



NEC3 Engineering and Construction

Short Contract (ECSC3)

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

and

for **Once-off Supply, Installation, commissioning and training of various laboratory and plant equipment for 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:

Once-off Supply, Installation, commissioning and training of various laboratory and plant equipment for 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:

Acceptance

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

The terms of the Contract, are contained in:

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

Part 2 Pricing Data

Part 3 Scope of Work: Works Information

Part 4 Site Information

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

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Tender Schedules as well as any changes to the terms of the Offer agreed by the tenderer and the Employer during this process of Offer and Acceptance, are contained in the Schedule of Deviations attached to and forming part of this Form of Offer and Acceptance. No amendments to or deviations from said documents are valid unless contained in this Schedule, which must be signed by the duly authorised representative(s) for both parties.

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

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

Signature(s)

Name(s)

Capacity

**for the
Employer**

(Insert name and address of organisation)

Name &
signature of
witness

Date

Note: If a tenderer wishes to submit alternative tender offers, further copies of this document may be used for that purpose, duly endorsed, 'Alternative Tender No. _____'

Schedule of Deviations

Note:

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

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

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

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

For the tenderer:**For the Employer**

Signature

Name

Capacity

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

C1.2 Contract Data**Data provided by the *Employer***

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	Lethabo Power Station Private Bag X 415 Vereeniging 1930
	Tel No.	
	Fax No.	N/A
	E-mail address	
11.2(11)	The <i>works</i> are	Once-off Supply, Installation, commissioning and training of various laboratory and plant equipment for 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.	Three (3) Month after contract placement and good delivered
13.2	The <i>period for reply</i> is	24 hours for emergency and 3 days for other contractual matters
40	The <i>defects date</i> is	52 weeks after completion date
41.3	The <i>defect correction period</i> is	[2] weeks
50.1	The <i>assessment day</i> is the	[1st] of each month.

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

50.5	The <i>delay damages</i> are	2% per day up to a maximum of 15% per task order
50.6	The retention is	[10]%
51.2	The interest rate on late payment is	[]% [Insert a rate only if a rate less than 0.5% per week of delay has been agreed]
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
	Does the United Kingdom Housing Grants, Construction and Regeneration Act (1996) apply?	No
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 <i>arbitration procedure</i> is	the latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.
	The place where arbitration is to be held is	<u>Johannesburg</u>, Republic of 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

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.

information which was already in the possession of the *Contractor* at the time of disclosure (evidenced by written records in existence at that time). Should the *Contractor* disclose information to others where required by this contract the *Contractor* ensures that the provisions of this clause are complied with by the recipient.

- Z3.2 If the *Contractor* is uncertain about whether any such information is confidential, it is to be regarded as such until notified otherwise by the *Employer*.
- Z3.3 In the event that the *Contractor* is, at any time, required by law to disclose any such information which is required to be kept confidential, the *Contractor*, to the extent permitted by law prior to disclosure, notifies the *Employer* so that an appropriate protection order and/or any other action can be taken if possible, prior to any disclosure. In the event that such protective order is not, or cannot, be obtained, then the *Contractor* may disclose that portion of the information which it is required to be disclosed by law and uses reasonable efforts to obtain assurances that confidential treatment will be afforded to the information so disclosed.
- Z3.4 The taking of images (whether photographs, video footage or otherwise) of the *works* or any portion thereof, in the course of Providing the Works and after Completion, requires the prior written consent of the *Employer*. All rights in and to all such images vests exclusively in the *Employer*.
- Z3.5 The *Contractor* ensures that all his subcontractors abide by the undertakings in this clause.

Z4 Waiver and estoppel: Add to clause 12.2:

- Z4.1 Any extension, concession, waiver or relaxation of any action stated in this contract by the Parties or their delegates or the *Adjudicator* does not constitute a waiver of rights, and does not give rise to an estoppel unless the Parties agree otherwise and confirm such agreement in writing.

