



NEC3 Engineering & Construction Contract

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

and [.....]
(Reg No. _____)

for **WITZENBERG SUBSTATION 2 x 66 kV, 9.5 MVAR SHUNT
CAPACITOR BANK BAYS: DESIGN, MANUFACTURE, TEST,
SUPPLY, DELIVER, CONSTRUCT, INSTALL, TEST AND
COMMISSION**

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CONTRACT No. _____

Part C1: Agreements & Contract Data

Contents:	No of pages
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C1.1 Form of Offer & Acceptance

1.1. Offer

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

WITZENBERG SUBSTATION 2 x 66 kV, 9.5 MVAr SHUNT CAPACITOR BANK BAYS: DESIGN, MANUFACTURE, TEST, SUPPLY, DELIVER, CONSTRUCT, INSTALL, TEST AND COMMISSION

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.

	The offered total of the Prices exclusive of VAT is	
	Sub total	
	Value Added Tax @ 15% is	
	The offered total of the amount due inclusive of VAT is ¹	
	(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:**

Name & signature of witness
(Insert name and address of organisation)

Date

Tenderer's CIDB registration number (if applicable)

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

1.2. Acceptance

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

The terms of the contract, are contained in:

Part C1 Agreements and Contract Data, (which includes this Form of Offer and Acceptance)

Part C2 Pricing Data

Part C3 Scope of Work: Works Information

Part C4 Site Information

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 _____

for the Employer

(Insert name and address of organisation) _____

Name & signature of witness _____ Date _____

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

1.3. 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	<i>(Insert name and address of organisation)</i>	<i>(Insert name and address of organisation)</i>
Name & signature of witness	_____	_____
Date	_____	_____

C1.2 ECC3 Contract Data

Part one - Data provided by the *Employer*

Clause	Statement	Data
1	General	
	The <i>conditions of contract</i> are the core clauses and the clauses for main Option	
	dispute resolution Option and secondary Options	B: Priced contract with bill of quantities W1: Dispute resolution procedure X1: Price adjustment for inflation X2 Changes in the law X3: Multiple currencies X7: Delay damages X15: Limitation of Contractor's liability for design to reasonable skill and care X16: Retention X18: Limitation of liability Z: Additional conditions of contract
	of the NEC3 Engineering and Construction Contract, April 2013 (ECC3)	
10.1	The <i>Employer</i> is (Name):	Eskom Holdings SOC Ltd (reg no: 2002/015527/30), a state owned company incorporated in terms of the company laws of the Republic of South Africa
	Address	Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg
10.1	The <i>Project Manager</i> is: (Name)	Lusanda Ntombana
	Address	Eskom Engineering Complex Eskom Road Brackenfell 7560
	Tel	+27 21 980 3532
	e-mail	NtombaL@eskom.co.za
10.1	The <i>Supervisor</i> is: (Name)	To be confirmed at award stage
	Address	

Tel No.

e-mail

11.2(13)	The <i>works</i> are	Design, manufacture, test, supply, deliver, construct, install, test and commission 2 x 66 kV, 9.5 MVar shunt capacitor bank bays at the Witzenberg Substation complete with accessories and spares as detailed in the works information, including training of Eskom Operators.	
11.2(14)	The following matters will be included in the Risk Register	See Typical Risks as referred to in the Safety Health and Environmental Specification.	
11.2(15)	The <i>boundaries of the site</i> are	Witzenberg Substation (33.228665S,19.317903E)	
11.2(16)	The Site Information is in	Part 4: Site Information	
11.2(19)	The Works Information is in	Part 3: Scope of Work and all documents and drawings to which it makes reference.	
12.2	The <i>law of the contract</i> is the law of	the Republic of South Africa	
13.1	The <i>language of this contract</i> is	English	
13.3	The <i>period for reply</i> is	4 workdays	
2	The Contractor's main responsibilities	Data required by this section of the core clauses is provided by the <i>Contractor</i> in Part 2 and terms in italics used in this section are identified elsewhere in this Contract Data.	
3	Time		
11.2(3)	The <i>completion date</i> for the whole of the <i>works</i> is	31 July 2027	
11.2(9)	The <i>key dates</i> and the <i>conditions</i> to be met are:	Condition to be met	key date
		1 Perform harmonics and switching studies	TBC
		2 Compile technical specifications in consultation with Eskom	TBC
		3 Design, engineering, supply, installation and commissioning of the shunt capacitors	TBC
		4 Civil Works	TBC
		5 Power Plant	TBC
		6 Control Plant	TBC
30.1	The <i>access dates</i> are:	Part of the Site	Date
		1 Entire site	01 February 2024

