



NEC3 Engineering and Construction

Short Contract (ECSC3)

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

and

for Installation and Commissioning of 10 Paired Armoured Telephone Cabling for Smokestack Lifts Intercom System at Lethabo Power Station

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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:

Installation and Commissioning of 10 Paired Armoured Telephone Cabling for Smokestack Lifts Intercom System at Lethabo Power Station

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:

Installation and Commissioning of 10 Paired Armoured Telephone Cabling for Smokestack Lifts Intercom System at Lethabo Power Station

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. _____'

Installation and Commissioning of 10 Paired Armoured Telephone Cabling for Smokestack Lifts Intercom System at Lethabo Power Station

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)*

(Insert name and address of organisation)

Name & signature of witness _____

Date _____

C1.2 Contract Data

Data provided by the *Employer*.

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

Clause	Statement	Data
General		
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 & 14.4	The <i>Employer's</i> representative to whom the <i>Employer</i> in terms of clause 14.4 delegates his actions ¹ is (Name):	[•]
	Address	Eskom Holdings SOC Ltd Lethabo Power Station Deneysville Road Viljoensdrift
	Tel No.	[•]
	Fax No.	[•]
	E-mail address	[•]
11.2(11)	The <i>works</i> are	Installation and Commissioning of 10 Paired Armoured Telephone Cabling for Smokestack Lifts Intercom System at Lethabo Power Station.
11.2(13)	The Works Information is in	the document called 'Works Information' in Part 3 of this contract.
11.2(12)	The Site Information is in	the document called 'Site Information' in Part 4 of this contract.
11.2(12)	The <i>site</i> is	Lethabo Power Station
30.1	The <i>starting date</i> is.	
11.2(2)	The <i>completion date</i> is.	28 February 2025
13.2	The <i>period for reply</i> is	1 week
40	The <i>defects date</i> is	52 weeks after Completion
41.3	The <i>defect correction period</i> is	2 weeks
50.1	The <i>assessment day</i> is the	25th of each month.
50.5	The <i>delay damages</i> are	0,5% the contract value per day up to a maximum of 15% of the contract

¹ Except those actions which can only be done by the *Employer* as a Party to the contract.

50.6	The retention is	5% of every assessment made
51.2	The interest rate on late payment is	0%
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	The amount of the deductibles relevant to the event described in the applicable" Format ECSC3" policy available on http://www.eskom.co.za/Tenders/InsurancePoliciesProcedures/Pages/EIMS_Policies_From_1_April_2014_To_31_March_2015.aspx
	Does the United Kingdom Housing Grants, Construction and Regeneration Act (1996) apply?	No
82.1	The Employer provides this insurance.	as stated for "Format ECSC3" available on http://www.eskom.co.za/Tenders/InsurancePoliciesProcedures/Pages/EIMS_Policies_From_1_April_2014_To_31_March_2015.aspx (See Annexure A for basic guidance)
82.1	The minimum amount of cover for the third insurance stated in the Insurance Table is:	whatever the Contractor deems necessary in addition to that provided by the Employer.
82.1	The minimum amount of cover for the fourth insurance stated in the Insurance Table is:	As prescribed by the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993 and the Contractor's common law liability for people falling outside the scope of the Act with a limit of Indemnity of not less than R500 000 (Five hundred thousand Rands)
93.1	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).
	Address	[•]
	Tel No.	[•]
	Fax No.	[•]
	e-mail	[•]
93.2(2)	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
93.4	The <i>tribunal</i> is:	Arbitration.

The *arbitration procedure* is

The latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.

The place where arbitration is to be held is **South Africa**

The person or organisation who will choose an arbitrator.

- if the Parties cannot agree a choice or
- if the arbitration procedure does not state who selects an arbitrator, is **the Chairman for the time being or his nominee of the Association of Arbitrators (Southern Africa) or its successor body.**

The conditions of contract are the NEC3 Engineering and Construction Short Contract (April 2013)²³ and the following additional conditions Z1 to Z11 which 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 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

² If June 2005 Edition applies, delete April 2013 and insert June 2005

³ 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.

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*.
- 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.
 - Service Provider shall ensure Compliance to Act, Eskom Safety Standards and Specifications:
 - The company to be registered with COID and have a letter of good standing prior to commencement of the work
 - The client to evaluate and approve the contractor's safety file after the contract has been awarded.
 - Contractor safety plans that shall be signed and approved by the responsible managers and their safety practitioners. Ensure what is listed on the file shall be implemented during project execution.
 - The contractor to ensure that the employees are trained and competent on the activities to be done.

Mitigating Factors.

1. The successful contractor shall be expected to have OHS system that is aligned to the client's
 2. The contractor shall be expected to conduct task risk assessment and pre-job briefs every time before performing work.
 3. The contractor must ensure that they align themselves with the requirements of PTW wherever it issued.
 4. Strict adherence to the PPE requirement must be adhered to by the contractor
 5. The contractor shall prepare a safety file for approval by Safety risk Management before work commences.
- 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:

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

- Z11.1 A 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.

Quality assurance

Note the following quality requirements for supplier to be in compliance prior to contract award

- 240-105658000 (QM 58) - Specifying Eskom supplier quality requirements. Tenderer to comply with the selected requirements as per (**category 2**).

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- 240-68099512FORM A: Tender & Contract Quality Requirements For QM 58 and Quality Requirements For ISO 9001 Standard - Tenderer to complete and sign form A (Section A & E)
- 240-12248626 List of Tender Returnable Document - Tenderer to submit all tender returnable for section A, B and C, D & E as per list (**category 2**)

Quality Requirements

- a) The Supplier shall comply with the Eskom's QM 58 (240-105658000) Supplier Quality Management Specification
- b) Quality requirements include visual inspection by the *Employer*, who will be entitled to witness progress of work at any time. The *Employer* shall also have the right to stop work and re-instruct the *Contractor*, who will comply with the requests.
- c) The *Employer* may, by arrangement, inspect completed work. If, in opinion of the *Employer*, the work does not comply with the quality requirements expected from the *Contractor*, the *Employer* shall instruct the *Contractor* to rectify the faults. The *Contractor* will comply with the instructions.
- d) The *Contractor* will comply with the *Employer's* Quality Requirements as specified in procedure BIA/QA/STD/01 latest revision, which is available from the Documentation Centre or the internal Medupi Web site.

Quality Control

- a) The Contractor shall develop Quality Control Plans (QCPs) and ensure that such are approved by Engineering prior to any work execution. The principle of "no QCP, no work shall apply". All intervention points such as witness, hold and inspection points shall be strictly adhered to. Any Eskom intervention point waived by Eskom shall be in writing.
- b) The QCP shall be signed progressively by the Engineer, Eskom technician and *Contractor* technician.
- c) Data books, reviews, reports and diagrams/drawings shall be submitted to Engineering after the completion of respective work on each machine (CMs, PMs, overhauls and refurbishments). This, however, shall not apply to basic day-to-day activities.
- d) QCP's to be submitted to Engineering and Quality for approval prior to major overhaul or maintenance work commencement.
- e) The contractor shall compile detailed technical sound failure assessment reports on respective machine failures as part of the data packs.
- f) The *Contractor* shall compile detailed technical repair/refurbishment reports detailing what refurbishment work was done on respective machine repairs as part of the data packs.
- g) The contractor shall compile commissioning reports for each machine.
- h) Following the execution of planned services and overhauls, the contractor shall provide a technical performance report after commissioning as proof that the machine is performing as expected.
- i) The contractor shall compile repair method statements with respect to each damaged machine component(s).
- j) The *Contractor* shall compile a high-level weekly machines plant health report indicating the

state of each machine, noting all the defects on each machine as well as the plan of action for the correction or return to service. This report shall be provided to the Engineer and Line Maintenance Manager.

