



NEC3 Engineering and Construction

# Short Contract (ECSC3)

A contract between Eskom Holdings SOC Ltd (Reg No. 2002/015527/30)

and

for Rouxville 66-22kV Substation Strengthening Project

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Documentation prepared by: [•]

# C1 Agreements & Contract Data

## C1.1 Form of Offer and Acceptance

### Offer

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

### Rouxville 66-22kV Substation Strengthening Project

The tenderer, identified in the signature block below, having examined the documents listed in the Tender Data and addenda thereto as listed in the Tender Schedules, 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	R[●]
Value Added Tax @ 15% is	R[●]
The offered total of the Prices inclusive of VAT is	R[●]
(in words) [●]	

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

Signature(s)

Name(s)

Capacity

**For the  
tenderer:**

(Insert name and address of organisation)

Name &  
signature of  
witness

Date

Tenderer's CIDB registration number:

## 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 1 Agreements and Contract Data, (which includes this Form of Offer and Acceptance)

Part 2 Pricing Data

Part 3 Scope of Work: Works Information

Part 4 Site Information

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

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Tender 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, which must be signed by the duly authorised representative(s) for both parties.

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

Notwithstanding anything contained herein, this Agreement comes into effect on the date when the tenderer receives one fully completed and signed copy of this document, including the Schedule of Deviations (if any) together with all the terms of the contract as listed above.

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 tender offers, further copies of this document may be used for that purpose, duly endorsed, 'Alternative Tender No. \_\_\_\_\_'

## Schedule of Deviations

Note:

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

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

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

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

### For the tenderer:

### For the Employer

Signature \_\_\_\_\_

\_\_\_\_\_

Name \_\_\_\_\_

\_\_\_\_\_

Capacity \_\_\_\_\_

\_\_\_\_\_

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

\_\_\_\_\_

Name & signature of witness \_\_\_\_\_

\_\_\_\_\_

Date \_\_\_\_\_

\_\_\_\_\_

## C1.2 Contract Data

### Data provided by the *Employer*

**[Instructions to the contract compiler: (delete these two notes in the final draft of a contract)]**

1. Please read the relevant clauses in the NEC3 Engineering and Construction Short Contract (April 2013) (ECSC3)<sup>1</sup> before you enter data. The number of the principal clause is shown for most statements however other clauses may also use the same data.
2. Where the following symbol is used “[•]” - data is required to be inserted.]

Completion of the data in full is essential to create a complete contract.

Clause	Statement	Data
<b>General</b>		
10.1	The <i>Employer</i> is (Name):	<b>Eskom Holdings SOC Ltd (reg no: 2002/015527/30), a state owned company incorporated in terms of the company laws of the Republic of South Africa</b>
	Address	<b>Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg</b>
10.1 & 14.4	The <i>Employer's</i> representative to whom the <i>Employer</i> in terms of clause 14.4 delegates his actions <sup>2</sup> is (Name):	<b>TBA</b>
	Address	<b>120 Henry Street Westdene Bloemfontein 9301</b>
	Tel No.	
	Fax No.	
	E-mail address	
11.2(11)	The <i>works</i> are	To strengthen the Rouxville 66-22kV Substation, by installing the 10MVA transformer, extend the existing control room to accommodate control plant activities.
11.2(13)	The Works Information is in	<b>the document called ‘Works Information’ in Part 3 of this contract.</b>
11.2(12)	The Site Information is in	<b>the document called ‘Site Information’ in Part 4 of this contract.</b>
11.2(12)	The <i>site</i> is	<b>Rouxville Substation</b>
30.1	The <i>starting date</i> is.	<b>TBC</b>
11.2(2)	The <i>completion date</i> is.	<b>8 Months 2024</b>
13.2	The <i>period for reply</i> is	<b>5 working days</b>

<sup>1</sup> Available from Engineering Contract Strategies Tel 011 803 3008, Fax 086 539 1902 or [www.ecs.co.za](http://www.ecs.co.za)

<sup>2</sup> Except those actions which can only be done by the *Employer* as a Party to the contract.

