



NEC3 Term Service Contract (TSC3)

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

**and [Insert at award stage]
(Reg No. _____)**

**for Refurbishment of Boiler Auxiliary Cooling Heat
Exchangers on Units 1,2,4,5 and 6 during planned
outages**

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CONTRACT No. [Insert at award stage]

PART C1: AGREEMENTS & CONTRACT DATA

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[to be inserted from Returnable Documents at award stage]	
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C1.1 Form of Offer & Acceptance

Offer

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

Refurbishment of Boiler Auxiliary Cooling Heat Exchangers on Units 1,2,4,5 and 6 during Outages

The tenderer, identified in the Offer signature block, has examined the documents listed in the Tender Data and addenda thereto and by submitting this Offer has accepted the Conditions of Tender.

By the representative of the tenderer, deemed to be duly authorised, signing this part of this Form of Offer and Acceptance the tenderer offers to perform all of the obligations and liabilities of the *Contractor* under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the *conditions of contract* identified in the Contract Data.

Options A	The offered total of the Prices exclusive of VAT is	
	Sub total	
	Value Added Tax @ 15% is	
	The offered total of the amount due inclusive of VAT is ¹	
	(in words)	

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

Signature(s)

Name(s) _____

Capacity _____

For the tenderer:

(Insert name and address of organisation)

Name & signature of witness

Date

Tenderer's CIDB registration number:

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

Acceptance

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

The terms of the contract, are contained in:

Part C1	Agreements and Contract Data, (which includes this Form of Offer and Acceptance)
Part C2	Pricing Data
Part C3	Scope of Work: Service Information

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

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Returnable Schedules as well as any changes to the terms of the Offer agreed by the tenderer and the Employer during this process of offer and acceptance, are contained in the Schedule of Deviations attached to and forming part of this Form of Offer and Acceptance. No amendments to or deviations from said documents are valid unless contained in this Schedule.

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

Notwithstanding anything contained herein, this agreement comes into effect on the date when the tenderer receives one fully completed original copy of this document, including the Schedule of Deviations (if any).

Signature(s)

Name(s)

Capacity

**for the
Employer**

Name &
signature of
witness

*(Insert name and address of
organisation)*

Date

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

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

Note:

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

No.	Subject	Details
1		
2		
3		
4		
5		
6		
7		

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

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

For the tenderer:

For the Employer

Signature

Name

Capacity

On behalf of

(Insert name and address of organisation)

(Insert name and address of organisation)

Name & signature of witness

Date

C1.2 TSC3 Contract Data

Part one - Data provided by the Employer

Clause	Statement	Data
1	General	
	The <i>conditions of contract</i> are the core clauses and the clauses for main Option: [Redacted] dispute resolution Option and secondary Options [Redacted] [Redacted]	A: Priced contract with price list W1: Dispute resolution procedure X1: Price adjustment for inflation X2 Changes in the law X17: Low Service damages X18: Limitation of liability X19: Task Order Z: Additional conditions of contract
	of the NEC3 Term Service Contract April 2013 ² (TSC3)	
10.1	The <i>Employer</i> is (name): Address Tel No. Fax No.	Eskom Holdings SOC Limited (Reg No: 2002/015527/30), a juristic person incorporated in terms of the company laws of the Republic of South Africa Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg
10.1	The <i>Service Manager</i> is (name): Address Tel Fax e-mail	Doreen Makena Duvha Power Station PO BOX 2199 Witbank 1035 (013) 690-0609 N/A MakenaMD@eskom.co.za

² Available from Engineering Contract Strategies Tel 011 803 3008 Fax 086 539 1902 www.ecs.co.za