31.1	The <i>Contractor</i> is to submit a first programme for acceptance within	1. With the tender, 2. when site access is given and 3. thereafter on the 1st day of each month
31.2	The <i>starting date</i> is	01 February 2024
32.2	The <i>Contractor</i> submits revised programmes at intervals no longer than	4 weeks
35.1	The <i>Employer</i> is not willing to take over the <i>works</i> before the Completion Date.	
4	Testing and Defects	
42.2	The <i>defects date</i> is	52 weeks after Completion of the whole of the works
43.2	The <i>defect correction period</i> is	2 weeks
5	Payment	
50.1	The <i>assessment interval</i> is	1 Month after the start date and then in monthly intervals thereafter.
51.1	The <i>currency of this contract</i> is the	South African Rand.
51.2	The period within which payments are made is	As per NEC contract period plus Eskom payment period terms listed against the vendor on SAP.
51.4	The <i>interest rate</i> 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.
6	Compensation events	
60.1(13)	The place where weather is to be recorded is: The <i>weather measurements</i> to be recorded for each calendar month are, The <i>weather measurements</i> are supplied by The <i>weather data</i> are the records of past <i>weather measurements</i> for each calendar month which were recorded at: and which are available from:	Witzenberg Substation (33.228665S,19.317903E) the cumulative rainfall (mm) the number of days with rainfall more than 20 mm the number of days with minimum air temperature less than 0 degrees Celsius the number of days with snow lying at 09:00 hours South African Time and these measurements: South African Weather Service. As specified South African Weather Bureau South African Weather Service if the need arises.
7	Title	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.

8	Risks and insurance	
80.1	These are additional <i>Employer's</i> risks	1. Refer to the attached Safety, Health and Environmental Specifications.
9	Termination	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.
10	Data for main Option clause	
B	Priced contract with bill of quantities	
60.6	The <i>method of measurement</i> is	Standard System of Measuring Builders Work (Sixth Edition Amended), Civil Engineering Standard Method of Measurement (Third Edition) and SANS and amended as stated in Part C2.1, Pricing Assumptions.
11	Data for Option W1	
W1.1	The <i>Adjudicator</i> is	the person selected from the ICE-SA Division (or its successor body) of the South African Institution of Civil Engineering Panel of Adjudicators by the Party intending to refer a dispute to him. (see www.ice-sa.org.za). If the Parties do not agree on an Adjudicator the Adjudicator will be appointed by the Arbitration Foundation of Southern Africa (AFSA).
W1.2(3)	The <i>Adjudicator nominating body</i> is:	the Chairman of ICE-SA a joint Division of the South African Institution of Civil Engineering and the London Institution of Civil Engineers. (See www.ice-sa.org.za) or its successor body.
W1.4(2)	The <i>tribunal</i> is:	Arbitration.
W1.4(5)	The <i>arbitration procedure</i> is	the latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.
	The place where arbitration is to be held is	Cape Town, 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	
12	Data for secondary Option clauses	
X1	Price adjustment for inflation	
X1.1(a)	The <i>base date</i> for indices is	The tender closing date.

X1.1(c)	The proportions used to calculate the Price Adjustment Factor are:	<p>The prices will be fixed and firm rates for the first 12 months from the tender closing date. At the end of month 12 the prices will be adjusted by Contracts Management Services using Contract Price Adjustments (CPA) as negotiated and agreed with the relevant <i>Contractor</i>. The relevant publications to be used are published by Statistics South Africa.</p> <p>Contractor to submit proposed CPA at tender evaluation stage on request in order to be reviewed, negotiated and agreed with the <i>Employer</i>.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">proportion</th> <th style="width: 30%;">linked to index for</th> <th style="width: 50%;">Index prepared by</th> </tr> </thead> <tbody> <tr> <td>0. [•]</td> <td>[•]</td> <td>[•]</td> </tr> <tr> <td>[•]</td> <td colspan="2">non-adjustable</td> </tr> <tr> <td colspan="3">Total: 1.00</td> </tr> </tbody> </table>	proportion	linked to index for	Index prepared by	0. [•]	[•]	[•]	0. [•]	[•]	[•]	0. [•]	[•]	[•]	0. [•]	[•]	[•]	0. [•]	[•]	[•]	[•]	non-adjustable		Total: 1.00		
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X2	Changes in the law	There is no reference to Contract Data in this Option and terms in italics are identified elsewhere in this Contract Data.
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X3	Multiple currencies		
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X3.1	The <i>Employer</i> will pay for these items or activities in the currencies stated	Items & activities	Other currency	Maximum payment in other currency
	Note: Any proposed foreign currencies at tender stage will be negotiated with the <i>Contractor</i> during the evaluation process. If any material needs to be imported by the <i>Contractor</i> it must be stipulated in ZAR value in items 2.1.2 to 2.1.5 in the BOQ.	[•]	[•]	[•]
		[•]	[•]	[•]
		[•]	[•]	[•]
		[•]	[•]	[•]