- k) The format (templates) of the reports as per e) - j) shall be negotiated with and approved by Eskom Engineering.
- l) The Contractor to ensure that all measuring and test equipment are calibrated at all times & proof thereof must be readily available.
- m) All Quality References and Standards as stipulated in this document will be adhered to.
- n) The Contractor shall utilise the Employer's quality documentation management system and processes.
- o) The supplier will ensure that the required OEM specifications and standards are met
- p) The Contractor is subjected to quality auditing at any point in time during the life of the contract.

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	The replacement cost where not covered by the Employer's insurance. The Employer's policy deductible as at contract date, where covered by the Employer's insurance	The Employer's certificate of Completion has been issued
Loss of or damage to Equipment, Plant and Materials	The replacement cost where not covered by the Employer's insurance. The Employer's policy deductible as at contract date,	The Defects Certificate has been issued

	where covered by the <i>Employer's</i> 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><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.</p> <p>The <i>Employer's</i> policy deductible as at contract date were covered by the <i>Employer's</i> insurance.</p> <p><u>Other property</u> The replacement cost.</p> <p><u>Bodily injury to or death of a person</u> 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

Insurance against or name of policy	Minimum amount of cover or minimum 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	Per the insurance policy document

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Business Interruption	
Nuclear Material Damage Terrorism	Per the insurance policy document

Z13 Nuclear Liability

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

Z14 Asbestos

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

AAIA	means approved asbestos inspection authority.
ACM	means asbestos containing materials.
AL	means action level, i.e. a level of 50% of the OEL, i.e. 0.1 regulated asbestos fibres per ml of air measured over a 4 hour period. The value at which proactive actions is required in order to control asbestos exposure to prevent exceeding the OEL.
Ambient Air	means breathable air in area of work with specific reference to breathing zone, which is defined to be a virtual area within a radius of approximately 30cm from the nose inlet.
Compliance Monitoring	means 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.

Installation and Commissioning of 10 Paired Armoured Telephone Cabling for Smokestack Lifts Intercom System at Lethabo Power Station

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.

Supplier Development Localization and Industrialization

Section 1: Specific Goals

A maximum of 10/20 points may be awarded to a tenderer for the specific goal specified for the tender. The points scored for the specific goal must be added to the points scored for price and the total must be rounded off to the nearest two decimal places. Subject to section 2(1)(f) of the Preferential Procurement Policy Framework Act, the contract must be awarded to the tenderer

scoring the highest points.

B-BBEE Status Level of Contributor	Number of points (90/10 system)	Number of points (80/20 system)
1	10	20
2	9	18
3	6	14
4	5	12
5	4	8
6	3	6
7	2	4
8	1	2
Non-compliant contributor	0	0

NB: The following documents are required to claim preference points,

- Valid B-BBEE certificate issued by a SANAS accredited verification agency / sworn affidavit / CIPS affidavit
- Proof of ownership / shareholding (preferably CIPC documentation) inclusive of shareholding breakdown
- Certified ID copies of shareholder(s)
- Proof of Disability (where applicable)

Tenderer failing to provide documentation for the allocation of preference points will not be disqualified, but'

- May only score point out of 90/80 for price
- Scores 0 points out of 10/20 for specific goals

Section 2: Objective criteria

The inclusion of objective criteria is not mandatory but a condition for contract award. If the tenderer does not meet objective criteria; it may lead to the second-ranked tenderer being recommended for award.

2.1 Designated Sectors

When applicable the following stipulated minimum threshold for Local Production and Content must be achieved in full by the tenderer

a) Is this Commodity or part of it a Designated Sector?

YES	NO
<input type="checkbox"/>	<input checked="" type="checkbox"/>

Please indicate below Designated Components

Commodity	Components	Local Content Threshold
Cables	<p style="text-align: center;">Electrical Cables</p> <p style="text-align: center;">Low voltage Low-Cost Reticulation Medium and High ACR</p> <p style="text-align: center;">Telecom Cables</p> <p style="text-align: center;">Potical Fibre Cables Copper Telecom Cables</p>	90%

NOTE: SBD 6.2 Declaration Form and Annex C (Local Content Declaration-Summary Schedule) are therefore **mandatory** and must be tender returnable if applicable.

If the quantity of materials and/or products cannot be wholly sourced in South Africa, **the DTI**, in consultation with the procuring entity, will grant exemption on a case-by-case basis. **Bidder should request and obtain written exemption from the Department of Trade and Industry (DTI).** Such exemption applications should be submitted and approvals should be obtained prior to the closure of the bid(s) concerned. **The DTI** in consultation with the procuring organ of state and the local industry will consider the exemption application on a case-by-case basis. Bidder should refer to national treasury Designated Sector Instruction Number 12 of 2016/2017 Paragraph 4.2.

NB: A tender that fails to meet the minimum stipulated threshold for local production and content will be disqualified.

2.2 CIDB Skills Development

Continuation of Mandatory Requirements

a) Is there CIDB compulsory training?

YES	NO
<input type="checkbox"/>	<input checked="" type="checkbox"/>
Not applicable	

If Yes, what is the % of the Construction Skills Development Goal % (CSDG)

If the answer above is Yes, it will then be mandatory for the supplier to match Eskom's targets

Criteria	Eskom Target	Tenderer Commitment
CSDG Percentage	N/A	
Description	N/A	

NOTE: Failure by the Contractor/Service Provider/Supplier to meet the CIDB CSDG mandatory % will render their tender non-responsive.

2.3 National Industrial Participation Programme

Eskom will implement the NIPP requirement, which determines that the contractor/supplier must contact the Department of Trade, Industry and Competition (dtic) to arrange for support and development of local businesses. Eskom is required to inform the tenderers of this requirement. NIPP will only be applicable for contracts with an FGN component or content of USD 5 million or more.

The following narrative must be captured in all tenders that have import/foreign content equal to or in excess of USD 5 million: (Not applicable)

“NIPP is a programme that seeks to leverage economic benefits and support the development of South African industry by effectively utilising the instrument of government procurement. The NIPP programme is mandatory for all government and parastatal purchases or lease contracts (goods and services) with an imported content equal to or exceeding USD 5 million.

“The programme targets South African and foreign industries, enterprises, and suppliers of goods and services to government/parastatals, where the imported content of such goods and services equals to or exceeds USD 5 million. The first customer of NIPP is the South African industry that benefits through the NIPP business plans, which, when implemented, generate new or additional business activities through one or more of the following: investment, export opportunities, job creation, increased local sales, SMME and BEE promotion, R&D, and technology transfer.

“Companies with an NIPP obligation must sign this obligation agreement with the Department of Trade, Industry and Competition (dtic) before the contract with Eskom Holdings SOC Ltd, as a purchasing entity, is signed. The obligation agreement governs the relationship between the dtic and the supplier. It defines the NIPP obligation value(s), requirements to fulfil the NIPP obligation, performance milestones, performance monitoring processes, and the NIPP credit allocation criteria.

“All tenders with an import content that is equal to or exceeds the threshold of USD 5 million compels the winning bidder to negotiate and enter into a NIPP obligation agreement with the dtic before signing the contract with Eskom.”.

2.4 Mandatory Subcontracting as condition of award (Not applicable)

Tenderer shall subcontract a minimum of **0%** of the contract value to the following designated groups:

- an EME or QSE which is 51% owned by black people living in rural or underdeveloped area or townships.

NOTE 1: Tenderers shall submit the following mandatory returnable for Subcontracting:

- Subcontracting agreement signed by both with subcontractors' company registration documents (CK and B-BBEE certificate or sworn affidavit) or

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- Copies of sub-contracting contracts (agreements) or copies of letters from the tenderer to the sub-contractors, stating the intent to sub-contract. The Tenderer should sign both documents and the Sub-contractor(s) earmarked.