11.2(2)	The Affected Property is	Duvha Power Station Units 1,2,4,5 and 6
11.2(13)	The <i>service</i> is	Refurbishment of Boiler Auxiliary Cooling Heat Exchangers on Units 1,2,4,5 and 6 during planned Outages
11.2(14)	The following matters will be included in the Risk Register	<p>The outage date might be postponed, resulting in labour and material price increases, and the document called ‘Scope of Work’ in Part 3 of this contract might change.</p> <p>The program must be flexible as outage can be shifted as results of production constrain.</p> <p>The employer will not make payment if the invoice from contractor does not correspond with the price assessment by the project manager on the payment.</p> <p>Employer failing to issue the contractor with the PTW (permit to work) due to unavailability of the plant.</p> <p>Appointment person responsible for permit to work might not be available due to shortage of appointment person on site.</p> <p>Access to site plant area might not be available due to other contractors working on the same area.</p>
11.2(15)	The boundaries of the site are	Duvha P/S Units 1,2,4,5, and 6 Boiler and Turbine Auxiliaries.
11.2(16)	The Site Information is in	Part 4: Site Information.
11.2(19)	The works information is in	Part 3: Scope of Work and all documents and drawings to which it makes reference.
12.2	The <i>law of the contract</i> is the law of	the Republic of South Africa
13.1	The <i>language of this contract</i> is	English
13.3	The <i>period for reply</i> is	1 days
2	The Contractor’s main responsibilities	As outlined on Part3: Scope of Work
21.1	The <i>Contractor</i> submits a first plan for acceptance within	4 weeks of the Contract Date
3	Time	
30.1	The <i>starting date</i> is.	01 July 2024 or As soon as possible
30.2	The <i>service period</i> is	5 Years

30.3	The <i>end date</i> is.	30 June 2029
4	Testing and defects	No data is required for this section of the <i>conditions of contract</i>. However if there is a defect arise during commissioning of the system, the contract will be responsible to sort out the defect picked within 26 weeks (defect period)
5	Payment	
50.1	The <i>assessment interval</i> is	1 week after completion of work as per task order
51.1	The <i>currency of this contract</i> is the	South African Rand
51.2	The period within which payments are made is	4 weeks
51.4	The <i>interest rate</i> is	<p>(i) zero percent above the publicly quoted prime rate of interest (calculated on a 365 day year) charged by from time to time by the Standard Bank of South Africa (as certified, in the event of any dispute, by any manager of such bank, whose appointment it shall not be necessary to prove) for amounts due in Rands and</p> <p>(ii) the LIBOR rate applicable at the time for amounts due in other currencies. LIBOR is the 6 month London Interbank Offered Rate quoted under the caption “Money Rates” in The Wall Street Journal for the applicable currency or if no rate is quoted for the currency in question then the rate for United States Dollars, and if no such rate appears in The Wall Street Journal then the rate as quoted by the Reuters Monitor Money Rates Service (or such service as may replace the Reuters Monitor Money Rates Service) on the due date for the payment in question, adjusted <i>mutatis mutandis</i> every 6 months thereafter (and as certified, in the event of any dispute, by any manager employed in the foreign exchange department of The Standard Bank of South Africa Limited, whose appointment it shall not be necessary to prove.</p>
6	Compensation events	This will be covered by the estimated Risk Contingency
	These are additional compensation events:	<p>1 Proposed SOW can be greater than expected after inspections, resulting on longer duration</p>
7	Use of Equipment Plant and Materials	No data is required for this section of the <i>conditions of contract</i>.

8	Risks and insurance	
80.1	These are additional <i>Employer's</i> risks	1. The program must be flexible as Outages can be shifted as a result of production constraints.
9	Termination	There is no Contract Data required for this section of the <i>conditions of contract</i>. However if the contractor does not provide the work as outlined on the SOW and not adhere to the contract terms & conditions and health & safety requirements, Project Manager will follow the proper steps and terminate the contract
10	Data for main Option clause	
A	Priced contract with price list	
11	Data for Option W1	
W1.1	The <i>Adjudicator</i> is (Name)	The person selected from the Eskom Panel of Adjudicators listed in Annexure B to this Contract Data by the Party intending to refer a dispute to him.
	Address	[•]
	Tel No.	[•]
	Fax No.	[•]
	e-mail	[•]
W1.2(3)	The <i>Adjudicator nominating body</i> is:	the Chairman of the Joint Civils Division of the South African Institution of Civil Engineering. (See www.jointcivils.co.za)
W1.4(2)	The <i>tribunal</i> is:	arbitration
W1.4(5)	The <i>arbitration procedure</i> is	the latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.
	The place where arbitration is to be held is	South Africa
	The person or organisation who will choose an arbitrator	the Chairman for the time being or his nominee of the Association of Arbitrators (Southern Africa) or its successor body.
	- if the Parties cannot agree a choice or - if the arbitration procedure does not state who selects an arbitrator, is	