Z5 Health, safety and the environment

- Z5.1 The *Contractor* undertakes to take all reasonable precautions to maintain the health and safety of persons in and about the execution of the *works*. Without limitation the *Contractor*:
- accepts that the *Employer* may appoint him as the "Principal Contractor" (as defined and provided for under the Construction Regulations 2014 (promulgated under the Occupational Health & Safety Act 85 of 1993) ("the Construction Regulations") for the Site;
 - warrants that the total of the Prices as at the Contract Date includes a sufficient amount for proper compliance with the Construction Regulations, all applicable health & safety laws and regulations and the health and safety rules, guidelines and procedures provided for in this contract and generally for the proper maintenance of health & safety in and about the execution of *works*; and
 - undertakes, in and about the execution of the *works*, to comply with the Construction Regulations and with all applicable health & safety laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the *Contractor's* direction and control, likewise observe and comply with the foregoing.
- Z5.2 The *Contractor*, in and about the execution of the *works*, complies with all applicable environmental laws and regulations and rules, guidelines and procedures otherwise

provided for under this contract and ensures that his subcontractors, employees and others under the *Contractor's* direction and control, likewise observe and comply with the foregoing.

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

- Z6.1 The *Contractor* provides the *Employer* with a tax invoice in accordance with the *Employer's* procedures stated in the Works Information, showing the correctly assessed amount due for payment.
- Z6.2 If the *Contractor* does not provide a tax invoice in the form and by the time required by this contract, the time by when the *Employer* is to make a payment is extended by a period equal in time to the delayed submission of the correct tax invoice. Interest due by the *Employer* in terms of clause 51.2 is then calculated from the delayed date by when payment is to be made.
- Z6.3 The *Contractor* is required to comply with the requirements of the Value Added Tax Act, no 89 of 1991 (as amended) and to include the *Employer's* VAT number 4740101508 on each invoice he submits for payment.

Z7 Notifying compensation events

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

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

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

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

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

Z10 Addition to Clause 50.5

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

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

Z11 Ethics

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

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.

Z12 Insurance

Z_12.1 Replace core clause 82 with the following:

Insurance cover 82

82.1 When requested by a Party, the other Party provides certificates from his insurer or broker stating that the insurances required by this contract are in

force.

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

INSURANCE TABLE A

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

	The replacement cost <u>Bodily injury to or death of a person</u> The amount required by the applicable law	
Liability for death of or bodily injury to employees of the <i>Contractor</i> arising out of and in the course of their employment in connection with this contract	The amount required by the applicable law	

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 m limit of indemnity
Assets All Risk	Per the insurance policy document
Contract Works insurance	Per the insurance policy document
Environmental Liability	Per the insurance policy document
General and Public Liability	Per the insurance policy document
Transportation (Marine)	Per the insurance policy document
Motor Fleet and Mobile Plant	Per the insurance policy document
Terrorism	Per the insurance policy document
Cyber Liability	Per the insurance policy document
Nuclear Material Damage and Business Interruption	Per the insurance policy document
Nuclear Material Damage Terrorism	Per the insurance policy document

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.
Standard	means the <i>Employer's</i> Asbestos Standard 32-303: Requirements for Safe Processing, Handling, Storing, Disposal and Phase-out of Asbestos and Asbestos Containing Material, Equipment and Articles.
SANAS	means the South African National Accreditation System.
TWA	means the average exposure, within a given workplace, to airborne asbestos fibres, normalised to the baseline of a 4 hour continuous period, also applicable to short term exposures, i.e. 10-minute TWA.

Z14.1 The *Employer* ensures that the Ambient Air in the area where the *Contractor* will Provide the Services conforms to the acceptable prescribed South African standard for asbestos, as per the regulations published in GNR 155 of 10 February 2002,

under the Occupational Health and Safety Act, 1993 (Act 85 of 1993) ("Asbestos Regulations"). The OEL for asbestos is 0.2 regulated asbestos fibres per millilitre of air as a 4-hour TWA, averaged over any continuous period of four hours, and the short term exposure limit of 0.6 regulated asbestos fibres per millilitre of air as a 10-minute TWA, averaged over any 10 minutes, measured in accordance with HSG248 and monitored according to HSG173 and OESSM.

