced amount - excluding VAT, the VAT and including VAT;
- (add other as required)

In addition;

1. The words "**TAX INVOICE**" in a prominent place (preferably at the top of the page).
2. **Name, address and VAT registration number** of the **supplier/contractor**.
3. **Name, address and VAT registration number** of the **recipient**.

Please note: Eskom's name has to be reflected as **Eskom Holdings SOC Limited** on all tax invoices and Eskom's VAT number is 4740101508. The word just Eskom is not acceptable.

4. An **individual serial number** (tax invoice number) and **date issued**.
5. A **full and proper description** of goods and/or services supplied.

Please note: Merely referring to a contract is not sufficient.

6. The **quantity** or **volume** of goods or services supplied.
7. Ensure that the Eskom Purchase Order Number is clearly indicated on your invoice together with the line number on the order you are billing for
8. Where the supply is subject to VAT at the standard rate, the following in Rand:
  - The pre-VAT value, VAT amount and consideration OR
  - The total consideration with a statement that VAT is included @15% OR
  - The total consideration and the Rand amount of VAT charged.

**Invoice Submission:**

- All electronic invoices must be sent in PDF format only
- Each PDF file should contain one invoice; or one debit note; or one credit note only. Eskom SAP system does not support more than one PDF being linked into workflow at a time
- Only one PDF file per email. ( i.e. one invoice or one debit note or one credit note only)
- Send all invoices in PDF straight from your system to the Eskom email address i.e. [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 invoice 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 park invoice report.

Your company can request a park invoice report from the Finance Shared Services (FSS) Contact Center which can then be followed up and corrected. You are welcome to forward the details of invoices corrected to the FSS Contact Center.

## 8. Performance Management

- The *Contractor's* Performance will be assessed in accordance with the Performance Appraisal Process attached to the order.
- The signed Contractor performance appraisal needs to be submitted with the final invoice/payment for each work order.

## 9. Acceptance of Eskom SHEQ Policies and Procedures

For access to Technical drawings please contact Brenda Morrison at 011 629 5266 /[Brenda.morrison@eskom.co.za](mailto:Brenda.morrison@eskom.co.za) for access to the PDE Scot Website.

The documents below form part of this legal binding contract, the *Contractor* confirms that he has familiarized himself with all the documents from 1 to 25 as indicated. For access to these documents please liaise with Procurement.

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	32-524	0	DEVELOPING A SAFETY, HEALTH AND ENVIRONMENTAL SPECIFICATION
4	34 - 333	1	HEALTH AND SAFETY REQUIREMENTS TO BE MET BY PRINCIPAL CONTRACTORS EMPLOYED BY ESKOM DISTRIBUTION 34-333
5	ESKOM LIFE SAVING RULES	1	ESKOM LIFE SAVING RULES 240-62196227
6	CONSTRUCTION REG 3		NOTIFICATION OF CONSTRUCTION WORK TO DEPARTMENT OF LABOUR

7	CONSTRUCTION REG 4 & 5		APPOINTMENT LETTERS FOR CLIENT REPRESENTATIVE, PRINCIPAL CONTRACTOR & CONTRACTOR
8 & 9	OHS ACT	1	WRITTEN AGREEMENT ON OHS ACT SECTION 37(2) & STANDARD CLAUSE
10, 11 & 12	34 - 1063	0	EXPANDED PUBLIC WORKS REPORT 34-1063.
13	<u>DST 34-961</u>	0	LEGAL APPOINTMENTS AND AUTHORIZATIONS
14	TPC 41-55		TRANSPORTING PERSONS ON BACK OF VEHICLES
15	LTIR	MASTER	LOST TIME INJURY REPORT
16	5. Contractor Performance Evaluation	MASTER	
17	6. Supplier Contract Requirements Quality	MASTER	
18	7. Hard Hat Specifications OHS 01/12/	MASTER	
19	8. Identifying, Analysing, Documenting and Observing Tasks according to Criticality.	REV 1	
20	9. Health & Safety Representatives inspection reports and guidelines	REV 1	
21	10. Work at Heights Procedure	REV 1	
22	11. SHE Requirements for the Eskom Commercial Process	REV 1	