12	Data for secondary Option clauses			
X1	Price adjustment for inflation			
X1.1	The <i>base date</i> for indices is	[●].		
	The proportions used to calculate the Price Adjustment Factor are:	Proportion	linked to index for	Index prepared by
		20%	Transport L2A	SEIFSA
		40%	Labour C3 (All Hourly-Paid Employees)	SEIFSA
		30%	[Material Table G-1 Engineering input price indices (Mechanical engineering)]	SEIFSA
		10%	adjustable	
		1.00		
X2	Changes in the Law	There is no reference to Contract Data in this Option and terms in italics are identified elsewhere in this Contract Data.		
X17.1	The <i>service level table</i> is in	<p>If the Contractor does not perform the work as per the program/schedule submitted, the Employer will apply delay damages of R3 000.00 per day up to limit of 10% of the contract value.</p> <p>A penalty of R5 000.00 will be applied for any defect that can cause low performance of the system/plant that the Contractor has work on</p> <p>A penalty of 2% per Task Order per outage will be applied if the contractor does not have an Authorised RP</p>		
X18	Limitation of liability			
X18.1	The <i>Contractor's</i> liability to the <i>Employer</i> for indirect or consequential loss is limited to	R0.0 (zero Rand)		
X18.2	For any one event, the <i>Contractor's</i> liability to the <i>Employer</i> for loss of or damage to the <i>Employer's</i> property is limited to	the amount of the deductibles relevant to the event		

X18.3	The <i>Contractor's</i> liability for Defects due to his design of an item of Equipment is limited to	<p>The greater of</p> <ul style="list-style-type: none"> • the total of the Prices at the Contract Date and • the amounts excluded and unrecoverable from the <i>Employer's</i> insurance (other than the resulting physical damage to the <i>Employer's</i> property which is not excluded) plus the applicable deductibles
X18.4	The <i>Contractor's</i> total liability to the <i>Employer</i> , for all matters arising under or in connection with this contract, other than the excluded matters, is limited to	<p>the total of the Prices other than for the additional excluded matters.</p> <p>The <i>Contractor's</i> total liability for the additional excluded matters is not limited.</p> <p>The additional excluded matters are amounts for which the <i>Contractor</i> is liable under this contract for</p> <ul style="list-style-type: none"> • Defects due to his design, plan and specification, • Defects due to manufacture and fabrication outside the Affected Property, • loss of or damage to property (other than the <i>Employer's</i> property, Plant and Materials), • death of or injury to a person and • infringement of an intellectual property right.
X18.5	The <i>end of liability date</i> is	5 years after the end of the <i>service period</i>.
X19	Task Order	
X19.5	The <i>Contractor</i> submits a Task Order programme to the <i>Service Manager</i> within	1 months of receiving the Task Order from the Project Manager
Z	The <i>additional conditions of contract</i> are	
Z1 to Z14 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 and the Electricity Distribution Industry.

Z2 Joint ventures

- Z2.1 If the *Contractor* constitutes a joint venture, consortium or other unincorporated grouping of two or more persons or organisations then these persons or organisations are deemed to be jointly and severally liable to the *Employer* for the performance of this contract.
- Z2.2 Unless already notified to the *Employer*, the persons or organisations notify the *Service Manager* within two weeks of the Contract Date of the key person who has the authority to bind the *Contractor* on their behalf.
- Z2.3 The *Contractor* does not substantially alter the composition of the joint venture, consortium or other unincorporated grouping of two or more persons without the consent of the *Employer* having been given to the *Contractor* in writing.

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

- Z3.1 Where a change in the *Contractor's* legal status, ownership or any other change to his business composition or business dealings results in a change to the *Contractor's* B-BBEE status, the *Contractor* notifies the *Employer* within seven days of the change.
- Z3.2 The *Contractor* is required to submit an updated verification certificate and necessary supporting documentation confirming the change in his B-BBEE status to the *Service Manager* within thirty days of the notification or as otherwise instructed by the *Service Manager*.
- Z3.3 Where, as a result, the *Contractor's* B-BBEE status has decreased since the Contract Date the *Employer* may either re-negotiate this contract or alternatively, terminate the *Contractor's* obligation to Provide the Works.
- Z3.4 Failure by the *Contractor* to notify the *Employer* of a change in its B-BBEE status may constitute a reason for termination. If the *Employer* terminates in terms of this clause, the procedures on termination are P1, P2 and P4 as stated in clause 92, and the amount due is A1 and A3 as stated in clause 93.