- Z14.2 Upon written request by the *Contractor*, the *Employer* certifies that these conditions prevail. All measurements and reporting are effected by an independent, competent, and certified occupational hygiene inspection body, i.e. a SANAS accredited and Department of Employment and Labour approved AAIA. The *Contractor* may perform Parallel Measurements and related control measures at the *Contractor's* expense. For the purposes of compliance the results generated from Parallel Measurements are evaluated only against South African statutory limits as detailed in clause Z14.1. Control measures conform to the requirements stipulated in the AAIA-approved asbestos work plan.
- Z14.3 The *Employer* manages asbestos and ACM according to the Standard.
- Z14.4 In the event that any asbestos is identified while Providing the Services, a risk assessment is conducted and if so required, with reference to possible exposure to an airborne concentration of above the AL for asbestos, immediate control measures are implemented and relevant air monitoring conducted in order to declare the area safe.
- Z14.5 The *Contractor's* personnel are entitled to stop working and leave the contaminated area forthwith until such time that the area of concern is declared safe by either Compliance Monitoring or an AAIA approved control measure intervention, for example, per the emergency asbestos work plan, if applicable.
- Z14.6 The *Contractor* continues to Provide the Services, without additional control measures presented, on presentation of Safe Levels. The contractually agreed dates to Provide the Services, including the Completion Date, are adjusted accordingly. The contractually agreed dates are extended by the notification periods required by regulations 3 and 21 of the Asbestos Regulations, 2001.
- Z14.7 Any removal and disposal of asbestos, asbestos containing materials and waste, is done by a registered asbestos contractor, instructed by the *Employer* at the *Employer's* expense, and conducted in line with South African legislation.

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

The tendering contractor is advised to read both the NEC3 Engineering and Construction Short Contract (April 2013) and the relevant parts of its Guidance Notes (ECSC3-GN)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.

C2.2 Price List

The Price List is as follows

Item no.	Description	Unit	Quantity	Rate	Price
1	INLINE TUBE EXTRAXTIO FAN	each	1		
2.	Benchtop Alkalinity and conductivity analyzer	each	1		
3.	Water Chiller suitable for use with ICP-OES Instrument	each	1		
4.	COD Reactor	each	1		
5.	UV/VIS Spectrophotometer	each	1		
6.	UPS (Uninterruptible Power Supply)	each	1		
7.	Electronic Analytical Balance	each	1		
8.	Potable Relative air humidity analyzer	each	1		
9.	Magnetic stirrer with hot plate	each	1		
10.	Potable Conductivity after cation removal and Degassed Conductivity after cation removal analyzer	each	1		
11.	Potable Hydrogen dew point analyser	each	1		
12.	Potable conductivity meter	each	1		
13.	Infrared thermometer	each	1		
14.	Portable Turbidity meter	each	1		
15.	Portable conductivity meter (Hand-held)	each	1		
16.	Portable DO (dissolved oxygen) meter	each	1		
17.	Portable COD (chemical oxygen demand) meter	each	1		
18.	Portable Sulfuric Acid concentration meter	each	1		
19.	Portable Sodium Hydroxide Concentration meter	each	1		
20.	Portable SDI (silt density index) meter	each	1		
21.	Peristaltic chemical dosing pumps	each	2		
22.	FOG (Fuel, Oil and Grease) analyzer for effluent water samples	each	1		

23.	Delivery	each	22		
24.	Installation, commissioning and training	each	22		
	The total of the Prices (excluding VAT):				

C3: Scope of Work

C3.1 Works Information

Once-off Supply, Installation, commissioning and training of various laboratory and plant equipment for Lethabo Power Station.