Potential scope to be subcontracted and/or outsourced:

Subcontracting, in this instance, will be treated as a condition for contract award. A supplier awarded a contract may not subcontract more than 25% of the value of the contract to any other entity that does not have an equal or higher B-BBEE status level of a contributor than the supplier concerned unless the contract is subcontracted to an EME that has the capability and ability to execute the subcontract

Section 3: SDL&I Objectives in line with Reconstruction and Development Programme (RDP) Goals

Tenderers who complete and submit the objectives as required, but who do not meet Eskom's targets, will not be disqualified. SDL&I objectives do not form part of scoring but commitments will form part of contractual obligations

1. Transformation – BBBEE Improvement or Retention Plan

Transformation remains an area of focus, where Eskom continuously strives to align itself with national transformation imperatives to unlock growth, drive industrialization, create employment and contribute to skills development. Eskom encourages its suppliers to constantly strive to improve their B-BBEE rating. Whereas Tenderer/s will be allocated points in terms of a preference point system based on specific goals, Eskom also requests that tenderer/s submits their B-BBEE improvement or retention plan within 30 days of signing the contract.

Tenderer/s are therefore requested to indicate the extent to which they will maintain (only if the respondent is a Level 1) or may improve/maintain their B-BBEE status over the contract period if their B-BBEE status is level 2 or 3. Tenderer/s with a B-BBEE status level 4 at the time of contract award, shall migrate and achieve as a non-negotiable a milestone of B-BBEE Level 3 by the end of the first year of the contract and thereafter improve their B-BBEE status level or migrate by one level higher. Tenderer/s with a B-BBEE recognition status of Level 5 to Level 8 or non-compliant at the time of contract award, shall migrate and achieve as a non-negotiable a milestone of Level 4 by the end of the first year of the contract and thereafter improve at least one B-BBEE Level higher of each year from the second year of the contract. Tenderer/s are requested to submit their B-BBEE Improvement Plan as an essential document within 30 days of signing the contract.

NB: A valid B-BBEE certificate or Sworn Affidavit is a condition for contract award, if your company's annual Total Revenue is R10 Million or less you qualify as an Exempted Micro

Enterprise therefore you can submit Sworn Affidavit. If your annual Total Revenue is R50 Million or less, you qualify as Qualifying Small Enterprise and must comply with all of the elements of QSE score card relevant to your sector unless an entity is at least 51% Black owned you are required to obtain a Sworn affidavit. If your Annual Total Revenue is above R50m you need to submit a Valid B-BBEE certificate

2. Local Procurement Content

“Local Procurement Content” refers to value added in South Africa by South African resources. Where a single contract involves a combination of local and imported goods and/or services, the tender response must be separated into its components as per the Price Schedule included with the tender documents. Local procurement content is total spending minus the imported component.

Tenderers are required to submit their proposals in the table below.

Local Procurement Content	Eskom target	Tenderer Proposal
	100%	

3. Procurement spend on entities with a minimum 51% black ownership

The winning tenderer is encouraged to procure/spend on designated groups on the following paid invoices for both:

- the indirect expenses (e.g. overheads) on goods and services supplied to the contractor/supplier by designated groups; and
- direct spend on goods and services supplied by the subcontractors for the execution of the scope of work.

Activities, as a proportion of the local procurement content, which may be subcontracted to designated black owned enterprises must be submitted in a table below.

Procurement Designated Group	from	Eskom Target	Tenderer Proposal
Black Owned		0%	
Black Women Owned		0%	
Black Youth Owned		0%	
Black Persons with Disability		0%	

4. Jobs. Tenderers are required to submit proposals for the type and number of jobs that will be created and retained in South Africa as a direct result of being awarded a contract.

Type of Jobs to be created	Number of Jobs to be created
Type of Jobs to be retained	Number of Jobs to be retained

Section 3: SDL&I Penalty and Performance Security

Eskom will apply a penalty of 2.5% of the invoice amount for failure to meet SDL&I obligations.

Eskom will apply a penalty of 2.5% of the Contract Value for failure to meet SDL&I obligations.

For the duration of the contract, Eskom will retain 2.5% of every invoice (excluding VAT) as security for the fulfilment of all SDL&I Obligations. The retained amounts shall only be released to the Contractor upon:

- Eskom receives the SDL&I progress report/s from the contractor.
- Fulfilment of all SDL&I obligations by the contractor.
- Submission of an approved compliance report by SDL&I Department.

Section 4: Reporting and Monitoring

- The suppliers shall on a quarterly basis submit a report to Eskom in accordance with Data Collection Template on their compliance with the SDL&I obligations described above.
- Eskom shall review the SDL&I reports submitted by the suppliers within 30 (thirty) days of receipt of the reports and notify the suppliers in writing if their SDL&I obligations have not been met.
- Upon notification by Eskom that the suppliers have not met their SDL&I obligations, the suppliers shall be required to implement corrective measures to meet those SDL&I obligations before the commencement of the following report, failing which Retention clauses shall be invoked.
- Every contract shall be accompanied by the SDL&I Implementation Schedule, which must be completed by the suppliers and returned to SDL&I representative for acceptance 28 days after contract award. This will be used as a reference document for monitoring, measuring and reporting on the supplier’s progress in delivering on their stated SDL&I commitments

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)⁴ 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

⁴ Available from Engineering Contract Strategies Tel 011 803 3008, Fax 086 539 1902 or 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.

C3: Scope of Work

C3.1 Works Information

Installation of 10 Paired Armoured Telephone Cabling for Smokestack Lifts Intercom System. The scope of work to be completed as part of this contract includes procurement, construction, installation, AKZ labelling, commissioning, testing of the two 10 pair armoured telephone cables and handover to the Employer including the data packs.

1. Description of the works

- a) The intercom scope was excluded during implementation of the Lethabo Smoke-Stack Lifts Upgrade Project. The hardwired telephone intercom has been provided with the lifts and it is not connected to EOD hence cabling is required to establish the interface.
- b) The Contractor shall procure, supply, pull and install two 10 pair armoured telephone cables that is required to comply with 240-64813568 standard for Indoor and Outdoor Telephone Cable.
- c) The Contractor pulls and run the first 10 pair armoured telephone cable from smokestack 2 lift PLC box to smokestack 1 lift telephone PLC box. The second 10 pair armoured telephone cable is pulled from smokestack 2 PLC box to the telecom’s junction box in the OPCR switchgear room. as shown on Figure 1 below.

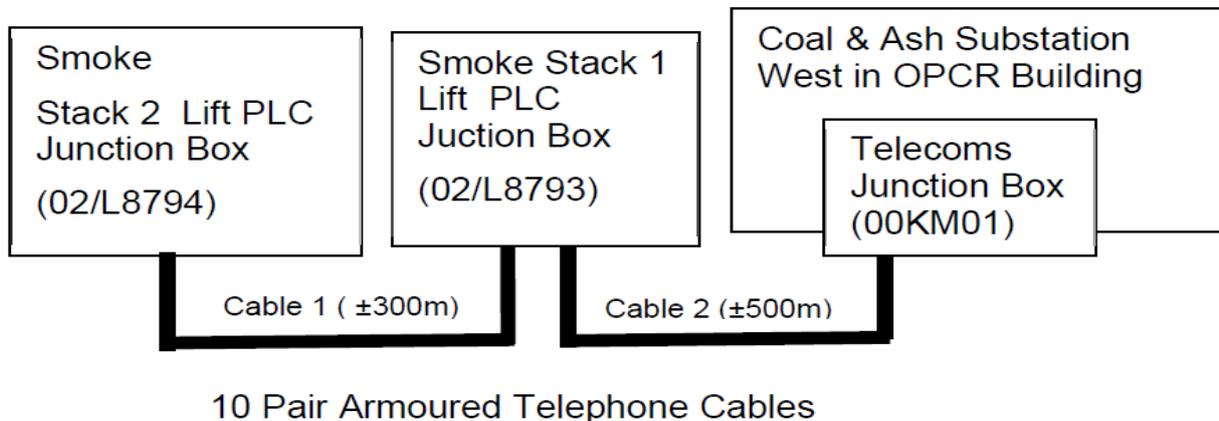


Figure 1: Cable Block Diagram

- d) The Contractor shall run the cables on the existing cable racks in the cable tunnels and leave a cable slack of 6m.
- e) The Contractor shall install new cable racks between the Smokestack lift PLC box and the existing cable racks in the cable tunnel.
- f) Termination of the cable to the PLC box shall be done by Eskom Telecoms technician not the Contractor.
- g) The estimated length of a cables is approximately 800m. The Contractor shall measure, fill the correct measurements in the cable schedule on Appendix C and submit the cable schedule to the Employer for approval prior the installation of cabling.