Z4 Confidentiality

- Z4.1 The *Contractor* does not disclose or make any information arising from or in connection with this contract available to Others. This undertaking does not, however, apply to information which at the time of disclosure or thereafter, without default on the part of the *Contractor*, enters the public domain or to information which was already in the possession of the *Contractor* at the time of disclosure (evidenced by written records in existence at that time). Should the *Contractor* disclose information to Others in terms of clause 25.1, the *Contractor* ensures that the provisions of this clause are complied with by the recipient.
- Z4.2 If the *Contractor* is uncertain about whether any such information is confidential, it is to be regarded as such until notified otherwise by the *Service Manager*.
- Z4.3 In the event that the *Contractor* is, at any time, required by law to disclose any such information which is required to be kept confidential, the *Contractor*, to the extent permitted by law prior to disclosure, notifies the *Employer* so that an appropriate protection order and/or any other action can be taken if possible, prior to any disclosure. In the event that such protective order is not, or cannot, be obtained, then

the *Contractor* may disclose that portion of the information which it is required to be disclosed by law and uses reasonable efforts to obtain assurances that confidential treatment will be afforded to the information so disclosed.

Z3.4 The taking of images (whether photographs, video footage or otherwise) of the Affected Property or any portion thereof, in the course of Providing the Service and after the end of the *service period*, requires the prior written consent of the *Service Manager*. All rights in and to all such images vests exclusively in the *Employer*.

Z5 Waiver and estoppel: Add to core clause 12.3:

Z5.1 Any extension, concession, waiver or relaxation of any action stated in this contract by the Parties, the *Service Manager* or the *Adjudicator* does not constitute a waiver of rights, and does not give rise to an estoppel unless the Parties agree otherwise and confirm such agreement in writing.

Z6 Health, safety and the environment: Add to core clause 27.4

Z6.1 The *Contractor* undertakes to take all reasonable precautions to maintain the health and safety of persons in and about the execution of the *service*. 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 Affected Property;
- 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 the *service*; and
- undertakes, in and about the execution of the *service*, 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. Thomson to check and confirm

Z7 Provision of a Tax Invoice and interest. Add to core clause 51

Z7.1 Within one week of receiving a payment certificate from the *Service Manager* in terms of core clause 51.1, the *Contractor* provides the *Employer* with a tax invoice in accordance with the *Employer's* procedures stated in the Service Information, showing the amount due for payment equal to that stated in the payment certificate.

Z7.2 If the *Contractor* does not provide a tax invoice in the form and by the time required by this contract, the time by when the *Employer* is to make a payment is extended by a period equal in time to the delayed submission of the correct tax invoice. Interest due by the *Employer* in terms of core clause 51.2 is then calculated from the delayed date by when payment is to be made.

Z8 Notifying compensation events

Z8.1 Delete the last paragraph of core clause 61.3 and replace with:

If the *Contractor* does not notify a compensation event within eight weeks of becoming aware of the event, he is not entitled to a change in the Prices.

Z9 Employer's limitation of liability

Z9.1 The *Employer's* liability to the *Contractor* for the *Contractor's* indirect or consequential loss is limited to R0.00 (zero Rand)

Z9.2 The *Contractor's* entitlement under the indemnity in 82.1 is provided for in 60.1(12) and the *Employer's* liability under the indemnity is limited to compensation as provided for in core clause 63 and X19.11 if Option X19 Task Order applies to this contract.

Z10 Termination: Add to core clause 91.1, at the second main bullet point, fourth sub-bullet point, after the words "against it":

Z10.1 or had a business rescue order granted against it.