40	The <i>defects date</i> is	<b>52 weeks after Completion</b>
41.3	The <i>defect correction period</i> is	<b>2 weeks</b>
50.1	The <i>assessment day</i> is the	<b>Between 25 to 30 of each month.</b>
50.5	The <i>delay damages</i> are	<b>R2 000 per day</b>
50.6	The retention is	<b>5%</b>
51.2	The interest rate on late payment is	<b>[•]% [Insert a rate only if a rate less than 0.5% per week of delay has been agreed]</b>
80.1	The <i>Contractor</i> is not liable to the <i>Employer</i> for loss of or damage to the <i>Employer's</i> property in excess of	<b>the amount of the deductibles relevant to the event</b>
	Does the United Kingdom Housing Grants, Construction and Regeneration Act (1996) apply?	<b>No</b>
93.1	The <i>Adjudicator</i> is	<b>the person selected from the ICE-SA Division (or its successor body) of the South African Institution of Civil Engineering Panel of Adjudicators by the Party intending to refer a dispute to him. (see <a href="http://www.ice-sa.org.za">www.ice-sa.org.za</a>). If the Parties do not agree on an Adjudicator the Adjudicator will be appointed by the Arbitration Foundation of Southern Africa (AFSA).</b>
	Address	<b>[•]</b>
	Tel No.	<b>[•]</b>
	Fax No.	<b>[•]</b>
	e-mail	<b>[•]</b>
93.2(2)	The <i>Adjudicator nominating body</i> is:	<b>the Chairman of ICE-SA a joint Division of the South African Institution of Civil Engineering and the London Institution of Civil Engineers. (See <a href="http://www.ice-sa.org.za">www.ice-sa.org.za</a> ) or its successor body</b>
93.4	The <i>tribunal</i> is:	<b>arbitration.</b>
	The <i>arbitration procedure</i> is	<b>the latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.</b>
	The place where arbitration is to be held is	<b>Bloemfontein, South Africa</b>

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The person or organisation who will choose an arbitrator

- if the Parties cannot agree a choice or
- if the arbitration procedure does not state who selects an arbitrator, is

**the Chairman for the time being or his nominee of the Association of Arbitrators (Southern Africa) or its successor body.**

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**The *conditions of contract* are the NEC3 Engineering and Construction Short Contract (April 2013)<sup>34</sup> and the following additional conditions Z1 to Z11 which always apply:**

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## **Z1 Cession delegation and assignment**

- Z1.1 The *Contractor* does not cede, delegate or assign any of its rights or obligations to any person without the written consent of the *Employer*.
- Z1.2 Notwithstanding the above, the *Employer* may on written notice to the *Contractor* cede and delegate its rights and obligations under this contract to any of its subsidiaries or any of its present divisions or operations which may be converted into separate legal entities as a result of the restructuring of the Electricity Supply Industry.

## **Z2 Change of Broad Based Black Economic Empowerment (B-BBEE) status**

- Z2.1 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.
- Z2.2 The *Contractor* is required to submit an updated verification certificate and necessary supporting documentation confirming the change in his B-BBEE status to the *Employer* within thirty days of the notification or as otherwise instructed by the *Employer*.
- Z2.3 Where, as a result, the *Contractor's* B-BBEE status has decreased since the *starting date* the *Employer* may either re-negotiate this contract or alternatively, terminate the *Contractor's* obligation to Provide the Works.
- Z2.4 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 those stated in Clause 91.1 and the amount due on termination includes amounts listed in Clause 92.1 less a deduction of the forecast additional cost to the *Employer* of completing the *works*.

## **Z3 Confidentiality**

- Z3.1 The *Contractor* does not disclose or make any information arising from or in connection with this contract available to others except where required by this contract. 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 where required by this contract the *Contractor* ensures that the provisions of this clause are complied with by the recipient.
- Z3.2 If the *Contractor* is uncertain about whether any such information is confidential, it is to be regarded as such until notified otherwise by the *Employer*.