X3.1	The <i>exchange rates</i> are those published in	<p>[•] on [•] (date)</p> <p>The items & activities will be paid in the other currency</p> <ul style="list-style-type: none"> - to a foreign Bank account nominated by the <i>Contractor</i> - to a valid SARB approved CFC account in South Africa - in accordance with an alternative payment method agreed with the <i>Employer</i> before the Contract Date. <p>(select one of the three methods as agreed with successful tenderer and delete the others and this note)</p>
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X7	Delay damages (but not if Option X5 is also used)	
X7.1	Delay damages for Completion of the whole of the <i>works</i> are	0.5% per day of the contract value up to a limit of 10% of the contract value
X15	Limitation of the <i>Contractor's</i> liability for his design to reasonable skill & care	
		There is no reference to Contract Data in this Option and terms in italics are identified elsewhere in this Contract Data.
X16	Retention (not used with Option F)	
X16.1	The <i>retention free amount</i> is	All main equipment material and the costs related to importing and delivering to site.
	The <i>retention percentage</i> is	10%
X18	Limitation of liability	
X18.1	The <i>Contractor's</i> liability to the <i>Employer</i> for indirect or consequential loss is limited to:	R0.0 (zero Rand)
X18.2	For any one event, the <i>Contractor's</i> liability to the <i>Employer</i> for loss of or damage to the <i>Employer's</i> property is limited to:	the amount of the deductibles relevant to the event
X18.3	The <i>Contractor's</i> liability for Defects due to his design which are not listed on the Defects Certificate is limited to	The greater of <ul style="list-style-type: none"> • the total of the Prices at the Contract Date and • 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.
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:	the total of the Prices other than for the additional excluded matters. The <i>Contractor's</i> total liability for the additional excluded matters is not limited. The additional excluded matters are amounts for which the <i>Contractor</i> is liable under this contract for <ul style="list-style-type: none"> • Defects due to his design which arise before the Defects Certificate is issued, • Defects due to manufacture and fabrication outside the Site, • loss of or damage to property (other than the <i>works</i>, Plant and Materials), • death of or injury to a person and • infringement of an intellectual property right.
X18.5	The end of liability date is	(i) seven years after the defects date for latent Defects and (ii) the date on which the liability in question prescribes in accordance with the Prescription

	<p>Act No. 68 of 1969 (as amended or in terms of any replacement legislation) for any other matter.</p> <p>A latent Defect is a Defect which would not have been discovered on reasonable inspection by the Employer or the Supervisor before the defects date, without requiring any inspection not ordinarily carried out by the Employer or the Supervisor during that period.</p> <p>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.</p>
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Z **The Additional conditions of contract are** **Z1 to Z15 always apply.**

Z1 Cession delegation and assignment

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

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

Z2 Joint ventures

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

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

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

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

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

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

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

- Z3.4 Failure by the *Contractor* to notify the *Employer* of a change in its B-BBEE status may constitute a reason for termination. If the *Employer* terminates in terms of this clause, the procedures on 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 <i>Contractor</i> or a third party, such party's employees, agents, or Subcontractors or Subcontractor's employees, or any one or more of all of these parties' relatives or friends,
Coercive Action	means to harm or threaten to harm, directly or indirectly, an Affected Party or the property of an Affected Party, or to otherwise influence or attempt to influence an Affected Party to act unlawfully or illegally,
Collusive Action	means where two or more parties co-operate to achieve an unlawful or illegal purpose, including to influence an Affected Party to act unlawfully or illegally,
Committing Party	means, as the context requires, the <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,
Corrupt Action	means the offering, giving, taking, or soliciting, directly or indirectly, of a good or service to unlawfully or illegally influence the actions of an Affected Party,
Fraudulent Action	means any unlawfully or illegally intentional act or omission that misleads, or attempts to mislead, an Affected Party, in order to obtain a financial or other benefit or to avoid an obligation or incurring an obligation,
Obstructive Action	means a Committing Party unlawfully or illegally destroying, falsifying, altering or concealing information or making false statements to materially impede an investigation into allegations of Prohibited Action, and
Prohibited Action	means any one or more of a Coercive Action, Collusive Action Corrupt Action, Fraudulent Action or Obstructive Action.
Z12.1	A Committing Party may not take any Prohibited Action during the course of the procurement of this contract or in execution thereof.
Z12.2	The <i>Employer</i> may terminate the <i>Contractor's</i> obligation to Provide the Services if a Committing Party has taken such Prohibited Action and the <i>Contractor</i> did not take timely and appropriate action to prevent or remedy the situation, without limiting any other rights or remedies the <i>Employer</i> 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 <i>Employer</i> can terminate the <i>Contractor's</i> obligation to Provide the Services for this reason.
Z12.3	If the <i>Employer</i> terminates the <i>Contractor's</i> obligation to Provide the Services for this reason, the amounts due on termination are those intended in core clauses 92.1 and 92.2.
Z12.4	A Committing Party co-operates fully with any investigation pursuant to alleged Prohibited Action. Where the <i>Employer</i> does not have a contractual bond with the Committing Party, the <i>Contractor</i> ensures that the Committing Party co-operates fully with an investigation.