23	12. Vehicle Safety	REV 0	
24	13. 32-95 Environmental Occupational Health and Safety Incident Management Procedure	REV 5	
25	14. Risk Audit System Template	REV 0	

**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.

**10. 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:
Pre-introductory meeting	Upon request of the Project Manager at an agreed date by all parties	Site	PM, QS, Site Supervisor, Safety and Environmental Representatives and the Contractor.
Introductory meeting	After safety and environmental files have been assessed and approved.	Site	PM, QS, Site Supervisor, Safety and Environmental Representatives and the Contractor.
Toolbox talk and risk assessment	Daily before work begins.	Site	Contractor and Site Supervisor.
Risk register and compensation events	As necessary.	Site	PM, Contractor and Site Supervisor.
Overall contract progress and feedback	On a regular basis as agreed with the Project Team and the Contractor	Site	PM, QS, Contractor, Site Supervisor, and Safety and Environmental Representatives.

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.

All project instructions are to be issued by the Project Manager only.

### **11. Documentation control**

All correspondence is to be addressed to the Project Manager with a chronological numbering system

### **12. Health and Safety Management**

**The Contractor shall ensure adherence to Eskom Life Saving Rules at all times.**

**Note: Contravention to any of the Eskom Life Saving rules, can result in termination of the contract subject to the outcome on an investigation.**

#### **RULE 1: OPEN, ISOLATE, TEST, EARTH, BOND AND/OR INSULATE BEFORE TOUCH**

No person may work on any electrical network unless:

- He / she is trained and authorised as competent for the task to be done.
- A pre-task risk assessment to identify all risks and hazards must be conducted prior to any work commencing.
- An equi-potential zone is created for each worker on the job site by earthing, bonding and/or insulating according to approved divisional procedures.
- All conducting material is connected together, all staff onsite wear electrical safety shoes and insulating techniques are applied according to standards.
- The authorised person (Team leader) has certified and shown all team members that the apparatus is safe to work on. He / she is trained and authorised as competent for the task to be done.
- *Contractor* to take precautionary measures when working in close proximity to other power lines.
- Jumper covering is provided to serve as an overhead jumper protection covering above solid cut-outs to reduce bird electrocutions.

#### **RULE 2 : HOOK UP AT HEIGHTS**

Working at height is defined as any work where an activity above 2 metres is performed from ladders, scaffolds, platforms, buckets, excavation, structures or where there is a potential for a fall. A pre-task risk assessment to identify all risks and hazards must be conducted prior to any work at height commencing.

No person may work at height where there is a risk of falling unless:

- You are appropriately trained.

- You are appropriately secured during ascending and descending.
- You are using an approved fall arrest system where applicable

The *Contractor* must be aware of the operating heights when working under HV lines.

### **RULE 3 : BUCKLE UP**

No person may drive any vehicle on Eskom business:

Unless the driver and all passengers are wearing seat belt

### **RULE 4: BE SOBER**

No person is allowed to work under the influence of drugs and alcohol. Under-the-influence' means the use of alcohol, drugs and /or a controlled substance to the extent that:

- The individuals faculties are in any way impaired by the consumption or use of the substances or;
- The individual is unable to perform in a safe, productive manner or;
- The individual has a level of any such substance in his body that corresponds with or exceeds accepted medical/legal standards or;
- The individual has a level of alcohol in his body that is greater than 0,02 % blood alcohol concentration.
- Any level of an illegal substance in the body' irrespective of when the substance was used

### **RULE 5: ENSURE THAT YOU HAVE A PERMIT TO WORK**

Where an authorisation limitation dictates, no person shall work without the required Permit to Work. (PTW)

- Work is as defined in the Plant Safety Regulations (PSR) and Operating Regulations for High Voltage Systems (ORHVS) of Eskom.
- A Risk Assessment must be carried out jointly by the Authorised (AP) and Responsible Person (RP) on all work before it commences.
- The PTW must be issued by an AP, in accordance with the PSR.
- The PTW must be accepted in writing by an authorised RP.
- The PTW shall be shown to everyone working on the job and the risks explained.
- The RP must ensure that all staff working on that job is entered on a Workers' Register and the risks explained to each one.