2. Cable Specifications

2.1 Conductors

a) Each conductor shall consist of annealed, electrolytic copper wire, smoothly drawn, approximately circular in section, uniform in quality, free from all defects and having a diameter in accordance with Table 1.

Table 1: Diameter of conductors and insulation thickness

DIAMETER OF THE CONDUCTOR (mm)			MINIMUM THICKNESS ON INSULATION (mm)	MAXIMUM OVERALL DIAMETER (mm)
NOM	MIN	MAX		
0.5	0.49	0.51	0.18	1.02

b) The electrical resistance of the conductors shall comply with those quoted in Table 2 below

Table 2: Resistance of conductors at 20°C

DIAMETER OF THE CONDUCTOR (mm)			MAXIMUM AVERAGE RESISTANCE OF CONDUCTORS (Ω/km)
NOM	MIN	MAX	
0.5	0.49	0.51	90.31

c) The conductors shall withstand the following elongation before fracture.

- 1) 15% for 0.5mm conductors

d) Any joint in the conductor shall be made by a method approved by inspecting officer and shall fulfil the following conditions:

- 1) The tensile strength of a 250 mm length of conductor containing a joint not to less than 90% of that similar sample of conductor without a joint.
- 2) The overall diameter of the conductor shall not be increased at a joint.

2.2 Insulation of Cabling

2.2.1 Material

a) The conductors shall be uniformly covered with insulating material consisting of coloured polyethylene. The polyethylene shall be complaint with SANS 1411-7, type PD1 Shrink Back Test.

b) The conductor insulation shall not shrink back more than 6mm overall or more than 4mm from either end of the sample cable, when subjected to 100°C for 24 hours.

2.2.2 Thickness

- a) Insulation shall be applied concentrically around the conductor and shall fit closely thereto.

2.2.3 Colours of Insulation

- a) The colours shall be in accordance with SANS 1091 National colour standard.
- b) Slight deviation from the colour standards defined in SANS 1091 shall not constitute grounds for rejection provided the colours are easily identifiable.
- c) The insulation of each conductor shall be colour coded in accordance with Table 3 below.

Table 3: Colour Code for Cables

PAIR NUMBER	PAIR INSULATION COLOUR	
	A	B
1	Blue	White
2	Orange	White
3	Green	White
4	Brown	White
5	Grey	White
6	Blue	Red
7	Orange	Red
8	Green	Red
9	Brown	Red
10	Grey	Red

2.3 Twinning

- a) Two insulated conductors shall be uniformly twisted together. The twist length of a pair shall not be greater than 100mm for 0.5mm diameter conductor cable.
- b) The twisting of cable pairs shall be such that cross-talk-attenuation between any two unshielded pairs of a cable shall be greater than 50 dB/km at audio frequencies (300-3400Hz).

2.4 Stranding of Cables

- a) Two insulated conductors shall be uniformly twisted together.
- a) The twist length of a pair shall not be greater than 100mm for 0.5mm conductor cable.
- c) The twisting of cable pairs shall be such that cross-talk-attenuation between any two unshielded pairs of a cable shall be greater than 50 dB/km at audio frequencies (300-3400Hz).

2.5 Tape Lapping of Cables

- a) The cable core shall be covered with lapping of suitable paper to provide at least two layers at any point.
- b) There shall be no adhesion between the core covering and the conductor insulation and no softening of the insulation on the conductors shall occur during the sheathing process.

2.6 Screen Moisture Barrier

- a) The cable core shall be completely covered with aluminium foil coated on one side with polyethylene applied longitudinally and with an overlap of not less than 6mm. Where the specified overall diameter of the cable sheath is 25mm or less, the minimum overlap shall be 3mm. The polyethylene coating shall be outside.
- b) The nominal thickness of the Aluminium / Polyethylene Laminate film shall be 0.15mm and 0.04mm respectively.
- c) The peel strength of polyethylene from the aluminium shall not be less than 0.25 N/mm width of the foil when tested.

2.7 Identification

- a) The number of pairs conductor size, manufacturers name and the year of manufacture shall be clearly embossed or indelibly marked on the outer sheath of the cable. Alternatively, a tape bearing the information shall be run under the sheath of the cable. Such information shall be repeated at least once every 350mm.

2.8 Armouring

The nominal diameter of the wire is specified in Table 4 below:

Table 4: Physical Dimensions of Armoured Cables

Cable Pairage	10
Nominal conductor diameter (mm)	0.5
Minimal Sheath Thickness (mm)	1
Nominal Overall Cable Diameter (mm)	15
Nominal diameter of steel wire armouring (mm)	0.9

2.9 Sheath

- a) All cables sheath and bedding where applicable, shall be of halogen-free, low smoke and flame-retardant compounds to SANS 1411-1,4&5.
- b) Alternatively, the bedding shall be general purpose PVC and the sheath shall be flaming retardant PVC to SANS 1507.
- c) The sheath shall form a smooth surfaced close-fitting tube, approximately circular in shape free from pin holes and any other defects. Ovality shall not be the difference between the maximum and minimum diameters at the same cross section expressed as a percentage of the minimum diameter.

Installation and Commissioning of 10 Paired Armoured Telephone Cabling for Smokestack Lifts Intercom System at Lethabo Power Station

- d) The sheath shall be applied in such a manner that no undue residual strain is left in the material. They shall be no adhesion between and the conductor insulation.

3. TESTING AND COMMISSIONING OF CABLES

General

- a) The armoured telephone cables supplied in this specification must be tested at the works as detailed in SANS 1507-6 as minimum requirement. Eskom will, however, accept standard European or American test methods on imported cable if evidence provided indicates that these are equal to, or more stringent, than the test specified.
- b) In view of the above requirements, all details of the manufacture's intended "Type", "Sample" and "Routine" tests are to be supplied with the tender documentation.
- c) The Contractor indicates in Schedule B the specific tests performed on the cables and shall provide type test certificates before the first delivery of cables.

3.1 Diameter of Wires

- a) The diameter of wire forming the conductor shall be taken as an average of not fewer than six measurements made at random on a representative piece of wire 300mm long. A method of measurement giving an accuracy of not less than 0.0025mm shall be used.
- b) Conductor Resistance the DC resistance shall be measured at room temperature, care being taken that at commencement of test the samples and reference standard have same temperature as the surrounding air. The measurement shall be carried out to an accuracy of within 0,5%. The length of conductor and method of testing shall be adequate to provide the accuracy required.

3.2 Conductor Elongation before fracture

- a) Samples of conductor, 250mm long taken from a completed cable shall when slowly and steadily stretched at a rate of 50mm/min give an elongation before fracture of 15% for 0.5 mm cables and 20% for 0.63mm and 0.9 mm cables.

3.3 Thickness of insulation

- a) The Contractor shall measure the thickness of insulation at three or more sections along the length of a representative sample of the PE insulated conductor 300mm long and taken not less than 300mm from the end of a factory.
- b) This measurement shall be made by taking two measurements on each of the two diameters at right angles to one another through the centre of the conductor i.e., at least 12 individual measurements shall be taken on the sample.
- c) A method of measurement capable of reading accurately to 0.025 shall be used. No reading shall fall below the specified minimum in Table 1 (Diameter of conductors and Insulation thickness).
- d) The thickness of sheathing shall be measured by the same method except that the measurement shall be taken at those points of a section where the sheath thickness is at its geometrical minimum.
- e) No reading shall fall below the specified minimum in Table 4 (Physical Dimensions of Armoured Cables).