Z13 Insurance

Z 13.1 Replace core clause 84 with the following:

Insurance cover 84

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

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.

2. INSURANCE TABLE A

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

Z 13.2

Replace core clause 87 with the following:

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

INSURANCE TABLE B

Insurance against or name of policy	Minimum amount of cover or minimum limit of indemnity
Assets All Risk	Per the insurance policy document
Contract Works insurance	Per the insurance policy document
Environmental Liability	Per the insurance policy document
General and Public Liability	Per the insurance policy document
Transportation (Marine)	Per the insurance policy document
Motor Fleet and Mobile Plant	Per the insurance policy document
Terrorism	Per the insurance policy document
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 <i>Employer</i> 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 <i>Employer</i> is solely responsible for and indemnifies the <i>Contractor</i> or any other person against any and all liabilities which the <i>Contractor</i> 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 <i>Contractor</i> or any other person or the presence of the <i>Contractor</i> or that person or any property of the <i>Contractor</i> or such person at or in the KNPS or on the KNPS site, without the permission of the <i>Employer</i> or of a person acting on behalf of the <i>Employer</i> .
Z14.3	Subject to clause Z14.4 below, the <i>Employer</i> 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 <i>Contractor</i> or any other person, or the presence of the <i>Contractor</i> or that person or any property of the <i>Contractor</i> or such person at or in the KNPS or on the KNPS site, without the permission of the <i>Employer</i> or of a person acting on behalf of the <i>Employer</i> .
Z14.4	The <i>Employer</i> 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 <i>Employer's</i> Asbestos Standard 32-303: Requirements for Safe Processing, Handling, Storing, Disposal and Phase-out of Asbestos and Asbestos Containing Material, Equipment and Articles.
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 <i>Employer</i> ensures that the Ambient Air in the area where the <i>Contractor</i> 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 <i>Contractor</i> , the <i>Employer</i> 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 <i>Contractor</i> may perform Parallel Measurements and related control measures at the <i>Contractor's</i> 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 <i>Employer</i> 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 <i>Contractor's</i> 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 <i>Contractor</i> 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 <i>Employer</i> at the <i>Employer's</i> expense, and conducted in line with South African legislation.

Annexure A: One-in-ten-year-return *weather data* obtained from the South African Weather Service for Witzenberg Substation (33.228665S,19.317903E)

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.

“Weather data can be obtained from SAWS on request if a compensation event arises.”

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

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	Priced contract with bill of quantities			
11.2(21)	The <i>bill of quantities</i> is in	Part 2: C2.2 as an attachment to this NEC document. (in figures) (in words), excluding VAT		
11.2(31)	The tendered total of the Prices is			
2.4	Data for Schedules of Cost Components	<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	Priced contract with bill of quantities	Data for the Shorter Schedule of Cost Components		
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	Minus %		
22 in SSCC	The rates of other Equipment are:	Equipment	Size or capacity	Rate per day
61 in SSCC	The hourly rates for Defined Cost of design outside the Working Areas are Note: Hourly rates are estimated 'cost to company of the employee' and not selling rates. Please insert another schedule if foreign resources may also be used	Category of employee	Hourly rate	
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:	
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PART 2: PRICING DATA

ECC3 Option B

Document reference	Title	No of pages
C2.1	Pricing assumptions: Option B	24
C2.2	The <i>bill of quantities</i>	26

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:

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

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.

4. 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 ²	square metre
m ² -pass	square metre pass
m ³	cubic metre
m ³ -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.

C2.2 the *Bill of quantities*

Please refer to the BOQ Price List as an attachment to this NEC document.