1. Description of the works

EQUIPEMNT/INSTRUMENT NAME	QUANTITY (EA)	SPECIFICATION
Benchtop Alkalinity and conductivity analyzer	1	<p>Titration Types: Potentiometric amperometry, colorimetric</p> <p>Titration Modes: Sample, blank, sample with blank</p> <p>Parameter: mV/pH, Conductivity, Temperature</p> <p>Resolution: mV/pH: ± 0.1 mV / ± 0.001 pH, Conductivity: ± 0.5 % of reading</p> <p>Sample Stand: can accommodate 12 beakers, auto titrator</p> <p>Power Requirements (Voltage): 240 V</p> <p>Languages: English (must) and other</p> <p>Electrode: Robust pH meter suitable water application (7-50°C), conductivity probe.</p> <p>Burette: must have burette for titrant (NH₃)</p> <p>Operating Interface: must have operating interface and able to store data.</p> <p>Calibration Curves Display: be able to display calibration curves</p>
INLINE TUBE EXTRACTION FAN	1	<p>Power requirements: 130-150W</p> <p>Power Supply: 220-230V</p> <p>Wind Flow: 900-1000 m³/h</p> <p>Pressure: min 380Pa but <400Pa</p> <p>Revolution: min 2600rpm but <3000rpm</p>
Water Chiller suitable for use with ICP-OES Instrument	1	<p>Nominal cooling Capacity: Min 1.4kW to 1.5kW</p> <p>Water temperature outlet: Min</p>

		16°C and Max 22°C Water Pressure: 3.5 Bar Water Flow: Min 10 l/Min and Max 12 l/Min
COD Reactor	1	Sample Capacity: 25 Vials Temperature heating range: Min 300°C and Max 1700°C with variable temperature control function Power supply: 220-230 V
UV/VIS Spectrophotometer	1	Wavelength measuring range: Vis min 30 nm and max 1100 nm UV min 190 nm and max 320 nm Lamp type: Tungsten halogen lamp, UV lamp or Xenon flash lamp Spectral Bandwidth: 1.8 nm to 4 nm Screen Display: touch screen colour display Cell size compatibility: 10,20,30 mm rectangular cells and 16mm round cell
UPS (Uninterruptible Power Supply)	1	UPS Type: Online UPS Power Output: 6kVA
Electronic Analytical Balance	1	Capacity: 0-200g Readability: Min 0.0001g Repeatability: ±0.1mg Linearity Deviation: 0.2mg or better Stabilization time: <5 seconds Weighing pan: 8-10 cm Power supply: 220-240V Balance glass/plastic housing dimensions: 340x215x350 mm Stability function: level indicator and Level key knob to adjust the balance level.
Potable Relative air humidity analyzer	1	Humidity and temperature probe with Bluetooth Humidity measurement range: 0 to 100% relative humidity Relative humidity accuracy: ± 2 % Temperature of up to 70°C Temperature accuracy: ± 5 °C Instrument must be equipped with air

		<p>velocity measurements.</p> <p>Power requirements: Use of batteries/ rechargeable</p>
Magnetic stirrer with hot plate	1	<p>Aluminium magnetic stirrer with a hot plate</p> <p>Adjustable electronic motor speed control with speed feedback.</p> <p>The top should be constructed from high chemical resistance material</p> <p>Continuous variable heat control by means of energy regulator.</p> <p>Heater indication lamp</p> <p>Front panel on and off switch</p> <p>Speed range (rpm): 60 – 2000</p> <p>Temperature range: up to 420 °C</p> <p>Stirrer capacity: 5L</p> <p>Power supply: 230v/50HZ</p> <p>Power rating @230V: 600W</p> <p>Plate size: 190 mm × 190 mm</p> <p>Material: ceramic corrosion resistance/ 304 stainless steel</p> <p>Power requirements:</p> <p>External AC to DC converter. Voltage and Frequency (Hz) selected automatically, 100–240 volts, 50–60 Hz. RSA power</p>
Potable Conductivity after cation removal and Degassed Conductivity after cation removal analyzer	1	<p>system should be mounted on a stainless-steel panel that is on a movable trolley.</p> <p>Reboiler should be enclosed</p> <p>Specifications:</p> <p>conductivity measurements from 0.055 uS/cm to 1000 uS/cm</p>