3.4 High Voltage Test

a) A voltage of 2000 V RMS at a frequency of 50Hz, or 3000V DC shall be applied between each conductor in the cable and the remaining conductors bunched and earthed. The voltage shall be applied gradually and maintained at the full value for one minute without breakdown.

3.5 Insulation Resistance

a) Sample lengths (10 m or longer) of insulated conductor shall be immersed in tap water for at least one hour. Thereafter 500V DC shall be applied between the conductor and water. After steady electrification for one minute the insulation resistance shall not be less than 37.5 MΩ per 1000m at 20°C.

3.6 Shrink Back Test

a) Sample lengths of insulated wires shall be selected, at random, from a multi-conductor cable or from rolls of a wire and cut to length of 150mm. These lengths shall be placed in a convection type circulating oven at 100°C for 24 hours.

b) The total shrinks back of insulation after cooling, as represented by the sum of the lengths of bare conductor protruding from the insulation at each end, shall not exceed 6mm and the length of bare conductor at either end shall not exceed 4mm. In addition shall have no visible signs of cracking.

3.7 Spark Test

a) Conductors shall be spark tested after insulation in accordance with SANS 1507-6 or an approved alternative method at 3W AC or 5W DC.

3.8 Capacitive Unbalance

- a) Unless otherwise specified the capacitive unbalance between pairs in the cable measured at audio frequency and corrected in accordance with this sub-clause, shall not exceed 400pF per 500m.
- b) The measured values shall be corrected as follows: lengths less than 100m being considered as 100m. The measured values shall be divided by X if shorter than 500m and multiplied by X if longer than 500m.

3.9 Continuity of Moisture Barrier

a) The moisture barrier shall be electrically tested for continuity and its resistance recorded in Ω/km.

3.10 Sheath Spark Test

a) The sheath shall be spark tested in accordance with SANS 1507-6 or any other approved alternative method at 2kV AC or 1Kv DC.

3.11 Type Tests Table

- a) All type tests must be performed in accordance with Table 5 below,

Table 5: Type Tests

COMPONENT	TEST PROPERTY	REFERENCE
Conductor	Elongation at break	According to SANS 6282-3 Section 2.Elongation at break of wire
Insulation	Physical properties	According to SANS 1411-2: Polyvinyl chloride (PVC)
Insulation	Spark test	According to SANS 62230
Sheath	Physical properties	According to SANS 1411-2: Polyvinyl chloride (PVC)
Finished Cable	Voltage withstand	According to SANS 6284-3

3.12 Test Certificates

- a) Records of all type and routine tests shall be available for inspection by Eskom’s representative at any time during the contract period. Test results are to be kept by supplier for a period of 5 years after expiry of contract.
- b) Where cables are to SANS specifications, the SANS specification should be embossed on the cable and SANS mark should be imprinted on the cable drum.

3.13 Witnessing of Tests

- a) Eskom reserves the right to appoint a representative to inspect the cable at any stage of manufacture or to be present at any time that tests are performed.
- b) If witnessed type tests apply, the samples must be selected according to the procedure detailed in SANS 1507-6. Such inspection shall not prevent the subsequent rejection if goods are later found to be defective.

3.14 PACKAGING

- a) Cables shall be supplied in drum lengths of 500m unless otherwise indicated. All cables shall be marked with the following:
 - Eskom order number.
 - Eskom cable code and specification to which the cable is manufactured.
 - Gross mass of drum and cable in kilograms.
 - The words “Not to be laid flat” shall be written visibly on the drum.
 - The name of the manufacturer and Trademark.
 - Arrow indicating the correct direction of rolling.
 - The length of the cable.

3.15 DELIVERY

- a) The equipment shall be delivered to the destination stated in the enquiry document.
- b) The equipment shall be protectively packed in such a way that it can be safely transported handled and stored at site, as it will not necessarily be possible for installation to commence immediately upon delivery.
- c) Attention is drawn to the fact that Eskom will only accept delivery at the specified destination only, and that the supplier shall make all necessary arrangements for acceptance, offloading and transshipping at all intermediate points, as well as the ultimate off-loading at the specified destination.

3.16 SITE TESTS

- a) All tests shall be in accordance with SANS 1507 and other relevant standards.
- b) Testing and Commissioning of cables shall be done by Contractor and witnessed by the commissioning team.
- c) The commissioning team comprises of the Contractor, Eskom C&I engineer, Thole Lift Technician and Eskom Telecoms Technician.
- d) The Eskom C&I Engineer shall have the right to call for or to carry out any additional tests, which may be necessary to prove that the requirements of the specification have been met. The Contractor shall assist with the conducting of these tests without delay.

3.17. General Requirements

3.17.1 DOCUMENTATION

- a) The Contractor shall furnish Eskom with the following product documentation:
 - Cable specification.
 - Cable construction details.

3.17.2 Drawings

- a) The creation, issuing and control of all Engineering Drawings will be in accordance with the latest revision of 240-86973501 (Engineering Drawing Standards – Common Requirements) to be supplied as part of the enquiry documents.
- b) All drawings must be issued to Eskom in both native CADD format (.dwg/.dgn) and PDF format as per 240-86973501 (Engineering Drawing Standards – Common Requirements).
- c) Contractor shall fully complete and certify drawings for compliance with the Contract requirements. Drawings shall have title block entries that clearly indicate the drawing is certified.
- d) Each submitted drawing shall be project unique and shall be clearly marked with the name of the project, Employer's Contract title, Employer's Contract file number, project equipment or structure nomenclature, component identification numbers, and Employer's name.
- e) The project name shall be listed on all drawings, including manufacturers' drawings. Tag numbers and equipment names shall be listed on all manufacturers' drawings.
- f) The project name shall be listed on all drawings, including manufacturers' drawings. Tag numbers and equipment names shall be listed on all manufacturers' drawings.
- g) The language of all documentation shall be in the English language. The units of measure shall be metric.

3.17.3 Drawing Submittal

- a) All documents and records management will be performed according to Project/Plant Specific
- b) Documents and Records Procedure. Any uncertainty regarding this should be clarified with the Employer.
- c) The Contractor shall comply with all minimum document metadata as specified in Technical Documentation Classification and Designation Standard (240-54179170).
- d) Transmittal letters shall be provided with each document submittal. The transmittal letter shall include the Contractor drawing number, revision number, and title for each drawing attached.
- e) Each drawing title shall be unique and shall be descriptive of the specific drawing content.
- f) Catalogue pages are not acceptable, except as drawings for standard non engineered products and when the catalogue pages provide all dimensional data, all external termination data, and mounting data.
- g) The catalogue page shall be submitted with a typed cover page clearly indicating the name of the project, unit designation, specification title, specification number, component identification numbers, model number, Contractor drawing number, and Employer's name. Drawings shall be submitted with all numerical values in metric units.

3.17.4 Documentation Requirements

- a) All documents supplied by the Contractor shall be subject to Eskom's approval. For consistency, it is important that all documents used within the project follow the same layout, style and formatting as described in the Technical Documents and Records Management Work Instruction (240-53114186).
- b) Documents such as QCP's, Method Statements and other documents impacting the work shall be approved by the Employer at least 3 working days prior to commencement of the Works.
- c) Each revision of a document or drawing shall be accompanied with a list of the comments made by the Employer on the previous revision if applicable and the response/corrective action taken by the Contractor. Changes shall be recorded in a revision table contained in each drawing/document.
- d) Documents and drawings shall indicate the Employer's number as allocated by the Employer.
- e) The Contractor may have his own internal document or drawing number on the document or drawing, but where reference is made among documents, the Employer's number shall be used as the reference number.
- f) The Contractor shall compile a complete data book for all work done during manufacturing, construction and commission containing the following as a minimum if applicable:
 - Approved "As built" drawings.
 - Approved QCP / ITP
 - Inspection reports
 - The manufacturer's certificate.