Z11 | 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 <i>Contractor</i> or a third party, such party's employees, agents, or Subcontractors or Subcontractor's employees, or any one or more of all of these parties' relatives or friends,
Coercive Action	means to harm or threaten to harm, directly or indirectly, an Affected Party or the property of an Affected Party, or to otherwise influence or attempt to influence an Affected Party to act unlawfully or illegally,
Collusive Action	means where two or more parties co-operate to achieve an unlawful or illegal purpose, including to influence an Affected Party to act unlawfully or illegally,
Committing Party	means, as the context requires, the <i>Contractor</i> , or any member thereof in the case of a joint venture, or its employees, agents, or 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 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 cover 83

- 83.1 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.
- 83.2 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
Loss of or damage caused by the <i>Contractor</i> to the <i>Employer's</i> property	The replacement cost where not covered by the <i>Employer's</i> insurance. The <i>Employer's</i> policy deductible as at Contract Date, where covered by the <i>Employer's</i> insurance.
Loss of or damage to Plant and Materials	The replacement cost where not covered by the <i>Employer's</i> insurance. The <i>Employer's</i> policy deductible as at Contract Date, where covered by the <i>Employer's</i> insurance.
Loss of or damage to	The replacement cost where not covered by

Equipment	the <i>Employer's</i> insurance. The <i>Employer's</i> policy deductible as at Contract Date, 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>Employer's</i> property, Plant and Materials and Equipment) and liability 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 Service	<u>Loss of or damage to property</u> 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

Z 12.2 Replace core clause 86 with the following:

**Insurance 86
by the
Employer**

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

INSURANCE TABLE B

Insurance against or name of policy	Minimum amount of cover or minimum limit of indemnity
Assets All Risk	Per the insurance policy document
Contract Works insurance	Per the insurance policy document
Environmental Liability	Per the insurance policy document
General and Public Liability	Per the insurance policy document
Transportation (Marine)	Per the insurance policy document
Motor Fleet and Mobile Plant	Per the insurance policy document
Terrorism	Per the insurance policy document

Cyber Liability	Per the insurance policy document
Nuclear Material Damage and Business Interruption	Per the insurance policy document
Nuclear Material Damage Terrorism	Per the insurance policy document

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*.

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.

Z13.4 The protection afforded by the provisions hereof shall be in effect until the KNPS is decommissioned.

Z13.5

Z14 Asbestos

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 Safe Levels Means measurements performed in parallel, yet separately, to existing measurements to verify validity of results.
- Standards 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.
- Standards 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.

C1.2 Contract Data

Part two - Data provided by the Contractor

Notes to a tendering contractor:

1. Please read both the both the NEC3 Term Service Contract (June 2005) and the relevant parts of its Guidance Notes (TSC3-GN)³ in order to understand the implications of this Data which the tenderer is required to complete.
2. The number of the clause which requires the data is shown in the left hand column for each statement however other clauses may also use the same data
3. Where a form field like this [] appears, data is required to be inserted relevant to the option selected. Click on the form field **once** and type in the data. Otherwise complete by hand and in ink.

Completion of the data in full, according to Options chosen, is essential to create a complete contract.

Clause	Statement	Data
10.1	The <i>Contractor</i> is (Name): Address Tel No. Fax No.	
11.2(8)	The <i>direct fee percentage</i> is	%
	The <i>subcontracted fee percentage</i> is	%
11.2(14)	The following matters will be included in the Risk Register	
11.2(15)	The Service Information for the <i>Contractor's</i> plan is in:	
21.1	The plan identified in the Contract Data is contained in:	
24.1	The key persons are: 1 Name: Job: Responsibilities: Qualifications: Experience: 2 Name:	

² Available from Engineering Contract Strategies Tel 011 803 3008 Fax 011 803 3009 or www.ecs.co.za

Job

Responsibilities:

Qualifications:

Experience:

**CV's (and further key person's data
including CVs) are in _____ .**

A	Priced contract with price list
11.2(12)	The <i>price list</i> is in _____
11.2(19)	The tendered total of the Prices is R _____

PART 2: PRICING DATA
TSC3 Option A

Document reference	Title	No of pages
C2.1	Pricing assumptions: Option A	1
C2.2	The <i>price list</i>	3

C2.1 Pricing assumptions: Option A

The conditions of contract

How work is priced and assessed for payment

Clause 11 in NEC3 Term Service Contract (TSC3) core clauses and Option A states:

Identified and defined terms	11	
	11.2	(12) The Price List is the <i>price list</i> unless later changed in accordance with this contract.
		(17) The Price for Services Provided to Date is the total of the Price for each lump sum item in the Price List which the <i>Contractor</i> has completed and where a quantity is stated for an item in the Price List, an amount calculated by multiplying the quantity which the <i>Contractor</i> has completed by the rate.
		(19) The Prices are the amounts stated in the Price column of the Price List. Where a quantity is stated for an item in the Price List, the Price is calculated by multiplying the quantity by the rate.