		<p>Calculation of pH value in the range from pH 7.5 to 11.5.</p> <p>Calculate alkalizing reagent concentration.</p> <p>Accuracy: accuracy of $\pm 1\%$</p> <p>Temperature compensation</p> <p>Power requirements:</p> <p>External AC to DC converter.</p> <p>Voltage and Frequency (Hz) selected automatically, 100–240 volts, 50–60 Hz. RSA power</p> <p>Safety:</p> <p>certified intrinsically safe for use in hazardous environments</p> <p>IP 66 / NEMA 4X</p> <p>No data loss after power failure, all data is saved in non-volatile memory.</p> <p>Overvoltage protection of in- and outputs.</p> <p>Galvanic separation of measuring inputs and signal outputs.</p>
Potable Hydrogen dew point analyser	1	<ul style="list-style-type: none"> • measurement ranges: available from $-100\text{ }^{\circ}\text{C}$ to $+20\text{ }^{\circ}\text{C}$ dewpoint, with good repeatability • Calibration Certificate traceable to National & International Humidity Standards • Accuracy $\pm 2\text{ }^{\circ}\text{C}$ ($\pm 3.6\text{ }^{\circ}\text{F}$) dewpoint • Integral calculator to display pressure dewpoints. Gauge pressure can be entered in kPa • Temperature compensated

		<p>for operating range</p> <ul style="list-style-type: none"> • Sample Flow Rate independent <p>Power supply:</p> <p>Rechargeable battery for stand-alone operation with</p> <p>operation time of more than >24 hours</p> <ul style="list-style-type: none"> • 220VAC 50Hz for recharging • 9 V DC battery • Charging time more than 100 hrs <p>Safety:</p> <p>certified intrinsically safe for use in hazardous environments.</p> <p>IP 66 / NEMA 4X</p>
Potable conductivity meter (inline sample)	1	<p>Conductivity sensor /probe that has integrated pH probe</p> <p>Conductivity measurements range 0.055- 30 mS/cm</p> <p>Accuracy: $\pm 2\%$</p> <p>Adjustable sample flow rate with sample cell</p> <p>Temperature compensation</p> <p>Panel:</p> <p>Instrument to be mounted on the panel with cast aluminium case</p> <p>Power requirements:</p> <p>Rechargeable battery for stand-</p>

		<p>alone operation with</p> <p>operation time of more than >24 hours</p> <ul style="list-style-type: none"> · 220VAC 50Hz for recharging · Li-ion battery · Charging time 6 h <p>Safety:</p> <p>certified intrinsically safe for use in hazardous environments.</p> <p>IP 66 / NEMA 4X</p> <p>No data loss after power failure, all data is saved in non-volatile memory.</p> <p>Overvoltage protection of in- and outputs.</p> <p>Galvanic separation of measuring inputs and signal outputs.</p>
Infrared thermometer	1	<p>Temperature range: up to 500 °C</p> <p>Temperature accuracy: ± 2 °C</p> <p>Relative humidity measurement range: 1% to 99%</p> <p>Response time: < 10 s</p> <p>Power requirements:</p> <p>Use of batteries/ rechargeable</p> <p>Safety:</p> <p>certified intrinsically safe for use in hazardous environments.</p> <p>IP 66 / NEMA 4X</p>
Portable Turbidity meter	1	<p>Application:</p> <p>Portable instrument designed for field and/or lab use to measure different types of water includes but not limited to raw, clarified, portable,</p>