3.17.5 Data Books

- a. The Contractor compiles data Books progressively for all manufacturing and construction/erection inspection, and test records and documents pertaining to the new 10 pair.
- b. armoured telephone cables. The Contractor submits data books to the Employer for their review.
- c. for all Plant and Materials and work undertaken with the applicable requirements and specifications.

3.18 GENERAL REQUIREMENTS

- a) The Contractor shall include the Employer's drawing number in the drawing title block. This requirement only applies to design drawings developed by the Contractor and his Sub-Contractors. It shall not apply to drawings developed by manufacturers for equipment and material such as valves, instruments, etc. Drawing numbers shall be assigned by the Employer as drawings are developed.
- b) The project name shall be listed on all drawings, including manufacturers' drawings. A separate sheet may be attached to the submittal if needed to adequately list all tag numbers associated with the drawings such as valves or instruments which may have numerous tag numbers associated with it.
- c) The language of all documentation shall be in the English language. The units of measure shall be metric.

3.18 PLANT IDENTIFICATION

3.18.1 Identification of Cable Types

- a) Cable types shall be identified by means of seven-character code, details of which are set out in drawing 0.00/1744 see Appendix A.
- b) The first character is "T" denotes the cable type as telephone, the second character is "Q" denotes the conductor insulation is coloured Polyethylene, the third character is "H" denotes construction of pair overall screened, the fourth character is "10" denotes the number of pairs, the fifth character is "A" denotes the conductor diameter of 0.5mm, the sixth character is "C" denotes the conductor material which is stranded copper and the last character is "X" which denotes the cable finish/protection which is steel wire armoured PVC sheathed.
- c) The copper conductors shall be of stranded or solid construction and annealed to the requirements of SANS1507. A minimum of seven strands shall be used on all core cables.
- d) The conductor insulation shall be flexible grade PVC as detailed on SANS 1507, of thickness to withstand the spark test specified.

3.18.2 Plant Labelling

- a) It is the responsibility of the Contractor to manufacture and install coded labels. Labels are manufactured and installed according to Plant Labelling standard (240-71432150).
- b) The Contractor will label the new 10 pair armoured telephone cables with coded labels.
- c) The Coding technician will do a quality check on the adherence to the Coding and labelling standards before installation on plant.

3.19. HANDOVER

a) Apart from any statutory data packages required, the Contractor also compiles and supplies a data package of the relevant drawings, test certificates etc. to the Employer's Representative for acceptance.

4. Constraints on how the Contractor Provides the Works

State any constraints on the sequence and timing of work and on the methods and conduct of work including the requirements for any work by the *Employer*. Also include any management related constraints, invoicing and payment procedures some of which have been inserted below as a minimum guide.

4.1 Meetings

Provide information about regular meetings to be held such as early warning and compensation event meetings (suggest weekly), safety and planning meetings.

4.2 Use of standard forms

Provide details of 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

The Z clauses make reference to invoicing procedures stated here in this Works Information. Also include a list of information which is to be shown on an invoice. The following text is provided as a guide; revise to suit actual requirements.

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.

Add procedures for invoice submission and payment (e. g. electronic payment instructions)

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. [See clause 11.2(5) and 63.2]. State in what form these records are to be kept and how accessed by the *Employer*.

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

If the ASGI-SA requirements are to be included in this contract specify constraints which *Contractor* must comply with after contract award in regard to any ASGI-SA requirements. The ASGI-SA Compliance Schedule completed in the returnable tender schedules is reproduced here. If ASGI-SA does not apply, delete this paragraph.

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 stated below.

[Insert the agreed ASGI-SA Compliance Schedule here]

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. [Elaborate on access to and format of records and frequency of submission etc.]

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

Specify constraints which *Contractor* must comply with after contract award in regard to any Broad Based Black Economic Empowerment (B-BBEE) or preferencing scheme measures.

4.7 Facilities to be provided by the *Contractor*.

State any requirements such as offices on site for the *Employer*.

4.8 Title to material from excavation and demolition

Read clause 70.2 then provide details as required. Particularly relevant in demolition where substantial amounts of copper are involved.

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C4: Site Information

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

1. Site Procedures and Regulations

1.1 Site location and Security

- The Site is at Lethabo Power Station situated \pm 18 km South of Vereeniging on the Viljoensdrift - Deneysville Road, Free State. Access to the site will be via the main security gate only.
- The *Employer* will inform the *Contractor* of the access procedures, and it should be expected that such procedures may change depending on the prevailing security situation.
- The *Contractor* to allow in his price and program for delays at the security gate. The *Employer* reserves the right for its Security personnel to search persons or vehicles entering or leaving the premises. This includes, but is not limited to briefcases and toolboxes.

1.2 Temporary Gate Permits

- The *Contractor* provides the *Employer* with the personal details of their staff at least two days prior to the occupation date. All names and details to be submitted to the *Employer* who arranges for all gate permits.

1.3 Occupational Health and Safety Induction Course

- All the employees of the *Contractor* must attend a health and safety induction course provided by the *Employer* at the security offices before they will be allowed to work on the Site. It is the responsibility of the *Contractor* to ensure that all employees have attended the health and safety induction.
- The Induction course includes an awareness on the Error prevention and Improvement tools and techniques to ensure familiarisation and use of these error-prevention tools/techniques inclusive of, Pre and Post-job briefs, Risk Assessments, Self-checks (STAR principle), Peer Checks, Job observations, Accountability, Effective communications e.g. 3- way, Questioning attitude, Procedural adherence, Hand overs and other.
- A list of employees requiring safety induction must be submitted at least 2 days in advance arrival so that the details of the safety and health induction course can be communicated.

The *Contractor* and his sub-*Contractors* ensure at all times compliance with safety regulations imposed by any Act of Parliament, ordinance or any regulation or by-law of any local or statutory authority. The *Contractor* acts in accordance with the health and safety requirements stated in the Works Information.

- In carrying out its obligations to the *Employer* in terms of this contract; in providing the Works; in using Plant, Materials and Equipment; and while at the Site for any reason, the *Contractor* complies and procures and ensures the compliance by its employees, agents, Sub-*Contractors* and mandataries with:
- the provisions of the Occupational Health and Safety Act 85 of 1993 (as amended) and all regulations in force from time to time in terms of that Act ("the OHSA"); and the Eskom "Health, Safety and Environmental specifications for *Contractors*" document attached to the Works Information (as amended from time to time) and such other Eskom Safety Regulations as are applicable to the Works and are provided in writing to the *Contractor* (collectively "the Eskom Regulations"). The Eskom Regulations may be amended from time to time by the *Employer* and all

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amendments will be provided in writing to the *Contractor*. The *Contractor* complies with the provisions of the latest written version of the Eskom Regulations with which it has been provided; and the health and safety plan prepared by the *Contractor* in accordance with the SHEQ Requirements

(The OHSA and the Eskom Regulations are collectively referred to as the "SHEQ Requirements".)

- The *Contractor*, at all times, considers itself to be the "*Employer*" for the purposes of the OHSA and shall not consider itself under the supervision or management of the *Employer* with regard to compliance with the SHEQ Requirements, the *Contractor* shall furthermore not consider itself to be a subordinate or under the supervision of the *Employer* in respect of these matters. The *Contractor* is at all times responsible for the supervision of its employees, agents, Sub-*Contractors* and mandataries and takes full responsibility and accountability for ensuring they are competent, aware of the SHEQ Requirements and execute the Works in accordance with the SHEQ Requirements.
- The *Contractor* acknowledges that it is fully aware of the requirements of all the above and undertakes to employ only people who have been duly authorized in terms thereof and who have received sufficient training to ensure that they can comply therewith.
- The *Contractor* ensures that all statutory appointments and appointments required by any Eskom Regulations are made and that all appointees fully understand their responsibilities and is trained and competent to execute their duties. The *Contractor* supervises the execution of their duties by all such appointees.
- The *Contractor* shall appoint a person who will liaise with the Eskom Safety Officer responsible for the premises relevant to this contract. The person so appointed shall, on request: supply the Eskom Safety Officer with copies of minutes of all Health And Safety Committee meetings, whenever he is required to do so; 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.