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<sup>3</sup> If June 2005 Edition applies, delete April 2013 and insert June 2005

<sup>4</sup> State whether attached as a 'PDF' file in terms of Eskom's licence, or to be obtained from Engineering Contract Strategies Tel 011 803 3008, Fax 086 539 1902 or [www.ecs.co.za](http://www.ecs.co.za).

- Z3.3 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.
- Z3.4 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 *Employer*. All rights in and to all such images vests exclusively in the *Employer*.
- Z3.5 The *Contractor* ensures that all his subcontractors abide by the undertakings in this clause.

**Z4 Waiver and estoppel: Add to clause 12.2:**

- Z4.1 Any extension, concession, waiver or relaxation of any action stated in this contract by the Parties or their delegates 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.

**Z5 Health, safety and the environment**

- Z5.1 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.
- Z5.2 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.

**Z6 Provision of a Tax Invoice and interest. Add to clause 50**

- Z6.1 The *Contractor* provides the *Employer* with a tax invoice in accordance with the *Employer's* procedures stated in the Works Information, showing the correctly assessed amount due for payment.
- Z6.2 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 clause 51.2 is then calculated from the delayed date by when payment is to be made.
- Z6.3 The *Contractor* 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.

**Z7 Notifying compensation events**

- Z7.1 Delete from the last sentence in clause 61.1, "unless the event arises from an instruction of the *Employer*."

**Z8 *Employer's* limitation of liability; Add to clause 80.1**

- Z8.1 The *Employer* liability to the *Contractor* for the *Contractor's* indirect or consequential loss is limited to R0.00 (zero Rand).

**Z9 Termination: Add to clause 90.2, after the words "or its equivalent":**

- Z9.1 or had a business rescue order granted against it.

**Z10 Addition to Clause 50.5**

- Z10.1 If the amount due for the *Contractor's* payment of *delay damages* reaches the limits stated in this Contract Data (if any), the *Employer* may terminate the *Contractor's* obligation to Provide the Works.

If the *Employer* terminates in terms of this clause, the procedures on termination are those stated in Clause 91.1 and the amount due on termination includes amounts listed in Clause 92.1 less a deduction of the forecast additional cost to the *Employer* of completing the *works*.

**Z11 Ethics**

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

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

**Action** Fraudulent Action or Obstructive Action.

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

**Z12 Insurance**

**Z \_12.1 Replace core clause 82 with the following:**

**Insurance cover 82**

- 82.1 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.
- 82.2 The *Contractor* provides the insurances stated in the Insurance Table A, from the *starting date* until the earlier of Completion and the date of the termination certificate.

**INSURANCE TABLE A**

Insurance against	Minimum amount of cover or minimum limit of indemnity	Cover provided until
Loss of or damage to the works	<p>The replacement cost where not covered by the <i>Employer's</i> insurance</p> <p>The <i>Employer's</i> policy deductible as at contract date, where covered by the <i>Employer's</i> insurance</p>	The <i>Employer's</i> certificate of Completion has been issued
Loss of or damage to Equipment, Plant and Materials	<p>The replacement cost where not covered by the <i>Employer's</i> insurance</p> <p>The <i>Employer's</i> policy deductible as at contract date, where covered by the <i>Employer's</i></p>	The Defects Certificate has been issued

	insurance	
The <i>Contractor's</i> liability for loss of or damage to property (except the <i>works</i> , Plant and Materials and Equipment) and for bodily injury to or death of a person (not an employee of the <i>Contractor</i> ) arising from or in connection with the <i>Contractor's</i> Providing the Works	<p><b><u>Loss of or damage to property</u></b></p> <p><b><u>Employer's property</u></b></p> <p>The replacement cost where not covered by the <i>Employer's</i> insurance</p> <p>The <i>Employer's</i> policy deductible as at contract date where covered by the <i>Employer's</i> insurance</p> <p><b><u>Other property</u></b></p> <p>The replacement cost</p> <p><b><u>Bodily injury to or death of a person</u></b></p> <p>The amount required by the applicable law</p>	
Liability for death of or bodily injury to employees of the <i>Contractor</i> arising out of and in the course of their employment in connection with this contract	The amount required by the applicable law	

82.3 The *Employer* provides the insurances as stated in the Insurance Table B

**INSURANCE TABLE B**

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

Nuclear Material Damage Terrorism	Per the insurance policy document
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### Z13 Nuclear Liability

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

### Z14 Asbestos

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

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

asbestos and asbestos containing material, equipment and articles.