		de-ionised, cooling water and wastewater Specification: Turbidity Light Detector: Infrared LED Turbidity Range: 0 to 4000 NTU Accuracy: $\pm 5\%$ Operating temperature: 0-50 °C Power requirements: Use of batteries/ rechargeable
Portable conductivity meter (Hand-held)	1	Application: for measurements of specific conductivity in pure water and ultrapure. Specification: Accessories: Conductivity sensor /probe Conductivity measurements range: 0.055 $\mu\text{S}/\text{cm}$ - 30 mS/m Accuracy: $\pm 2\%$ Panel/casing: Water and dust proof casing Power requirements: Use of batteries / rechargeable
Portable DO (dissolved oxygen) meter	1	Specifications: Range: from 0-20 ppm Panel/casing: Dust and waterproof Power requirements: Use batteries or rechargeable Accessories: Probe and cable Accuracy: $\pm 1.5\%$ Temperature range: -5 °C- 50 °C
Portable COD (chemical oxygen demand) meter	1	Application: Measure the amount of oxygen required for the oxidation of all the organic compounds present in the

		<p>water sample. Testing of organic matter wastewater output as biochemical oxygen demand (BOD) or chemical oxygen demand (COD)</p> <p>Specification:</p> <ul style="list-style-type: none"> • Enclosure robust, compact, watertight, and dustproof • Measuring Range: 50-2000 mg/L • Temperature range: 0-150°C • Cell size compartment: 16mm round cell • Light Source: UV LED <p>Power supply:</p> <p>Rechargeable battery Powered from a battery pack and battery charger power supply supplied with the field meter.</p>
Portable Sulfuric Acid concentration meter	1	<p>Application:</p> <p>To measure acid concentration to verify acid strength during regeneration</p> <p>Specification:</p> <ul style="list-style-type: none"> • Sample suitability: for movable liquid, viscous liquid, volatile liquid, corrosive liquid, high temperature liquid and suspended liquid • Sulfuric acid concentration range: 0.0-100.0%, • Temperature range: 0~99.9°C • Density range: 0.001—99.999g/cm³ • Temperature Compensation Coefficient Range: (0.00001~9.99999)/°C <p>Power supply:</p> <p>Rechargeable / Batteries</p>

Portable Sodium Hydroxide Concentration meter	1	<p>Application: Measure caustic strength for Regens verifications</p> <p>Specification:</p> <ul style="list-style-type: none"> • Sample suitability: for movable liquid, viscous liquid, volatile liquid, corrosive liquid, high temperature liquid and suspended liquid • Density resolution for AU-300L, AU-300LM: 0.001g/cm³ • Measurement range: 0.001-99.999g/cm³ • Sodium Hydroxide concentration range: 0.0-100% • density range: 0.001—99.999g/cm³ • temperature range: 0~99.9°C <p>Power supply: Rechargeable /batteries</p>
Portable SDI (silt density index) meter	1	<p>Application: Silt density index test for Reverse Osmosis Systems and Ultra Filtration Systems</p> <p>Specification:</p> <ul style="list-style-type: none"> • Membrane Filter Discs for Silt Density Index Testing: 0.45 Micron • Test Kit: perform SDI 5-, 10- and 15-minutes tests with both 100 ml and 500 ml sample size. • Feed pressure range: 240kpa-700 Kpa • Temperature range: 40 °C – 60 °C <p>Accessories:</p> <ul style="list-style-type: none"> • Replacement 50 Micron Filter

		<p>for the Built-In Pre-Filter</p> <p>Power requirements:</p> <p>Use of batteries/ rechargeable</p> <p>Cover:</p> <p>Dustproof and waterproof</p>
Peristaltic chemical dosing pumps	2	<p>Application:</p> <p>Peristaltic chemical dosing pumps for emergency dosing of ferric and or poly</p> <p>Specification:</p> <p>Power supply 100-240V 50/60Hz AC Flow range 0.1 - 500 ml/min Speed range 0.01 - 65 RPM Max. discharge pressure 7 bar operating temperature 4 - 45°C</p> <p>Safety:</p> <p>Must have secure mounting for easy integration into pump systems.</p>
FOG (Fuel, Oil and Grease) analyzer for effluent water samples	1	<p>Specification:</p> <p>Power supply: 220-230v/50HZ AC</p> <p>Measurement: infrared wavelength suitable for low concentration</p> <p>Filter size: 1-4 microns</p> <p>Sample suitability: effluent water samples</p>

2. Drawings

Drawing number	Revision	Title

3. Specifications

List the specifications that apply to this contract. Some typical headings have been provided as a minimum; delete if not required or expand and include correct titles as applicable.