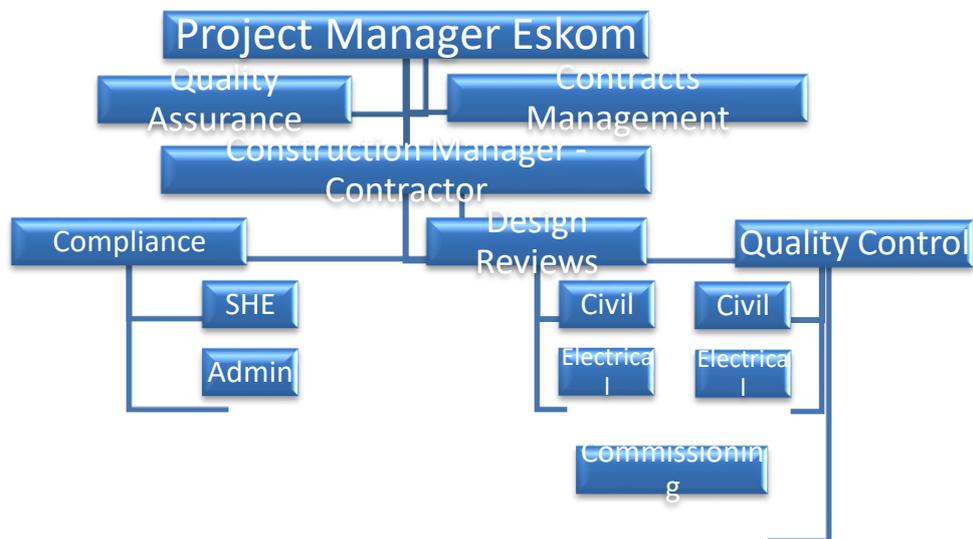
- The RP must ensure that the conditions of the PTW are enforced for the duration of the work.

**SHEQ REQUIREMENTS:**

In compliance to Eskom’s SHEQ Policy, the Contractor to ensure;

- Commitment to safety, health and environmental excellence
- Conduct business with respect and care for people and minimise or avoid impact on the environment
- Compliance to environmental legislation, conditions of Environmental Authorisations and requirements set out in environmental management plans
- Acceptance that all injuries and occupational illnesses, as well as safety and environmental incidents are preventable
- Report, respond to, investigate, close-out, and share learning from safety and environmental incidents
- That SHE is an integral part of your operations and that:
  - no operating condition, or urgency of service, can justify endangering the life of anyone or cause injury or damage to the environment

In addition, the *Contractor* to ensure as a **tender returnable** the following information (as per organogram) is provided to the *Employer*, stating who the relevant qualified person is as per various role levels of the below organogram with all required credentials.



**Other Health & Safety Requirements:**

- **The Contractor shall comply with:**
  - The **Occupational Health and Safety Act, 1993**, and all regulations made there under as per the standard clause Z6, stipulated on page 16 of this contract.
  - The **Construction Regulations, 2003**.
  - The Health and Safety Requirements of the *Employer* more fully set out in Distribution Standards **34-333** (The Contractor will sign page 36 of the specification as acknowledgement of receipt and adherence)
  - All Eskom Safety and Operating Procedures as outlined in the **ORHVS (Operating Regulations on High Voltage Systems)** and the standards attached to this document i.e. 34-145 and 34-146.
  - The Contractor shall ensure that the Site Supervisor has a valid and applicable ORHVS Authorisation. Should a Contractor be in the process of having an in-house employee authorised, then he should indicate by schedule as to when the person will be fully authorised. This however should be finalised before tenders are evaluated and proof thereof provided.
- The Contractor shall ensure that the Contractor's Responsible Person shall supervise the works at all times and be available to take permits where necessary.
- The Contractor shall appoint a person who will liaise with the Eskom Safety Officer responsible for the premises relevant to this contract.