The *Employer*, or any person appointed by the *Employer*, may, at any stage during the duration of this contract:

- conduct health and safety audits regarding all aspects of compliance with the SHEQ Requirements, at any off-site place of work, or the site establishment of the *Contractor*;
 - refuse any employee, Subcontractor or agent of the *Contractor* access to the premises if such person has been found to commit an unsafe act or any unsafe working practice or is found not to be qualified or authorised in terms of the SHEQ Requirements;
 - Issue the *Contractor* with a stop order should the *Employer* become aware of any unsafe working procedure or condition or any non-compliance with any provision of the SHEQ Requirements.
 - The *Contractor* immediately reports any disabling injury as well as any threat to health or safety of which it becomes aware at the Works or on the Site to the *Employer's Representative*.
- The *Contractor* undertakes not to do, or not to allow anything to be done which will contravene any of the provisions of the Act, Regulations or Safety and Operating Procedures.
 - The *Contractor* appoints a person, qualified in accordance with the SHEQ Requirements, as the liaison with the Eskom Safety Officer for all matters related to health and safety, this person shall be contactable 24 hours a day.
 - The *Contractor* confirms that it has been provided with sufficient written information regarding the health and safety arrangements and procedures applicable to the Works to ensure compliance by it and all employees, agents, Sub-*Contractors* or mandataries with the SHEQ Requirements while providing the Works in terms of this contract. As such, the *Contractor* confirms that this contract and the relevant Eskom Regulations referred to in this contract constitute written arrangements and procedures between the *Contractor* and the *Employer* regarding health and safety for the purposes of section 37(2) of the

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OHSA.

- The *Contractor* agrees that the *Employer* is relieved of any and all of its responsibilities and liabilities in terms of Section 37(1) of OHSA in respect of any acts or omissions of the *Contractor*, and the *Contractor's* employees, agents or Sub-*Contractors*, to the extent permitted by the OHSA.
- The *Contractor* hereby indemnifies the *Employer* and holds the *Employer* harmless in respect of any and all loss, costs, claims, demands, liabilities, damage, penalties or expense that may be made against the *Employer* and/or suffered or incurred by the *Employer* (as the case may be) as a result of, any failure of the *Contractor*, its employees, agents, Sub-*Contractors* and/or mandataries to comply with their obligations in terms of clause 16, and/or the failure of the *Employer* to procure the compliance by the *Contractor*, its employees, agents, Sub-*Contractors* and/or mandataries with their responsibilities and/or obligations in terms of or arising from the OHSA.
- In carrying out his obligation as the mandatory to the *Employer* for this contract in terms of the National Environmental Management Act No.107 of 1998, the *Contractor* ensures that he complies with the Act when Providing the Services or using plant, materials or equipment.

1.5 Permit to Work System

- NO work shall be carried out without a "PERMIT TO WORK"
- The *Contractor's* Responsible Person must satisfy himself that all sources of possible danger are isolated. Details of the Permit to Work system can be found in the Plant Safety Regulations for Lethabo Power Station, Eskom. The *Contractor* must also make provision for sufficient Authorise Supervisor(s) depending on the contractual obligations. The Authorised Supervisor will need to undergo a week's training, which will be arranged at a suitable Eskom facility. This person must also pass an exam to verify his understanding of the procedure, after which he/she will need to be interviewed by a panel to discuss the practical understanding of being appointed as an Authorised Supervisor.
- A Master Permit to Work is used on declared major outages, details can be found in local procedure LBA 00085. Permit changes are made during the dead time, if it is required by the *Contractor* that a certain supply be made available or plant tested than this can be applied for at the Outage Management Meeting at least 1 day in advance.
- Plant with a prohibitive sign attached may only be operated by appointed Eskom personnel. Any *Contractor* employee found tampering with such plant will be permanently removed from Site.

1.6 Transportation of passengers: open LDV's:

No *Eskom* employee or *Contractor* would be allowed to transport passengers on the back of open light delivery vehicles (LDV's). It is a legal requirement to provide safe transportation of *Eskom* and *Contractor* employees – therefore the following will be enforced:

- All passengers must be transported in a closed vehicle with proper and adequate Seating, fitted with safety belt for the number of passengers to be transported.
- Tools and equipment must be properly secured.
- Only authorised drivers may transport passengers.
- Proof must be submitted on request in terms of valid roadworthiness of all vehicles
- The above must apply to on site and off site transportation of passengers.

1.7 Eskom Life Saving Rules:

Life Saving Rules have been developed that will apply to all Eskom *Employees*, agents, consultants and *Contractors*.

Rule 1: Open, Isolate, Test, Earth, Bond, and/or Insulate before touch - that is any plant operating above 1 000 V.

Rule 2: Hook up at heights - no person may work at height where there is a risk of falling.

Rule 3: Buckle up – no person may drive any vehicle on Eskom business and/or on Eskom premises: unless the driver and all passengers are wearing seat belts.

Rule 4: Be sober (no person is allowed to work under the influence of drugs and alcohol).

Rule 5: Use a permit to work – where an authorization limitation exists, no person shall work without the required permit to work.

1.8 Local Safety Procedures

The *Contractor* adheres to all local procedures. A list of local procedures is available on request from the *Employer*.

1.9 Incidents / Accidents

- Incidents and accidents must be reported and investigated as detailed in LBA 00030. All incidents must also be reported to the *Employer* within 24 hours.
- First aid must be made available either by the *Contractor* or use can be made of the Lethabo medical centre at a fee. The availability of the *Contractor's* own first aid does not relieve the *Contractor* of his obligation to report and investigate the incident in accordance with Lethabo Procedure.
- The *Employer* will accompany the *Contractor* to hospital in the case of serious injury.

1.10 Fire Prevention

- Fire prevention and protection requirements to which *Contractors* must comply are detailed in LBA 00030.

1.11 Protective Equipment and Clothing

- The *Contractor* supplies his own personal protective equipment necessary to carry out the *works* and the *Contractor* shall ensure that all overalls for his staff have clearly identifying **company LOGO's**
- The *Contractor* is also responsible to inspect and maintain such equipment as required in terms of the OHS Act and local procedures.

1.12 Inspection of Equipment

- The *Contractor's* equipment is inspected by an authorised Eskom employee on arrival at the site.
- The following documentation is required to accompany the equipment where applicable: copies of all test certificates and maintenance records.
- Lifting equipment and electrical equipment must be marked with a unique number, code or colour code for identification. If the equipment is found to be in an unsatisfactory condition or if insufficient maintenance has been carried out on the equipment then it will not be approved for use on Site. A list of all lifting equipment and electrical equipment must be submitted to the *Employer* at least 2 days prior to the occupation date. This list must indicate the unique number and description of the equipment.

- Training requirements must comply with the Works Information and statutory requirements.