PART 3: SCOPE OF WORK

Document reference	Title	No of pages
C3.1	This cover page <i>Employer's Works Information</i>	28 - 47
	Total number of pages	

C3.1 Works Information

Description of the works (Overview)

Design, manufacture, test, supply, deliver, construct, install, test and commission 2 x 66 kV, 9.5 MVA shunt capacitor bank bays at the Witzenberg Substation complete with accessories and spares as detailed in the works information, including training of Eskom Operators.

Please refer to the attached project specification for the detail specification and all related and applicable drawings: 314703982 - Witzenberg Substation FDP - 2 x 66kV Cap Bank Bays REV 1 Date: 01/06/2023

1. Constructability plan

The contractor shall be responsible to submit a detailed constructability plan to Eskom for approval prior to the commencement of any works. The contractor will know the best construction method based on the plant and resources he/she has to their disposal.

It should also be noted that Eskom shall not take any liability for the constructability plan and that the contractor shall take full responsibility as such. It is also up to the contractor to ensure that all work is done according to the latest SANS specification and fully complies with the OHS Act. The contractor shall also ensure all approvals are obtained from any statutory bodies and/or owners for the duration of the project.

2. 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	<i>PM, Site Supervisor, Safety and Environmental Representatives and the Contractor.</i>
Introductory meeting	After safety and environmental files have been assessed and approved.	Site	<i>PM, QS, Site Supervisor, Safety and Environmental Representatives and the Contractor.</i>
Toolbox talk and risk assessment	Daily before work begins.	Site	<i>Contractor and Site Supervisor.</i>
Risk register and compensation events	As necessary.	Site	<i>PM, Contractor and Site Supervisor.</i>
Overall contract progress and feedback	On a regular basis as agreed with the Project Team and the Contractor	Site	<i>PM, QS, Contractor, Site Supervisor, and Safety and Environmental Representatives.</i>

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

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

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

3. General

- Material for the proposed projects supplied by the *Contractor* shall be in accordance with the specification, project drawings and specified Bill of Quantities.
- 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
- Proof of any cost on the *Contractor's* invoice(s) shall be submitted to the *Employer's* Representative.
- All Tools and/or Equipment to perform all of the Works as per works order shall be supplied by the *Contractor*. The *Employer* will not supply any tools and/or equipment to provide the Works or a part of the Works. The *Contractor* will not be allowed to make use of the *Employer's* Trolleys or Ladders.
- Tools and Equipment entering the Site can be subject to an inspection by the *Employer's* Representative for conformance to safety standards. The latest tool/machinery safety checklist shall be represented at the same time. Should the *Employer's* Representative find any non-conforming item(s) on the Site, the *Employer's* Representative will request the *Contractor's* Responsible Person to remove such non-conforming item(s) from the Site immediately.
- Each task shall be performed in a safe manner at all times for the well being of the *Contractor's* staff and the *Employer's* staff.
- All personal protective clothing and equipment to safely perform all of the Works shall be available on the Site at all times. The Principal *Contractor* and all his/her subcontractors are responsible to make all personal protective clothing and equipment available to all his/her staff.
- No waste or redundant material/spares shall be dumped in the *Employer's* waste bins at the loading bay area or placed in the surrounding area at the waste bins. All waste and redundant material/spares shall be removed from the Site daily by the *Contractor* only to be disposed off at a registered dump site. A Certificate of the safe disposal shall be obtained from the registered dump site by the *Contractor* and placed on record in his/her Health and Safety File. The Site shall be neat and clean at the end of the day. On completion of each task the same shall apply.
- The *Contractor* shall ensure that the work area(s) are properly barricaded before proceeding to provide the Works. Barricading shall be firm and solid, be up at all times and be clearly visible from all angles to the staff, workers and the public. No barricading or part of the barricading shall be removed before all of the Works have been provided.
- The Principal *Contractor* and all his/her Sub Contractors shall at all times adhere to the *Employer's* lockout procedure. The *Contractor* is responsible to supply all locks, lockout

mechanisms and notices to be displayed to safely lock out all sources of energy e.g. *Mechanical, Electrical, Pneumatic and Hydraulic*.

- During this contractual period, should any additions or alterations be made to any of the existing facilities or service systems "Approved As Built Drawings" must be submitted to the *Employer* on completion.
- On completion of this contract the *Contractor* shall hand over to the *Employer's* Representative his/her Health and Safety File. No final payment will be authorized until the *Employer's* Representative is in receipt of the *Contractor's* Health and Safety File.