This confirms that Option A is a priced contract where the Prices are derived from a list of items of service which can be priced as lump sums or as expected quantities of service multiplied by a rate or a mix of both.

Function of the Price List

Clause 54.1 in Option A states: "Information in the Price List is not Service Information". This confirms that instructions to do work or how it is to be done are not included in the Price List but in the Service Information. This is further confirmed by Clause 20.1 which states, "The *Contractor* Provides the Service in accordance with the Service Information". Hence the *Contractor* does **not** Provide the Service in accordance with the Price List. The Price List is only a pricing document.

Link to the Contractor's plan

Clause 21.4 states "The *Contractor* provides information which shows how each item description on the Price List relates to the operations on each plan which he submits for acceptance". Hence when compiling the *price list*, the tendering contractor needs to develop his first clause 21.2 plan in such a way that operations shown on it can be priced in the *price list* and result in a satisfactory cash flow in terms of clause 11.2(17).

Preparing the price list

Before preparing the *price list*, both the *Employer* and tendering contractors should read the TSC3 Guidance Notes pages 14 and 15. In an Option A contract, either Party may have entered items into the *price list* either as a process of offer and acceptance (tendering) or by negotiation depending on the nature of the *service* to be provided. Alternatively the *Employer*, in his Instructions to Tenderers or in a Tender Schedule, may have listed some items that he requires the *Contractor* to include in the *price list* to be prepared and priced by him.

It is assumed that in preparing or finalising the *price list* the *Contractor*:

- Has taken account of the guidance given in the TSC3 Guidance Notes relevant to Option A;
- Understands the function of the Price List and how work is priced and paid for;
- Is aware of the need to link operations shown in his plan to items shown in the Price List;
- Has listed and priced items in the *price list* which are inclusive of everything necessary and incidental to Providing the Service in accordance with the Service Information, as it was at the time of tender, as well as correct any Defects not caused by an *Employer's* risk;
- Has priced work he decides not to show as a separate item within the Prices or rates of other listed items in order to fulfil the obligation to complete the *service* for the tendered total of the Prices.
- Understands there is no adjustment to items priced as lump sums if the amount, or quantity, of work within that item later turns out to be different to that which the *Contractor* estimated at time of tender. The only basis for a change to the (lump sum) Prices is as a result of a compensation event.

Format of the *price list*

(From the example given in an Appendix within the TSC3 Guidance Notes)

Entries in the first four columns in the *price list* in section C2.2 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 tendering contractor enters the amount in the Price column only, the Unit, Expected Quantity and Rate columns being left blank.

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

If the *Contractor* is to be paid a Price for an item proportional to the length of time for which a service is provided, a unit of time is stated in the Unit column and the expected length of time (as a quantity of the stated units of time) is stated in the Expected Quantity col

C2.2 the *price list*

Note: Price list will be attached with the tender, refer to document no 240-166481326 under works information

Price List A: Refurbishment of Boiler Auxiliary Cooling Heat Exchangers

Note:

- The price list can be extended were necessary and all above items (10 points) will be based on fixed cost each of every Outage.
- Find detailed Scope under Part 3: Scope of Work (SOW), and take into consideration all points raised
- Any additional work that might arise after inspection needs to be addressed to the *Service Manager* for approval. This include replacement of worn equipment/component/parts with new ones such as plates etc and any other activities/task that might be discovered during inspection.
- The Contractor will be responsible for taking His/Her own PTW before any work is carried out. It is the Contractor's own responsibility to get authorized in terms of the Eskom Plant Safety Regulations. The Contractor must be fully authorized within 6 months after the contract placement. Contractor to bear in mind that, this work can only be done during Outages and other Contractors will be working in the same area.