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

**SANAS** means the South African National Accreditation System.

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

Z14.1 The *Employer* ensures that the Ambient Air in the area where the *Contractor* will Provide the Services conforms to the acceptable prescribed South African standard for asbestos, as per the regulations published in GNR 155 of 10 February 2002, under the Occupational Health and Safety Act, 1993 (Act 85 of 1993) ("Asbestos Regulations"). The OEL for asbestos is 0.2 regulated asbestos fibres per millilitre of air as a 4-hour TWA, averaged over any continuous period of four hours, and the short term exposure limit of 0.6 regulated asbestos fibres per millilitre of air as a 10-minute TWA, averaged over any 10 minutes, measured in accordance with HSG248 and monitored according to HSG173 and OESSM.

Z14.2 Upon written request by the *Contractor*, the *Employer* certifies that these conditions prevail. All measurements and reporting are effected by an independent, competent, and certified occupational hygiene inspection body, i.e. a SANAS accredited and Department of Employment and Labour approved AAIA. The *Contractor* may perform Parallel Measurements and related control measures at the *Contractor's* expense. For the purposes of compliance the results generated from Parallel Measurements are evaluated only against South African statutory limits as detailed in clause Z14.1. Control measures conform to the requirements stipulated in the AAIA-approved asbestos work plan.

Z14.3 The *Employer* manages asbestos and ACM according to the Standard.

Z14.4 In the event that any asbestos is identified while Providing the Services, a risk assessment is conducted and if so required, with reference to possible exposure to an airborne concentration of above the AL for asbestos, immediate control measures are implemented and relevant air monitoring conducted in order to declare the area safe.

Z14.5 The *Contractor's* personnel are entitled to stop working and leave the contaminated area forthwith until such time that the area of concern is declared safe by either Compliance Monitoring or an AAIA approved control measure intervention, for example, per the emergency asbestos work plan, if applicable.

Z14.6 The *Contractor* continues to Provide the Services, without additional control measures presented, on presentation of Safe Levels. The contractually agreed dates to Provide the Services, including the Completion Date, are adjusted accordingly. The contractually agreed dates are extended by the notification periods required by regulations 3 and 21 of the Asbestos Regulations, 2001.

Z14.7 Any removal and disposal of asbestos, asbestos containing materials and waste, is done by a registered asbestos contractor, instructed by the *Employer* at the *Employer's* expense, and conducted in line with South African legislation.

## Data provided by the *Contractor* (the *Contractor's Offer*)

The tendering contractor is advised to read both the NEC3 Engineering and Construction Short Contract (April 2013) and the relevant parts of its Guidance Notes (ECSC3-GN)<sup>5</sup> in order to understand the implications of this Data which the tenderer is required to complete. An example of the completed Data is provided on page 31 of the ECSC3 April 2013 Guidance Notes.

Completion of the data in full is essential to create a complete contract.

10.1	The <i>Contractor</i> is (Name):	[•]
	Address	[•]
	Tel No.	[•]
	Fax No.	[•]
	E-mail address	[•]
63.2	The percentage for overheads and profit added to the Defined Cost for people is	[•]%
63.2	The percentage for overheads and profit added to other Defined Cost is	[•]%
11.2(9)	The Price List is in	the document called 'Price List' in Part 2 of this contract.
11.2(10)	The offered total of the Prices is [Enter the total of the Prices from the Price List]:	R[•] excluding VAT [in words] [•] excluding VAT

<sup>5</sup> Available from Engineering Contract Strategies Tel 011 803 3008, Fax 086 539 1902 or [www.ecs.co.za](http://www.ecs.co.za).