The Following to be noted;

- The *Employer's* Representative reserves the right to stop any task/job being performed at any time should the Principal *Contractor* or his/her Sub *Contractor(s)* not comply to the specifications for the task/job and/or when workmanship and/or quality is not to the satisfaction of the *Employer's* Representative.
- Any Employee employed by the *Employer* has the right to stop a task/job at any time should he/she find the Principal *Contractor* or his/her Subcontractor(s) deviating from safety standards and procedures as per the *Employer* and/or the Construction Health and Safety Regulations/Occupational Health and Safety Act [Act 85-1993].
- The *Employer's* Representative reserves the right to send any Employee employed by the Principal *Contractor* or his/her Subcontractor off the Site should the Employee make himself/herself guilty of transgression of the 5 cardinal rules or any form of unsatisfactory behaviour.
- All material and/or spares that may become redundant while performing any task/job on the Site shall remain the property of the *Employer* unless otherwise stated 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.

4. Works/Purchase Order Process

- Should any changes be required during the construction period, the Contractor should bring this to the attention of the Employer/Project Manager. Only once approval has been granted via a written instruction, can the Contractor proceed with these changes.
- Work can only commence once the Contractor is given a valid 45 number.

5. 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*

6. Inspection and commissioning

- The *Contractor* shall complete the standard Eskom quality check sheets for Civil works 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.

LIST OF SANS 1200 SERIES STANDARDISED SPECIFICATIONS

Although not bound in nor issued with this document, the following standardized specifications shall form part of the contract document and shall apply:

Document	Revision		Title	Tick if publicly available
CIVIL ENGINEERING CONSTRUCTION				
SANS 1200 A	1986 3		Standardized specification for civil engineering construction Section A: General	
SANS 1200 AA	1986 3		Standardized specification for civil engineering construction Section AA: General (small works)	
SANS 1200 C	1980 1		Standardized specification for civil engineering construction Section C: Site clearance	
SANS 1200 D	1988 3		Standardized specification for civil engineering construction Section D: Earthworks	
SANS 1200 DA	1988 3		Standardized specification for civil engineering construction Section DA: Earthworks (small works)	
SANS 1200 DB	1989 3		Standardized specification for civil engineering construction Section DB: Earthworks (pipe trenches)	
SANS 1200 DM	1981 1		Standardized specification for civil engineering construction Section DM: Earthworks (roads, sub grade)	
SANS 1200 DK	1996 1		Standardized specification for civil engineering construction Section DK: Gabions and pitching	
SANS 1200 G	1982 2		Standardized specification for civil engineering construction Section G: Concrete (Structural)	
GENERAL NATIONAL STANDARDS AND ACTS				
Act no. 73	1989		Environmental Conservation act.	
Act no. 31	1963		Fencing Act.	
TRH14	1985		Guidelines for road construction materials	
Act no. 85	1993		Occupational health and safety act.	

SAISC	1990		South African Steel Construction Handbook	
TMH1	1986		Standard Methods of Testing Road Construction Materials	
ESKOM NEW WORKS STANDARDS				
NWS 1017			Accident Prevention	
NWS 1494	3		Fire prevention and protection of contractors and Eskom premises on Engineering sites	
NWS 1060			Injury prevention and protection	
NWS 1814/C1			Quality assurance requirements for civil and building contracts	
NWS 1058	4		Safety at construction sites: Requirements to be met by Contractors	
ESKPVAAL7	2		Environmental impact assessment procedure for Eskom	
ESKPBAAD6			Environmental management policy	
DTOS 0071	0		Eskom Standard for Barricading	
EVS 005	1		Quality requirements for quality related items and equipment	
EVS 010			Quality requirements for quality related services	
34-333	1		Occupational Health and Safety Requirements to be met by Contractors and Sub-Contractors Employed by Eskom.	
32-136			Construction Safety, Health, and Environmental Management	
			OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT NO. 85 OF 1993)	

First Aid Standard		Latest revision	Refer to IARC
34-332			
Procedure for refusal to work on the grounds of Health, Safety and Environmental concerns	DPC	Latest revision	Refer to IARC
34-925			
Barricading Procedure	DPC	Latest revision	Refer to IARC
34-908			
Government Occupational Health and Safety Act – Construction Regulations 2003		Latest revision	Publicly Available
Reporting, Recording, Investigating Costing and Following up of incidents or accidents	DPC	Latest revision	Refer to IARC
34-350			
Standard applicable to <i>Contractors</i> working in close proximity to live apparatus	DST 34-	Latest revision	Refer to IARC
1954			
Provision and use of personal protective equipment	DST 34-	Latest revision	Refer to IARC
1710			