1.

“LEGAL COMPLIANCE TO CONSTRUCTION REGULATIONS 2014 Regulation 8(5 and 6)

**Appointment of Construction Health and Safety Officer (CHSO) and Professional Registration:**

The 2014 Construction Regulations were promulgated in February 2014 and have fundamental implications on Eskom and its contractors. These regulations describe the requirements and obligations that are binding and applicable to all persons involved in construction work.

One of the fundamental requirements focuses on professional registration, where a contractor must appoint in writing, a full time or part time Construction Health and Safety Officer (CHSO) after consultation with the client and after having considered the size of the project, the degree of danger likely to be encountered or the accumulation of hazards or risks on the site. No contractor may appoint a CHSO who is not registered with the South African Council for the Project and Construction Management Professions (SACPCMP) and has necessary competencies and resources. The CHSO's involvement is generally to assist with the control of all health and safety related aspects on site. This will be effective as of 6<sup>th</sup> August 2015.”

- The person so appointed shall:
  - supply the Eskom Safety Officer with copies of minutes of all Health and Safety Committee meetings (if relevant), on a monthly basis.
  - supply the Eskom Safety Officer with copies of all appointments in respect of employees employed on this contract, in terms of the Act and Regulations and shall advise the Eskom Safety Officer of any changes thereto – to be handed over to the *Employer* prior to construction start.

- Eskom may, at any stage during the currency of this agreement, be entitled to;
    - do safety audits at the *Contractor's* premises, its work-places and on its employees;
    - refuse any employee, sub-contractor or agent of the *Contractor* access to its premises if such person has been found to commit any unlawful act or any unsafe working practice or is found to be not authorized or qualified in terms of the Act
    - issue the *Contractor* with a work stop order or a compliance order should Eskom become aware of any unsafe working procedures or conditions or any non-compliance with the Act, Regulations and Procedures referred to in 1 above by the *Contractor* or any of its employees, sub-contractors or agents.
  
  - No extension of time will be allowed as a result of any action taken by Eskom in terms of the above and the *Contractor shall* have no claim against Eskom as a result thereof. Furthermore, no amendments to the Act or the Regulations or reasonable amendment to Eskom's Safety and Operating Procedures will entitle the *Contractor* to claim any additional costs incurred in complying therewith from Eskom.
  
  - The *Contractor* shall be responsible for all expenses incurred to ensure adherence to Health and Safety Regulations as stipulated above which includes but is not restricted to ORHVS training courses, etc.
- 2.
- - Typically, the identified risks as listed in the "Health & Safety Specification" for this contract which could endanger persons/*works* as per scope of work to be completed by the *Contractor*. Specific risks, related to this project are as follows:

**NB: To be prepared when issuing Works/Purchase Order, Site Specific**

Typical Risk	Y/N	Detailed Description
LIVE UNDERGROUND CABLES		
WORK IN LIVE CHAMBERS/RESTRICTED AREAS		
LIVE OVERHEAD CONDUCTORS/CROSSINGS		
CLOSE PROXIMITY WORK TO LIVE EQUIPMENT		
OPERATING OF CRANES/VEHICLE MOUNTED		
STATIC ELECTRICITY/INDUCTION		
WORK WITH CHAINSAWS/MECHANICAL CUTTERS		
MATERIALS HANDLING/ HEAVY EQUIPMENT HANDLING		
CONDUCTOR STRINGING AND TENSIONING		
VEHICLE RISKS		
WORK IN OPEN TRENCHES/EXCAVATIONS		
BIOLOGICAL/HEALTH RISKS (CAMPS)		
WEATHER RELATED RISKS (UV, HEAT, COLD, WIND, RAIN, SNOW, ETC.)		
ENVIRONMENTAL RISKS		
ERGONOMIC RISKS (BODY POSITION, FATIGUE)		