## C2 Pricing Data

### C2.1 Pricing assumptions

Entries in the first four columns in the Price List are made either by the *Employer* or the tendering contractor

If the *Contractor* is to be paid an amount for the item which is not adjusted if the quantity of work in the item changes, the tenderer enters the amount in the Price column only; the Unit, Quantity and Rate columns being left blank.

If the *Contractor* is to be paid an amount for the item of work which is the rate for the work multiplied by the quantity completed, the tenderer enters the rate which is then multiplied by the expected quantity to produce the Price, which is also entered.

All Prices are to be shown excluding VAT unless instructed otherwise by the *Employer* in Tender Data or in an instruction the *Employer* has given before the tenderer enters his Prices.

If there is insufficient space in the Price List which follows, state in which document the Price List is contained.

## C2.2 Price List

Summary of Schedule for Rouxville Substation 66/22kV transformer Bay is as follows:

Item no.	Description	Unit	Amount
	Preliminary & general	Sum	
	<b>civil</b>		
	Site clearance	Sum	
	Earthworks	Sum	
	Earthworks (pipe trenches)	Sum	
	Gabions and pitching	Sum	
	Earthworks (roads, subgrade)	Sum	
	Concrete (structural)	Sum	
	Bedding (pipes)	Sum	
	Stormwater drainage	Sum	
	Subbase	Sum	
	Kerbing and channelling	Sum	
	Fencing	Sum	
	Building work	Sum	
	<b>Primary Plant</b>		
	66kV Feeder bay	Sum	
	66kV Busbar	Sum	
	Transformer 66-22kv bay new	Sum	
	Transformer 66-22kv bay	Sum	
	Fire Barrier	Sum	
	22kV Busbar	Sum	
	Masts	Sum	
	Decommission	Sum	
	Control Plant	Sum	
	<b>TOTAL OF PROJECT COST (EXCL. VAT AND IDC)</b>		

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

**REFER TO C2.2 Price List Rouxville SS BOQ (Excel)**

**CONTRACTOR:**

.....  
PRINT NAME

.....  
SIGNATURE

.....  
DATE



## C3: Scope of Work

### C3.1 Works Information

#### 1. Description of the *works*

The Contractor shall completely construct the following works at Rouxville substation:

##### Civil scope

- Upgrading of Access Roads.
- Construction of Storm water culverts, earth drains, berms and mitre banks.
- Complete replacement of the existing fences and gates with all signs, notices and labels.
- Replacement of existing property boundary gate.
- Complete removal of existing stone verge kerbing and replacement with new stone verge kerbing at the correct offset.
- Construction of new cable trenches.
- Construction of new transformer plinth and bund wall.
- Complete extension of the existing Substation Control / Relay Room and the demolition of an existing foundation adjacent to the existing building.
- Closing of existing windows and ventilation openings in the existing building.
- Construction of a new cable trench road crossing
- Replacement of Asbestos cable trench covers with new pre-cast concrete type covers
- Removal of yardstone, herbicide treatment and placing of new imported yardstone.

##### Primary Plant scope

- The extension of the 66kV busbar using column and beams
- The installation of a second 66/22kV 10MVA transformer bay
- The installation of a 66kV busbar isolator on the existing 66/22kV transformer bay
- The restringing of the 22kV busbar
- The installation of 2 x 22kV feeder bays

##### Control Plant scope

###### Protection:

###### new installations in the new control room and old

- Install a 66kV feeder differential protection on the new feeder bay.
- Install transformer protection scheme on the new 66/22kV 20MVA transformer (Old Control Room).
- Install a Tap change control scheme and incorporate it into the transformer panel (Control Room).
- Install 2 x rural feeder protection schemes on the new 22kV feeder bay (New Control Room).
- Reuse the existing 3 x rural feeder protection schemes on existing 22kV feeder bays.
- Install a communication processor for remote access.
- Reuse the existing AC/DC panel.
- All protection installations to use serial communication.
- Install 2 x CT JB's on the new 66kV transformer CT and new 66kV feeder CT.
- Install 2 x VT JB's on the 66kV and 22kV busbar VTs.
- Pre-commission and commission the new installations.
- Provide control and supervisory cabling accordingly

###### new cabling on the existing protection panels.

- Re-cable the existing 66/22kV Transformer No.1 protection scheme.
- Re-cable the existing 66/22kV Transformer No.1 Tap changer scheme.
- Re-cable the existing 2 x 22kV feeder protection schemes.