Health and Safety Specification	Latest revision	Attached
General		
Generic Environmental Management Plan	Latest revision	Attached
Pre-task planning and feedback process 227	DPC 34- Latest revision	Refer to IARC
Procedure for the handling of non-conformance SCSPVABX4	Latest revision	Refer to IARC
Handing over documentation: Major Reticulation, Minor Reticulation, Reticulation 1195	DST 34- Latest revision	Refer to IARC
Access to Farms 190	DGL 34- Latest revision	Refer to IARC
Technical Instruction – Prohibition Notice: Ref. No. IOSS 2074-003 03 TI – 016	Latest revision	Refer to IARC
Framework for the Implementation of Labour Intensive Projects under the Expanded Public Works Programme (EPWP)	Latest revision	Publicly Available

3.4 Constraints on how the Contractor Provides the Works

1. 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.

2. 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 Western Cape Authorisation for the full duration of this Contract.

3. Quality Assurance and Quality Plan

- Refer to the attached project specific Quality document.

4. 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.

5. Material and Bill of Quantities

The *Bill of Quantities* is a provisional measure and quantities are subject to re-measurement.

Storage and security of material will be the responsibility of the Contractor until the Completion Certificate is certified. The Contractor is responsible for all costs involved to expedite lost, damaged or stolen material.

All material to adhere to Eskom specifications and criteria

Eskom’s Bill of Quantities provided in the price list is provisional.

Materials off site: No payment will be made for any materials stored on or off site or in transit; it will only be paid for when installed.

The *Contractor* shall supply all required materials to complete the *works* and deliver it to site or unless otherwise agreed and stated in the *Bill of Quantities*.

Storage of all material:

- Contractors should have sufficient space and capacity at their facilities to store all material related to this project.
- All the material related to this contract will be delivered to the Contractor’s facility for storage and safekeeping.
- Contractor to adhere to good housekeeping practises when storing material.

6. 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 apply good housekeeping at all times.
- *Contractor* 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.

7. 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

8. 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.
- The *Contractor* will ensure that testing and commissioning of installations takes place where applicable as per the handover document attached to this contract and that all required Certificates of Compliance are completed.
- *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* shall ensure that all Construction work is carried out in accordance with Eskom's specifications, standards and regulations including the CD containing "A Technical brief for Electrical Reticulation Projects" handed to and signed for by the *Contractor*.
- 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.

9. 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 7EPWP 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 a responsible for assisting Eskom in reporting all work done.
- No payment will be certified without the required report being submitted

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

- The Contractor must submit this report with each payment assessment claim for all major reticulation projects.
- No payment will be certified without this report being submitted.

11. Wayleaves and other

- All costs for damaged fences and road reserve shall be borne by the *Contractor*.

12. 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*).

NOTE: The principle *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.

12.1 Subcontractor requirements

The principle *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 Principle 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 principle 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.

13. Retention

As stated in the NEC contract data section X16.

14. Payment and Invoicing

May 2019 Rev0

PAYMENT PROCESS – Project Execution WCOU

In an endeavour to reduce the time taken to pay suppliers/contractors, the process now allows submission of invoices from manual to electronic submission via e-mail to invoiceseskomlocal@eskom.co.za

The *Contractor* assesses the amount due and applies to the *Employer* for payment adhering to the following payment process:

item	ACTIVITY	RESPONSIBLE PERSON
1	<ul style="list-style-type: none"> The <i>Contractor</i> to forward to the PC an Assessment of work completed on the <i>assessment day</i>. (i.e. as per NEC3 Payment Certificate format as attached to this contract with supporting Bill of Quantities and cost). The <i>Contractor</i> attaches the detail assessment of the amount due to each tax invoice showing the Price for Work Done to Date for each item in the Price List for work which he has completed. 	<i>Contractor</i>
2	<ul style="list-style-type: none"> PC/PM (known as <i>Employer</i>) together with the <i>Contractor</i> agrees to the Assessment. Any possible issues regarding the claim of actual work completed will be addressed with the <i>Contractor</i>. 	PC/PM and <i>Contractor</i>
3	PC/PM will thereafter submit Assessment to the relevant QS to compile a Payment Certificate	PC/PM
4	Once the Assessment is verified, the Payment Certificate will be compiled and signed by the QS and handed over to the PC/PM	QS
5	The PC/PM will check the Payment Certificate with Assessment and request the Project Controller to process the required detail on the SAP system	PC/PM
6	The Project Controller to process the Service Entry on SAP and create a SE Number	Project Controller
7	The Project Controller to notify PC/PM once the SE number is generated	Project Controller
8	The PC/PM will then approve the SE on SAP thereby generating a Good Receipt (GR) number	PC/PM
9	The SE number and the GR number to be populated on the Payment Certificate	PC/PM
10	PC/PM to sign and issue the Payment Certificate to <i>Contractor</i>	PC/PM
11	On receipt of the Payment Certificate with the SE and GR numbers, the <i>Contractor</i> will sign the Payment Certificate and, together with the relevant invoice, submit directly to invoiceseskomlocal@eskom.co.za	<i>Contractor</i>
Project Co-ordinator – PC ; Quantity Surveyor – QS ; Service Entry – SE ; Goods Receipt – GR ; Employer’s Representative or Programme Manager - PM SAP - Financial Accounting System		