Item No.	Description	Unit	Qty	Rate	Total Qty	Price
1	Stripping of heat exchangers (A&B) plate packs (133 plates per pack) on site	EA	2		24	
2	Cleaning of heat exchanger(A&B) plate packs (133 plates per pack)	EA	2		24	
3	Replace old gasket with new one	EA	1		3 192	
4	Replace damaged plate with new one	EA	1		1 330	
5	Supply complete plate pack (133 OFF)	EA	2		24	
6	Supply complete gasket set (133 OFF)	EA	2		24	
7	Installation of heat exchanger(A&B) plate packs on site	EA	2		24	
8	Transport (up to 60KM's per day)	km	60		7 200	
9	SHEQ (including PPE, Safety file and all related SHEQ requirements etc)	Lumpsum	5		60	
10	P's and G's	Lumpsum	5		60	
Total of the Prices (Excluding VAT):						

NB: it should be noted that quantities might increase or decrease depending on the Outage Plan.

Contractor:

Int & Surname

Signature

Date

PART 3: SCOPE OF WORK

Document reference	Title	No of pages
	This cover page	1
C3.1	<i>Employer's Service Information</i>	2
C3.2	<i>Contractor's Service Information</i>	23
	Total number of pages	

C3.1: EMPLOYER'S SERVICE INFORMATION

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1 Description of the service

1.1 Executive Overview

Duvha Power Station consists of 6 Units with the identical types of Boiler auxiliary cooling system consists of two AM20-HBM plate heat exchangers (H/E’s). These two H/E’s are cleaned during outages to improve their thermal efficiency that need to be refurbished during Outages. This work will be done during IR and GO Outages.

1.2 Employer’s Requirements for the Service

The works consists of the refurbishment of the H/E’s. The heat exchangers need to be cleaned and no leaks must be experienced during commissioning. Dye pen (NDT) testing need to be performed to identify the cracks on the plate were necessary. Replace all old gaskets and ensure that no potential leaks must be encountered while the system is in service.

1.3 Interpretation and Terminology

The following abbreviations are used in this Service Information

Abbreviation	Meaning given to the abbreviation
NEC	New engineering contract
TSC	Term Service Contract
SOW	Scope of Work
PM	Project Manager
SE	System Engineer
LAR	Limited Access Register
ASS	Assistant Shift Supervisor
SPO	Senior plant operator
QA	Quality Assurance
QC	Quality Control
QCP	Quality Control Plan
PTW	Permit to Work
GO	General Overhaul
IR	Interim

HE	Heat Exchanger
----	----------------

1.4. Work to be Performed by the Contractor

The Contractor will be responsible for performing the following works:

- Refer to DOCUMENT called Heat exchanger refurbishment (2023-08-01) under Scope of work ATTACHED WITH THE TENER

1.5. General Conditions and Acceptance Criteria

The Contractor is required to submit valid certificates of the courses and training completed according to the OHSA act and proof of SANS standards compliance (for the Technician and Company). This entire document has to be submitted with tender document.

The Employer will provide scaffolding or platforms if required. The Employer will liaise or make an arrangement with the scaffolding contractor for requirements according to the plan.

QCP document to be approved by Eskom

1.6. Constraints on how the Contractor Provides the Works

Constraints on the sequence and timing of work exist due to other contractors also performing work on the same plant. The Contractor will liaise and plan with these contractors for access.

The Contractor makes his own assessment of the problems and difficulties which may be encountered and no extra payment or claim of any kind will be allowed on account of providing reasonable access to and interfacing with other Contractor

The Contractor specifies and agrees with the Supervisor which existing installations, if any, will require temporary removal or dismantling, in order for him to acquire access to the area designated for the works. Any such removal or dismantling and its subsequent reinstatement are the responsibility of the Contractor.

Therefore the assessment of the payment to the Contractor will only be done after signing of all supporting document such as QCP, all required Certificates etc.

The Contractor will be responsible for taking His/Her own PTW before any work is carried out. It is the Contractor's own responsibility to get authorized in terms of the Eskom Plant Safety Regulations. The Contractor must be fully authorized within 3 months after the contract placement. Contractor to bear in mind that, this work can only be done during Outages as well as during normal day to day maintenance and other Contractors will be working in the same area.

2 Management Strategy and Start up

3 Management strategy and start up.

3.1 Management meetings

Regular meetings of a general nature may be convened and chaired by the Supply Manager as follows:

Title and purpose	Approximate time & interval	Location	Attendance by:
Feedback meeting	09H00 Monday-Friday	TBA	Management
Outage meeting	10H00 daily	TBA	Management
Quality Meeting	TBA	TBA	QC
Safety Meeting	TBA	TBA	Safety officer

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*. Records of these meetings shall be submitted to the *Service Manager* by the person convening the meeting within five days of the meeting.