#### **Metering:**

##### **New installation: To be installed in the new control room**

- Install 19-inch standard metering panel consisting of two-meter modules for Statistical metering in the new control room.
- Install a Statistical metering on the LV (22kV) side of the Transformer and two outgoing 22kV Mohokare and Rouxville-Zastron 2 feeders.
- Install Quality of Supply Module
- Install 3 x new 1A A1700 Elster Vision meters for Statistical metering on 66/22kV 20MVA Transformer and two outgoing 22kV feeders.
- The Trutech Smart Too modem will be installed in the metering panel to enable remote metering.
- Install new cables from the 22kV Combo Breaker CT's, and 22kV VT/JB to the metering panel.

##### **Existing Metering Panel 1: Cable work only**

- Install new cables from the existing 22kV Dogbox Breaker CT's, and 22kV VT/JB to the existing metering panel 1 in the old control room.
- Install Quality of Supply Module to accommodate plant equipment's that is installed in the existing metering panel 1.
- Re use the existing 19-inch metering panel 1 consisting of two-meter modules for Statistical metering in the old control room.
- Re use the existing 4 x 1A A1700 Elster Vision meters for Statistical metering on 66/22kV 10MVA Transformer and three outgoing 22kV feeders. (Zastron 1, Rouxville Munic and Smithfield 1)
- Re use the Trutech Smart Too modem installed in the existing metering panel 1 to enable remote metering.
- Note: CT ratios to remain the same for 66/22kV 10MVA Transformer 1 and all three outgoing 22kV feeders. (Zastron 1, Rouxville Munic and Smithfield 1)

#### **Scada:**

- RTU will be replaced with the Bloemfontein Bulk ACE Replacement.
- Expand D20 RTU with a serial interface.
- Pre commission and Final-commission all the equipment according to the IDF records.
- Provide control and supervisory cabling accordingly.

Please see detailed Final design Documents

## 2. Drawings

Detail drawings		
Drawing no	Sheet	Title
D-DT-5237	1-9	FENCING
0.54/8282	-	NON-LETHAL ELECTRIFIED FENCING
D-DT-5238	1 – 16	BUILDINGS
D-DT-5239	1 – 4	BUILDINGS
D-DT-5240	1 – 21	EARTHING
D-DT-5231 / 5232 / 5233 / 5236	ALL	TRANSFORMER PLINTHS AND RELATED
D-DT-5234	1 – 9	OIL DAMS
D-DT-5233/41	1 – 2	OIL CONTAINMENT - OIL DAM
D-DT-5252 /5257/5260/5265	-	COLUMNS AND BEAMS
D-DT-5245 / 5247	-	CIVILS: KERBING, TRENCHING, LV CABLE CROSSING, GATE RAMPS
D-DT-5273 / 5274	1 – 4	LABELS AND SIGNS
D-DT-5275	-	FIREWALL (BRICK)
Project Specific Drawings		
Drawing no	Sheet	Title
D-FS-13574	ALL	ROUXVILLE 66/22 kV SUBSTATION
D-FS-18174	01-08	ROUXVILLE 66/22 kV SUBSTATION – CIVIL WORKS DRAWINGS

Please see detailed design package for all relevant drawing reference.