WORK ON/DISMANTLING OF RUSTED & ROTTEN POLES AND STRUCTURES		
FIRE RISKS		
PUBLIC SAFETY RISKS		
WORK CLOSE TO PUBLIC ROADS		
WORKING IN ENVIRONMENTAL SENSITIVE AREA		
HISTORICAL EVENTS THAT COULD INFLUENCE THE PROJECT, I.E. CURRENT STRUCTURE DESIGNS, AGE OF STRUCTURES TO BE WORKED ON, ETC		
DEMOGRAPHICS OF THE AREA		

- **THE CONTRACTOR SHALL IDENTIFY MITIGATION ACTIONS FOR ALL IDENTIFIED RISKS, AS WELL AS IDENTIFY ANY ADDITIONAL RISKS AND INCLUDE IT IN THE HEALTH AND SAFETY PLAN TO BE PROVIDED TO THE EMPLOYER ON TENDER RETURN.**

### Compensation for Occupational Injuries and Diseases (COID) Act

The *Contractor* shall submit with his tender proof of adherence to the above Act.

- To be completed per project and submitted to *Employer's* Representatives as per works order.

#### 13. Quality of workmanship

- The *Contractor* is required to employ a competent Supervisor or Foreman on site for the duration of the project to implement workmanship quality checks. The Supervisor / Foreman appointed by the *Contractor* must be authorized to take a permit in terms of ORHVS and working earths.
- Eskom will do inspections and quality checks on installations completed by the *Contractor* prior to hand-over of each project.

#### 14. Environmental Management

- The *Contractor* shall receive a Generic Environmental Management Plan where applicable and *Contractor* shall manage the documents.
- Specific Environmental Management Plans might be applicable to some projects. The specific EMP shall be handed over to the *Contractor* at commencement of the project and the *Contractor* shall manage it accordingly.
- *Contractor* shall provide toilet facilities, water and electricity.
- All environmental legal Liabilities and claims arising from the activities of the *Contractor* shall be for the *Contractors* expense and shall be priced for in the P&G's Price List.
- The *Contractor* is required to have an understanding of Eskom's basic environmental principles and commitments.
- No open fires will be allowed on Site.
- Existing roads or tracks are to be used as far as possible.

#### 15. Construction Safety

- The *Contractor* shall comply with other Safety application provisions of Government, Provincial, Municipal Safety Laws, Building, Construction, Electricity Regulations and Eskom Distribution Standards.
- The *Contractor* shall accept full responsibility for the means, methods, sequence or procedures of construction for safety precautions or programmes incident to the work of the *contractor*.

## Provision of Maintenance and Breakdown to 66kV and 132kV Feeder and Cable Contract

- The *Contractor* is required to submit a working methodology statement with regards to the Safety Standards while working within hazardous areas such as live substations or in close proximity of energized apparatus and/or lines.
- The *Contractor* shall indemnify the *Employer* and the Engineer against responsibility for safety on the site of the works.
- Reference of the Safety Methodology Statement can be found in the Government Occupational Health and Safety Act (Act 85 of 1993) and Construction Regulations Document which is publicly available.
- Typically, RISK ANALYSIS IDENTIFYING RISKS THAT could endanger the work as done by the *Contractor* will be done per Works Order. The *Contractor* should identify mitigation actions for these risks, as well as identify any additional risks and submit at tender
- The safety of the *Contractors* personnel and employees acquire precedence over the construction works.
- The *Contractor* shall submit a Safety Plan to the *Employer* within one week of award of contract prior to starting on site. The Safety Plan to be assessed by the *Employers* Representative where after on approval will the *Contractor* be allowed access to site.