Title	Date or revision	Tick if publicly available
<u>General Specifications:</u>		
Health and Safety requirements		X
Environmental requirements		X
Site regulations and access control		X
<u>Technical specifications:</u>		X

Health and safety, the environment and quality assurance

Health and safety risk management

RISK	MITIGATING FACTORS	LEVEL (HIGH/MEDIUM/LOW)
Supplier:	Instrument failure and defects to be covered by the supplier under warranty and guarantee up to a year after purchase.	High
Safety: Non-compliance to all legal requirements.	<p>Supplier shall ensure Compliance to Act, Eskom Safety Standards and Specifications Act: Occupational Health and Safety Act of 1993 Standard 32-136: Standard Contractor Health and Safety Requirements. Health and Safety Specification: 32-1188</p> <p>Compliance to the applicable Eskom Lifesaving rules, National Road Traffic Act and Eskom Vehicle Safety Specifications</p> <ol style="list-style-type: none"> 1.Driver training & competence 2.Strict adherence to the rules and Eskom vehicle specifications and other procedures 3.Strict adherence to Eskom offloading processes 4.Adherence to vehicle maintenance plans and daily/pre-trip inspections 5. Strict adherence to travelling task risk assessment <p>Company's internal offloading safe-work procedures to be submitted to the client prior contract awarding.</p>	High
Quality: Non-compliance with technical specs may lead to equipment failure and performance testing	The supplier to conduct pre-delivery inspection and verification against specs	Medium
Inadequate installation and commissioning will lead to equipment not	Utilized competent team to execute the scope of work,	Medium

fully operational	Include installation and commissioning checklist and provide validation report	
Delivery delays due to logistics issues will impact on the project schedule	Supplier to confirm lead times and provide regular progress updates to the client	Medium
Lack of quality control may result in defective outputs, rework, delays, increased costs, and non-compliance with standards	<ul style="list-style-type: none"> • The QCP for installation must be developed and submitted by the service provider before the execution of the SOW. Eskom Quality Control and System Engineer will review and approve the QCP. • The QCPs shall be utilized during installation and adhered to intervention points without compromising. 	Medium
Documentation gaps will lead to poor traceability and future maintenance issues	<p>The Supplier must submit all required technical and quality documentation prior to project close-out,</p> <ul style="list-style-type: none"> • After completing the installation, the service provider shall submit signed off Data Book consists of the following: <ul style="list-style-type: none"> ➢ Approved and signed off QCP. ➢ Pressure certificate ➢ Installation Certificate or report. <p>Warranty certificate</p>	Medium
Failure to manage Non-Conforming Outputs may lead to the delivery of defective or substandard products, rework, project delays, increased costs	Eskom shall be informed of non-conforming products and services as soon as such non-conformances are recognized by the supplier. The supplier shall implement the respective processes which must adequately reflect Eskom involvement.	Medium
Improper product packaging and transportation may lead to equipment damage or non-conformance upon delivery	<p>The products must be supplied by the service provider along with a product data sheet.</p> <p>The supplier is responsible for ensuring that the product is packaged and transported in a manner that guarantees its safety, proper stacking, and preservation.</p>	Medium
Failure to provide training to the client on the operation and first-line maintenance of the supplied equipment may result in improper use, reduced equipment lifespan	The supplier must conduct comprehensive end-user training on equipment operation and first-line maintenance, provide detailed training manuals, and obtain client sign-off confirming understanding and competence before project close-out.	Medium
Failure to include necessary returnable or adhere to the tender requirements may result	The supplier will be evaluated and scored in accordance with the Category 3 evaluation criteria.	Medium