## 3. Specifications

Title	Date or revision
OCCUPATIONAL HEALTH AND SAFETY STANDARD FOR <i>CONTRACTORS</i> AND <i>SUBCONTRACTORS</i> WORKING FOR ESKOM	DISPVABF3
PROCEDURE FOR REFUSAL TO WORK ON GROUNDS OF HEALTH AND SAFETY	SCSPVABP6 REV 0
CONTRACTOR HEALTH AND SAFETY PLAN – TO BE COMPLETED AND SUBMITTED AT TENDER STAGE	
CONSTRUCTION, SAFETY, HEALTH AND ENVIRONMENT MANAGEMENT IN ESKOM	EPC 32-136 REV0
ACKNOWLEDGEMENT OF OCCUPATIONAL HEALTH AND SAFETY STANDARD FOR <i>CONTRACTORS</i> AND <i>SUBCONTRACTORS</i> WORKING FOR ESKOM	
GOVERNMENT OCCUPATIONAL HEALTH AND SAFETY ACT – CONSTRUCTION REGULATIONS	PUBLICLY AVAILABLE

TRAINING, TESTING AND AUTHORIZATION OF PERSONS FOR THE OPERATION AND MAINTENANCE OF THE POWER SYSTEM	SCSPVABN2
THE TRAINING LOGBOOKS FOR AUTHORIZATION OF PERSONS FOR HIGH-VOLTAGE	SCSAMAEE5 REV 1
PROCEDURE TO FOLLOW WHEN THE INTEGRITY OF EARTH CONTINUITY CONDUCTORS CONNECTING APPARATUS TO THE EARTH MAT IS SUSPECT	SCSPVABFO REV 0
IDENTIFYING, ANALYSING, DOCUMENTING AND OBSERVING DANGEROUS / HAZARDOUS TASKS	SCSPVACKO REV 0
REPORTING, RECORDING AND INVESTIGATION OF INCIDENTS	ESKPVABN9
FOR BARRICADING	SCSPVABF4 REV 0
STANDARD FOR THE CONTROL AND APPLICATIONS OF MASTER LOCKS AND ISSUE OF MASTER KEYS	SCSASAAU1 REV 0
ROUTINE INSPECTIONS OF ELECTRICAL EQUIPMENT	SCSASABA8 REV 0
CLEARING AND MAINTENANCE OF SERVITUDE ROUTES SCSASAAZ9 REV 0 TRAINING, TESTING AND AUTHORIZATION OF PERSONS FOR THE OPERATION AND MAINTENANCE OF THE POWER SYSTEM	SCSPVABN2 REV 0
STANDARD APPLICABLE TO CONTRACTORS WORKING IN CLOSE PROXIMITY TO LIVE APPARATUS	SCSASAAW8 REV 1
PROCEDURE FOR THE IDENTIFICATION OF RISK PRIOR TO THE COMMENCEMENT OF WORK	SCSPVABB2 REV 1
STANDARD FOR THE USE OF EQUIPOTENTIAL EARTH FOOTPLATES	SCSASAAU5 REV 0
MV AND LV POLE IDENTIFICATION	SCSASABZ5
ACCESS TO FARMS	DGL_34-190
BUSINESS CONDUCT POLICY AND GUIDELINES	ESKPBAAN4 REV1
LOCAL STANDARD FOR THE OPERATING OF HIGH CUTTER / CHAIN SAW	NETOM7 REV 0
RELEVANT STANDARDS AS LISTED IN THE DOCUMENT CALLED THE DESIGN DOCUMENT	
PROCEDURE FOR THE REPORTING ,INVESTIGATION ,COSTING AND FOLLOW UP ON INCIDENCES ACCIDENTS	DPC -34-350
ENVIRONMENTAL LIAISON COMMITTEE (ELC) PERFORMANCE INDICATOR REPORTING PROCESS	EPC -32 -249
SAFETY ,HEALTH AND ENVIRONMENTAL POLICY	EPL 32-94
EMP GUIDELINE	EPC 32-248
WASTE MANAGEMENT PROCEDURE	EPC 32-245
PROCEDURE FOR CLEARING VEGETATION AND MAINTENANCE WITHIN OVERHEAD POWERLINES	EPC 32-247
HERBICIDES MANAGEMENT	ESKPBAAD4
ESKOM STANDARD ON THE SAFE USE OF PESTICIDES AND HERBICIDES	ESKASAA0
RECOMMENDED HERBICIDES	DISTIZAB4

See final design package for more detailed specification.