1.13 Documentation

The *Contractor* is responsible to have the following documentation available on site in accordance with LBA 00030:

- A copy of the OHS Act.
- Copies of all site accident report forms as required by the OHS Act.
- Copies of minutes of health and safety meetings held on site.
- Copies of inspection reports produced by the accident prevention officer.
- Copies of attendance registers for all incidents or work stoppages

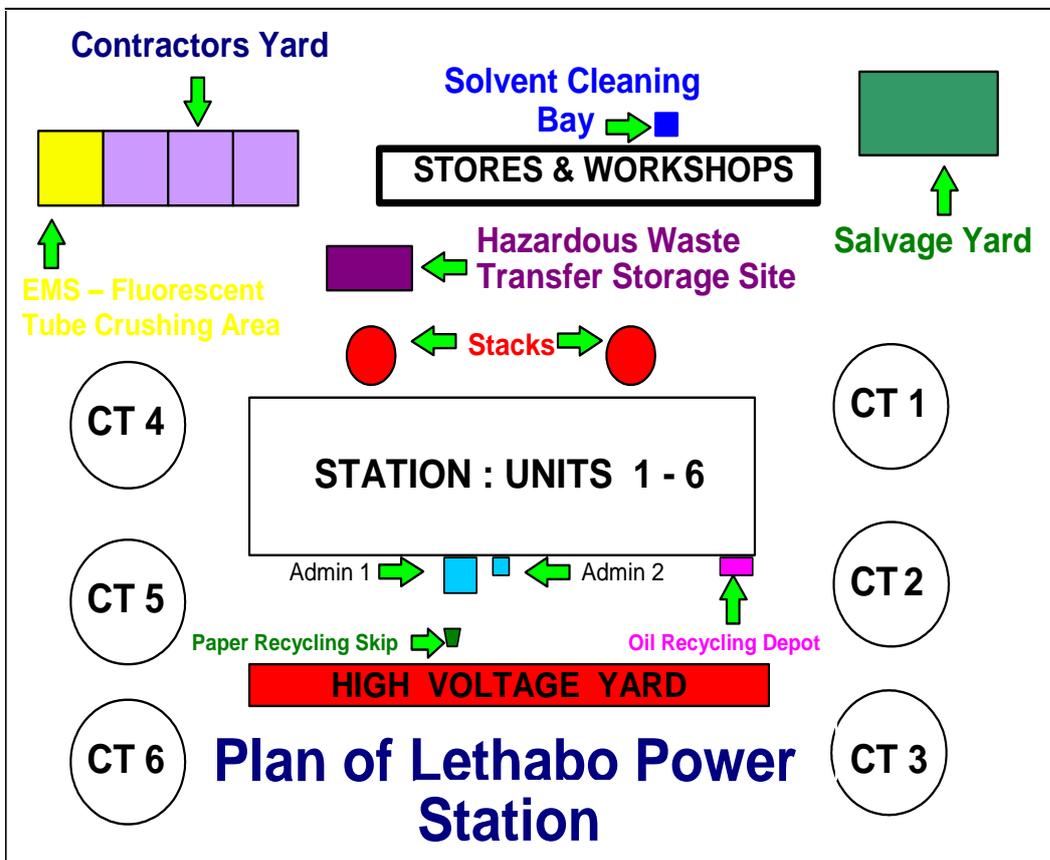
1.14 Environmental Policy and Waste Handling

The *Contractor* shall submit an Environmental Management Plan (EMP) to be reviewed and approved by Eskom environmental officer, one week before the commencement of works if required as per the Works Information.

1.15 Disposal of Waste

Waste shall be removed promptly to the designated disposal area as per below requirements:

- Domestic waste to the white waste bins
- No stockpiling will be permitted
- Production waste in the marked bins i.e. coal and ash only
- Paper in its recycling bin
- Contact Civil Engineering for the disposal of building rubble
- Scrap metal, Wood & Rubber, Redundant Valves, Pipes, and Equipment etc. to be placed in the marked bins in the Salvage Yard. Solvents and cloths used to the Cleaning Bay.



1.16 Hazardous Waste Disposal and Handling

- Any new hazardous waste that comes to the temporary hazardous waste site must be accompanied by an SDS; all other hazardous waste can be delivered without the SDS.
- An inventory is signed by the person who delivers the hazardous waste and the waste coordinator must acknowledge the receipt of the waste.
- A 210l drum with lid will be issued to the person who has delivered the waste after the inventory is signed.
- Drums with incorrect colour coding or drums without lids will not be accepted at the temporary hazardous waste site.

2. Additional General information

LBS00067 to be used as it contains statutory requirements as well as the minimum SHE requirements to which Eskom employees and contractors must comply whilst performing work on the premises of Lethabo Power Station.

The purpose of the procedure is to assist the Contract Supervisor or Project Manager, and the contractor to develop, implement and maintain an organised Safety, Health and Environment Management Plan performing work.

Contractors are accountable for taking all the necessary steps to protect all persons (including employees, visitors, and the general public), to protect the environment and property against any harm during the course of performing work or services in relation to their contractual obligations. In addition, all work procedures and equipment will be carried out in accordance with Eskom and legislative requirements.

Eskom's contractors have the fundamental accountability and responsibility for executing on-site safety, health, and environment issues for their activities, services, products, and work. Each contractor is responsible for ensuring that its employees and the employees of any appointed contractors comply with all occupational safety, health, and environmental (SHE) statutory requirements and the policies and procedures of Eskom Holdings SOC Limited.

This procedure is supplementary to the requirements of relevant legislation and the conditions of the contract.

2.1 Plant & Materials

- The *Employer* may at his own discretion, supply any Plant and Materials as may be required by the *Contractor* to Provide the Works.
- The *Contractor* is to notify the *Employer* in writing, 48 hrs in advance, of such Plant and Materials required.

2.2 Equipment or Material Access and Removal

2.2.1 Access

- The *Contractor* ensures that all equipment and materials brought through the security gate is signed in at the main security gate on an OV18 form.

2.2.2 Removal

- The *Contractor* is not allowed to remove any equipment or materials from site without producing the relevant OV18 forms, or the equipment lists. (Security Access Sign In)
- If the equipment or material is to be removed the same day, on which they were brought on to site, then the OV18 form will need to be produced at the gate when leaving the site.

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- If the equipment or material is removed after this time then a Non-Returnable Gate Release will be provided by the *Employer's Representative*, on receipt of the original OV18, with which the *Contractor* brought the equipment on site.

2.2.3 Site or Area Establishment and Evacuation

2.2.3.1 Application for Site Establishment:

- Sites are allocated according to availability, the period for which the *Contractor* is going to be on site, or if special circumstances warrant the allocation of a site. Documentation to support this application to be submitted as stipulated below.
- The location of the site or area is indicated during the site or area take-over inspection.

2.2.3.1 Site Establishment:

- The *Contractor* does not occupy any site or area other than that allocated to him.
- The *Contractor* does not occupy the site or area prior to the take-over inspection.
- The *Contractor* maintains the site or area provided to him to the satisfaction of the *Employer*. A site inspection to be conducted by both parties prior to site establishment.
- The *Employer* will require full access at all times of the *Contractor's* site or area for inspection.
- The *Contractor* will remain accountable for the security of his designated site area. The *Employer* will accept no accountability for any theft, losses or damage under the *Contractors'* control.

2.2.3.2 Site De Establishment:

- The *Contractor* advises the *Employer* in writing, five (5) days prior to site de establishment in accordance with LBA 00030.
- Site de establishment cannot proceed without the approval of the *Employer* in writing. Final payment and the first portion of the retention (where applicable) will not be released if not supported by the *Employer*, as this is seen as part of the works.

2.2.4 Information Required for Site Establishment:

- Note that the below will be based on the *Contractor's* planning for execution of the works. The price schedule should be completed as per required Section A
- The information supplied will assist in site allocation.

Description	Quantity	Comments: Contractor to explain quantity requirements
Equipment:		
Container		
Store		
Vehicle		
Generator		
Plant equipment (i.e. crane, forklift, hoisting equipment)		
Ablution Facilities		
Other		
People: (where applicable)		
Site Manager		

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Safety Officer		
Supervisor		
Storeman		
Artisan		
Electrician		
Welder		
Semi-Skilled		
General Labourers		
Other		
Materials: (where applicable)		
Oil		
Cleaning Equipment		
Hazardous Material		
Other: (where applicable)		
Hot permit requirement		