in delays from the bidding process.	240-68099512 Form A: The tenderer must complete and sign this form to acknowledge and accept Eskom Supplier Quality Requirements as per QM 58 Specification and ISO 9001 Standard	
Environment: Non-Conformance to Environmental Requirements	<ul style="list-style-type: none"> • Supplier to be familiar with the Eskom SHEQ policy and SHEQ induction. • Supplier shall report all incidents or risks whilst on the job to the Eskom Project leader who will inform the environmental department • Supplier to be familiarized with Lethabo waste management procedure. • Contractor shall comply to the following environmental procedures: <ul style="list-style-type: none"> ○ LBE22005 Environmental spill management procedure LBE22004 Environmental waste management procedure	Low

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

- Equipment to be delivered, installed and commissioned by the contractor and provide quality and calibration certificate for each instrument supplied.
- Full technical manuals to be supplied with the equipment.
- The contractor is not allowed to do anything other than what has been stipulated in the contract and drawings, unless instructed to do so by the *Employer's representative* in writing.

4.1 Meetings

- Before work starts on site, an inaugural meeting is held with the Contractor and the Employer, to explain in detail all requirements of the Site Regulations.
- The Contractor is issued with a file of current Site Regulations on arrival. The file remains the property of the Employer and the Contractor is responsible for its maintenance and updating to include new or revised regulations as issued by the Employer.
- The Contractor must ensure that all personnel performing work on the plant are authorised, this includes but not limited to:
 - Confine space locations
 - Working at heights
 - Heat stress areas
 - Scaffolding
 - Hazardous substances

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

All meetings shall be recorded using minutes or a register prepared and circulated by the person who convened the meeting. Such minutes or register shall not be used for the purpose of

confirming actions or instructions under the contract as these shall be done separately by the person identified in the *conditions of contract* to carry out such actions or instructions.

4.2 Use of standard forms

The *Contractor* shall use the following standard form, and all the forms shall be requested from the *Employer* when needed:

- DCC 333 - *Employer's Assessment*
- DCC 367 – Event Register
- DCC 368 – Completion Certificate
- DCC 370 – Access Certificate
- DCC 371 – Notification of Defect
- LFM 1007 – Quality Control for *Contractor*

4.3 Invoicing and payment

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

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

- Name and address of the *Contractor*
- The contract number and title;
- *Contractor's* VAT registration number;
- The *Employer's* VAT registration number 4740101508;
- The total Price for Work Done to Date which the *Contractor* has completed;
- Other amounts to be paid to the *Contractor*;
- Less amounts to be paid by or retained from the *Contractor*;
- The change in the amount due since the previous payment being the invoiced amount - excluding VAT, the VAT and including VAT;

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.

- the Price for each lump sum item in the Price List or Task Order which the *Contractor* has completed and
- where a quantity is stated for an item in the Price List or Task Order, an amount calculated by multiplying the quantity which the *Contractor* has completed by the rate.

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].

- The *Contractor* shall keep all the original invoice and these invoices shall be supplied to the *Employer* shall the need arise.

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

N/A

4.7 Facilities to be provided by the *Contractor*

N/A

4.8 Title to material from excavation and demolition

N/A

4.9 Design by the *Contractor*

N/A

4.10 Cataloguing requirements by the *Contractor*

N/A

5. Requirements for the programme

N/A

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

Describe what the *Employer* will provide such as services (including water and electricity) and “free issue” Plant and Materials and equipment.

Item	Date by which it will be provided

C4: Site Information**1. Site Procedures and Regulations****1.1 Site location and Security**

- The Site is at Lethabo Power Station situated ± 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 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 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.

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.
- 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.

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

1. Access limitations

N/A

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

N/A

3. Hidden and other services within the site

N/A

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