### **16. Handover on completion**

1. On completion of the works as indicated on the works order, the Contractor shall complete the installation by adhering to all requirements as stipulated in the Handover Procedure as attached to this contract.
2. The Contractor shall negotiate with the *Employer* a reasonable handover date for each project.
3. At the handover meeting, all relevant requirements as per the Handover procedure shall be adhered to by the Contractor. The *Employer's* representative shall only verify the handover documentation.
4. All relevant test readings, including earth readings shall be indicated by the Contractor on the Handover Documentation. All test readings shall be done according to Eskom Specifications and Standards.

### **17. Environmental constraints and management**

The Contractor shall control its activities and processes in accordance with Environmental Requirements for the Procurement of Assets, Goods and Services and Cape Coastal Cluster Environmental Management System procedure 240- 77731322. The Eskom Environmental Management Plan provides the aspects and impacts that will require management and must be followed strictly. The Contractor is to prepare a site specific separate EMP for all environmental- risks that might arise and any changes to the approved plan shall be reported and be approved by the Eskom Environmental Control officer (ECO) and Project Manager prior to the commencement of work.

In addition, the Contractor is required to ensure that all goods, services or works supplied in terms of this Works Information also conform to all applicable environment legislation(s), Safety, Health, Environment and Quality Policy, EPC32-727; SHE Requirements for the Eskom Commercial Process, ST32-726; (and additional requirements). The Contractor shall comply with the environmental criteria and constraints stated in Section 1.3.2.

When required, the Contractor must ensure that all Subcontractors' EMP comply with legal and other requirements and also includes all the environmental risks associated with the scope of work. The Main (Principal) Contractor shall define the specific risks applicable to the Subcontractor's scope of work

The Contractor is to send a initial flash report for any environmental incidents that have occurred on site as soon as possible or within 24 hours to the Eskom Environmental Control officer (ECO) and Project Manager clearly stating any impact to the environment.

No environmental records shall be destroyed or discarded by the Contractor. Eskom as the Employer and the Contractor shall agree that the Contractor retains certain environmental records. Waste

generated during the course of the project must be disposed at a registered landfill site and the Contractor shall retain records of disposal and submit a waste report to the Eskom environmental officer (ECO).

Deviations from these requirements will be regarded as a non-conformance. Should there be concerns regarding environmental performance and non-conformance to environmental requirements, management engagements and interventions will be introduced to determine a means to addressing the shortfalls. Once these interventions have been explored and exhausted, then the Eskom Supplier Disciplinary Process will be followed.

The cost to the Contractor to ensure that waste is disposed of at a registered landfill site and all relevant costs payable to the landfill site as well as safe storage of all equipment which will be removed and replaced from site which will be transported upon instruction to the nearest designated disposal site within the Western Cape Province.

The contractor may be required to comply with additional requirements dependent upon the municipal area where the services are rendered, this includes municipal bylaws and any legal provisions applicable to a specific geographical area.

### **18. Quality assurance requirements**

- “Quality Assurance Requirements: The *Contractor* shall comply with all quality requirements as set out in the document QM-58 i.e. Eskom Contract Quality Requirements Specification.
- The Contractor shall comply with ISO9001:2008 Quality Management System Requirements.
- The *Contractor* shall comply with all other regulatory and statutory requirements applicable to the *works*. “
- The *Contractor* needs to submit a quality plan indicating the control points for quality to ensure that the *works* are done according to specification.

### **19. Programming constraints**

A comprehensive and fully detailed programme is to be submitted within the seven (7) days after the introductory meeting and should indicate all milestones and critical dates. This programme must first be approved by the *Project Manager* and must be updated on an as and when required basis by the *Project Manager*.