### Access to the Eskom Web Page

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

### Acknowledgement of Web Access

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

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

Signed at: ..... on the ..... day

of ..... 20.....

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

Statutory requirements and standards

- All activities shall comply with the statutory requirements and where possible, within the ambit of guidelines, inter alia;
- See Health and Safety Requirements for Construction Work
- **In providing the works, the contractor shall be required to:**  
Supply, deliver and install materials in accordance with the contract where stated "**Materials to be supplied by the Contractor**". Materials to be controlled and managed on site in accordance with the approved construction programme.

**As-built drawings and schedule of quantities:**

- The *Contractor* submits these as-built drawings and as-built schedule of quantities as part of the hand-over documentation in line with the completion Dates indicated on the approved construction programme.

**Supply of material:**

- All material must be SANS approved.
- All materials used shall comply with the *Employer*. Requirements and shall be new and of the best quality.
- See the Bill of Quantities (**Price List**) when to supply and install or take delivery, handle and install **Materials supplied by the Employer** and price accordingly. Note all quantities are provisional and the final quantities will be re measured on site.
- All material provided by the contractor will have to be approved by Eskom (SI department) before installation

**Plant & Materials**

- **Three weeks** notice is required from the *Contractor* to the *Project Manager* as a pre-condition with regard to the delivery date and place.
- Equipment, No equipment or any other thing shall be supplied by the *Employer* to assist the *Contractor*.

##### 4.1 Meetings

Progress and Technical meetings will be held every 14 days, or as mutually agreed by the *Project Manager* and *Contractor*

##### 4.2 Use of standard forms

Standard forms to be used by the *Contractor* in the administration of the contract, for example early warning and compensation event notifications.

##### 4.3 Invoicing and payment

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 and title;
- *Contractor's* VAT registration number;
- The *Employer's* VAT registration number 4740101508;
- 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)

The *Contractor* 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.

#### **4.4 Records of Defined Cost**

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

#### **4.5 Accelerated Shared Growth Initiative – South Africa (ASGI-SA)**

The *Contractor* complies with and fulfils the *Contractor's* obligations in respect of the Accelerated and Shared Growth Initiative - South Africa in accordance with and as provided for in the *Contractor's* ASGI-SA Compliance Schedule..

The *Contractor* shall keep accurate records and provide the *Employer* with reports on the *Contractor's* actual delivery against the above stated ASGI-SA criteria.

The *Contractor's* failure to comply with his ASGI-SA obligations constitutes substantial failure on the part of the *Contractor* to comply with his obligations under this contract.

#### **4.6 BBBEE and preferencing scheme**

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

#### **4.7 Facilities to be provided by the Contractor**

N/A

#### **4.8 Title to material from excavation and demolition**

N/A

#### **4.9 Design by the Contractor**

N/A

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

N/A

### 5. 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.

- OTHER INFORMATION TO BE SHOWN ON THE PROGRAM.

- All Public Holidays for the duration of the contract.

## 6. Services and other things provided by the *Employer*

[illegible]



## C4: Site Information

### **C4.1: Information about the *site* at time of tender which may affect the work in this contract**

#### **1. Access limitations**

The substation is located approximately 1.7 km south of the Rouxville Town centre, via an unsurfaced road and a short gravel / farm track towards the substation. The substation is located on a hill side outside of the town.

Arrangements shall need to be made with the local CNC supervisor prior to any access to site.

#### **2. Ground conditions in areas affected by work in this contract**

Various Soil conditions to be determined by Contractors Civil Engineer

#### **3. Hidden and other services within the *site***

The risk for encountering hidden cables is high from inspections on site and thus the Contractor shall check and confirm any services prior to any construction activities commence.

#### **4. Details of existing buildings / facilities which *Contractor* is required to work on**

The Rouxville Substation and the Control Room. Also to note are the Asbestos Containing Cable Trench Covers which shall be disposed of.