In terms of core clause 50 the *Contractor* assesses the amount due and applies to the *Employer* for payment. The *Contractor* applies for payment with a tax invoice addressed to the *Employer* as follows:

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

- Name and address of the Contractor
- 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

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

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

15. Performance Management

- The *Contractor's* Performance will be assessed in accordance with the Performance Appraisal Process attached to this contract at completion of the works.
- The signed Contractor performance appraisal needs to be submitted with the final assessment/payment of the works.

16. Health and Safety Management

NOTE: Please refer to the attached project specific Health and Safety document.

- 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 8 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.

**“LEGAL COMPLIANCE TO CONSTRUCTION REGULATIONS 2014 Regulation 8(5 and6)
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 6th 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.

17. 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 and submitted to *Employer's* Representatives.

18. Quality of workmanship

- The *Contractor* is required to employ a competent Supervisor or Forman 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.

19. Environmental Management

NOTE: Please refer to the attached project specific Environmental Management Program.

- 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.

20. 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*.
- 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.

21. Supplier development and Localisation

NOTE: Please refer to the attached project specific Supplier development and Localisation document and requirements attached to this tender.

22. Handover on completion

1. On completion of the works the Contractor shall complete the installation by adhering to all requirements as stipulated in the Handover Procedure as described in the scope of works.
2. The Contractor shall negotiate with the *Employer* a reasonable handover date for each condition to be met as stated in the contract data 11.2(9).
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.

23. General

1. Except for site management and specialized labour such as operators for plant and equipment, the *Contractor* is encouraged to use "local" labour on a temporary basis for all manual tasks.
2. The *Contractor* will attend all site meetings as arranged by the *Employer*
3. The *Contractor* will report all obstacles on site that could impact on time and cost e.g. trees, obsolete poles and inclement weather, to the *Employer* in writing.
4. All Construction work shall be carried out in accordance with all the statutory requirements applicable to the area, Eskom's specifications, standards and regulations.

5. The *Contractor* will be given access to the proposed site and the *Contractor* must comply with Eskom's National, Provincial and Local environmental policies, safety standards and laws.
6. The onus is on the *Contractor* to obtain the latest revision of standards applicable.
7. The *Employer* reserves the right to alter the scope of the works programme and constraints.
8. The Clerk of Works of the *Employer* will do Quality Control Checks and inspections on the *works*. The *Contractor* notifies the Clerk of Works or *Employer's* Representative of any inspections to be done three days in advance.
9. The *Contractor* shall ensure that caution is exercised when working in close proximity of live electrical equipment.

24. Requirements for the programme

- 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 in order 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.
 - 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.

25. Services and other things provided by the Employer

Item	Date by which it will be supplied
Access to site	When construction commence.
Project specification for the detail specification and all related and applicable drawings: 314703982 - Witzenberg Substation FDP - 2 x 66kV Cap Bank Bays REV 1 Date: 01/06/2023	Attached to tender.
Way leaves	As and when required.
Project specific Health and Safety Spec	Attached to tender.
Project specific SD&L document and requirements	Attached to tender.
Project specific Environmental Management Programme	Attached to tender.
Project specific Quality Requirements and specifications	Attached to tender.

C4: Site Information

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."

The *Contractor* shall familiarize himself with conditions of access roads and sites as well as subsurface conditions.

Should the *Contractor* (if authorized by Eskom) be required to work in close proximity of energised cables, he shall take all the necessary precautions to ensure the safety of his staff.

The *Contractor* is deemed to execute Safety Procedures to ensure the safety of his staff and community during the Contract Period.

The safety of the *Contractors* Employees, subcontractors and community takes preference over the scope of the works.

The *Contractor* should take all reasonable steps to become fully aware of existing services and site conditions of the specific site prior to starting the *works*.

Water, electricity, ablution facilities and secured storage area are to be provided by the *Contractor* where necessary.