**The following dates shall be clearly reflected on the programme:**

- Starting and completion dates for all activities as well as relevant key dates for hold or witness points. All relevant significant activities shall be shown to monitor the progress in the factory/workshop.
- The programme shall also reflect a 2-week period for inspection and correcting of Defects before the completion date.

Updated programmes must be available at all meetings reflecting progress to date and the date when delivery will take place through the use of task orders.

#### FORMAT OF THE PROGRAM

- The *Contractor* shall submit his construction program in terms of the conditions of contract.
- The *Contractor* is to submit a revised programme for acceptance at each site meeting.
- This program shall be in the form of an approved Gantt Chart containing the following information:
- All construction activities, including milestones, initial tasks, critical path, required Outages, and target *Dates*. All potential risk activities should be clearly indicated on the critical path.

## Provision of Maintenance and Breakdown to 66kV and 132kV Feeder and Cable Contract

- Every activity on the programme will be clearly linked to labour resources and equipment required to perform the specific activity.
- Projected weekly progress on *site* for the entire duration of the contract.
- Completion and hand-over *Dates* for formal inspection by the site supervisor must be indicated.
- A column showing the daily tempo of all the construction activities must be indicated next to the activity on the programme.
- Project expenditure on a monthly basis for the entire duration of the contract.
- The following project phases and activities are minimum requirements for the programme:
- Site Establishment and Material Delivery – Lead times to be specified.
- Preparation work – Work that can be completed without the necessity of power outages
- Outage work – Work that must be completed under outage conditions
- Planned outages to be included in the programme
- *Contractors* float to be included in the programme
- The Contract Program will be on display in the *Contractors Site Offices* and will be updated weekly. In addition to the maintaining of this programme, the *Contractor* will report progress to the *Project Manager* at each site meeting or at request of the *Project Manager*.
- The *Contractor* shall also provide an organisation chart showing the personnel to be employed for the *works*, along with a detailed CV of all key personnel.
- Should any deviations to the program be found the *Contractor* shall submit a revised program to the *Project Manager* within one week of such deviations being brought to the *Contractor's* attention.
- The Outages must be arranged with *Employer* via the Outage arrangement procedures, as a pre-requisite for the acceptance of the programme by the *Project Manager*.
- Acceptance of any program by the *Project Manager* shall have no contractual status other than an indication that the *Project Manager* is satisfied as to the order in which the work is to be carried out, and that the *Contractor* undertakes to perform all work in accordance with the accepted program.
- The *Project Manager* retains the right to alter the accepted program should circumstances on *site* necessitate such a change.

OTHER INFORMATION TO BE SHOWN ON THE PROGRAM.

The following Statutory non-working days are included within the contract period:

- All Public Holidays for the duration of the contract.
- The programme must clearly indicate the non-working days for the entire construction period.

## **20. 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.

## **21. Access to the site**

- The *Employer* will provide the *Contractor* with an Access Certificate to formally provide access to the site and *works* implementation.
- The *Contractor* shall ensure that he is familiar with conditions of access roads and sites as well as subsurface conditions.
- The *Contractor* will adhere to all the requirements as per the specification **Access to Farms** which includes, but is not restricted to:
- Identity cards with photographs

- Clearly marked vehicles NB: All contractor vehicles need to be marked with a sticker stating "Eskom Contractor" but should be on Eskom Standard. All Contractor staff should be identifiable by the use of PPE and gubbons reflecting company's name.
- Cooperation in order to help Eskom provide the customer with a project schedule reflecting the period during which the construction and commissioning activities will take place.
- The *Contractor* shall be responsible for negotiation with customers/landowners with regard to use of access routes on farms etc.
- The *Contractor* will be responsible for negotiation with land or business owners and / or the Local Authority with regard to the *works*.
- The *Contractor* will be responsible for external disputes which may occur with regard to the *works*.
- The *Contractor* is required to make all the necessary arrangements with the Local Authorities for road crossing structures and removal thereof, e.g. Removal of pavements, thrust boring under roads, wayleaves, etc.

**NOTE: releasing Eskom, its contractors, and agents from any and all liability in respect of damages caused by the construction of the said *works* after resolution by the contractor of similar issues at completion of *works*:**

- The *Contractor* to ensure after completion of the *works*, that the attached "Final Release" form is fully completed by the affected landowners. The fully signed form(s) to be submitted to the Eskom Representative. Final Payment will not be released unless this fully completed/signed form(s) is received by the Eskom Representative

## ***22. Training workshops and technology transfer***

The obligation for technology transfer being included as part of this contract on Completion of the *Works* is to train Eskom Staff and/or other *Contractors* on the use of the access control and remote monitoring systems, as well as training on maintenance.

## ***23. Completion, testing, commissioning and correction of Defects***

### **Work to be done by the Completion Date**

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. 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.

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

The *Contractor* will have to carry out the supervision of the installations, as per the instruction of the *Project Manager*.

Materials facilities and samples for tests and inspections

Random sample test and inspections may be requested, to ensure good quality of the goods being supplied.

### **Commissioning**

Commissioning is to be done before or after Completion depending on the Programme from the *Project Manager*.

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

In order to put the *works* into operation the *Project Manager* may require the *Contractor's* assistance or be in attendance.

### **Take over procedures**

Take-over is after or at the same time as Completion. The *Contractor* is to arrange an inspection before completion of the installation to inspect and identify any outstanding or any defects. The *Project Manager* may require the *Contractor* to provide assistance.

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

The *Project Manager* arranges access for the *Contractor* to use a part of the *works* which has been taken over if needed to correct any Defects. After the *works* have been put into operation, the *Employer* may require the *Contractor* to undertake certain procedures before such access can be granted. The *Contractor* will be responsible for ensuring that the area to be worked in is barricaded before correcting any defects.

### **Performance tests after Completion**

The *Contractor* to demonstrate that the *works* can operate as guaranteed by the *Contractor* (in *Contractor's* Works Information) or specified by the *Employer* either here or elsewhere in this Works Information.

### **Training and technology transfer**

The *Employer* requires the *Contractor* to provide training on the use of the access control or any associated transfer of technology from him to the *Employer*.

### **Operational maintenance after Completion**

Not applicable.

## 6. Drawings

All work shall be carried out to the specified requirements, standards and quality as set out by Eskom while observing and complying to all safety and environmental requirements. All project specifications will be form part of the relevant Task Order for each project.

The Contractor is appointed on this contract on a Rate Only basis, as and when required. Eskom will provide confirmation of the total value of work completed in terms of this contract once the period of the contract has reached its agreed end date, or upon request of the contractor for the total value of each project completed to date at the time of request.

Eskom reserves the right not to appoint any work to a Contractor based on poor performance of the Contractor.

## PART 4: SITE INFORMATION

Document reference	Title	No of pages
	This cover page	1
C4	Site Information	1
Total number of pages		2

## PART 4: SITE INFORMATION

Core clause 11.2(16) states

“Site Information is information which

- describes the Site and its surroundings and
- is in the documents which the Contract Data states it is in.”

In Contract Data, reference has been made to this Part 4 of the contract for the location of Site Information.

### **General description**

All relevant descriptions will be specified in the Task Order for any project executed in terms of this contract.

### **Existing buildings, structures, and plant & machinery on the Site**

All relevant information will be specified in the Task Order for any project executed in terms of this contract.

### **Subsoil information**

All relevant information will be specified in the Task Order for any project executed in terms of this contract.

### **Hidden services**

All relevant information will be specified in the Task Order for any project executed in terms of this contract.

### **Other reports and publicly available information**

All relevant information will be specified in the Task Order for any project executed in terms of this contract.

**NOTE: ALL APPLICABLE SITE INFORMATION ABOVE WILL FORM PART OF THE TASK ORDER FOR THE RELEVANT PROJECT WHEN ISSUED.**