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

3.2 Contractor's management, supervision and key people

Site Manager
Supervisor

3.3 Provision of bonds and guarantees

The form in which a bond or guarantee required by the *conditions of contract* (if any) is to be provided by the *Contractor* is given in Part 1 Agreements and Contract Data, document C1.3, Sureties.

The *Employer* may withhold payment of amounts due to the *Contractor* until the bond or guarantee required in terms of this contract has been received and accepted by the person notified to the *Contractor* by the *Service Manager* to receive and accept such bond or guarantee. Such withholding of payment due to the *Contractor* does not affect the *Employer's* right to termination stated in this contract.

2.4 Documentation control

- All procedures, work instructions, forms and all contractual communications must be controlled for the duration of the contract.
- The following will appear on all controlled documentation as a title page, page header or page footer:
 - Title
 - Document Unique identifier
 - Revision number, original documents will be noted as revision 0. All subsequent revisions will be number sequentially (1, 2, 3, 4....)
 - Revision Date
 - Date when document was last changed. This date will change with each revision.
 - Effective Date
 - Date when document first came into use. This date will not change as the document is revised.

- All contractual communications will be in the form of properly compiled letters or forms attached to e mails and not as a message in the e mail itself.
- Inspections reports to be compiled and submitted within two weeks.
- Data package after all the work has been finished to be submitted within one week after the repairs

2.5 Invoicing and payment

Within one week of receiving a payment certificate from the *Service Manager* in terms of core clause 51.1, the *Contractor* provides the *Employer* with a tax invoice showing the amount due for payment equal to that stated in the *Service Manager's* payment certificate.

The *Contractor* shall address the tax invoice to Eskom Holdings Limited's VAT (4740101508) and Company Registration Number (2002/015527/06). The tax invoice shall be saved in PDF and sent to invoiceseskomlocal@mp2rc110.eskom.co.za and include on each invoice the following information:

Name and address of the *Contractor* and the *Service Manager*;
The contract number and title;
Contractor's VAT registration number;
The *Employer's* VAT registration number 4740101508;
Description of service provided for each item invoiced based on the Price List;
Total amount invoiced excluding VAT, the VAT and the invoiced amount including VAT;
(add other as required)

2.6 Records of Defined Cost to be kept by the *Contractor*

The *Contractor* keeps accurate and complete books of accounts, records and other evidence relating to the Actual Cost. Records and accounts must reflect all work done on the contract. These are open to audit. All documentation is kept by the *Contractor* for a period of three years following Completion of this contract. This information must be kept up to date at all times.

The *Contractor* may be requested to submit to the delegated *Service Manager* proof of costs incurred, which may include the following:

- the number and grading of employees within the Working Areas
- the number and grading of employees outside the Working Areas
- copies of their daily time cards
- cost allocation
- payroll registers
- Schedule of Equipment and time sheets, and
- Any other information the delegated *Project Manager* reasonably requires.

2.7 Training workshops and technology transfer

Duvha Power Station will from time to time schedule Plant Safety Regulations training; it is responsibility of the *Contractor* to book his personnel for the training.

2.8 Things provided at the end of the *service period* for the *Employer's* use

2.8.1 Equipment

None.

2.8.2 Information and other things

All records, data books, inspection reports etc relating to the *Works*.

2.9 Management of work done by Task Order

The *Service Manager* issues a Task Order to the *Contractor* which specifies clearly the work to be provided, additional specifications and procedures and any other constraints the *Contractor* complies with in providing the Works. The Task Order is issued before the *Contractor* Provides the Work.

The *Service Manager* issues Task Orders to the *Contractor* in a timely manner that allows the *Contractor* to properly plan the work within the time periods stated on the *Task Order*.

The *Service Manager* issues to the *Contractor* any information relative to the *Employer's* need and circumstance surrounding forecast future work required from the *Contractor*. This information allows the *Contractor* to provide staff in a cost effective and efficient manner.

Emergency work

The *Service Manager* may issue a verbal instruction to the *Contractor* to undertake emergency work. This verbal instruction is confirmed in writing within 5 days from when the instruction is issued.

3. Health and safety, the environment and quality assurance

3.1 Health and safety risk management

The *Contractor's* personnel is to undergo Safety Induction Training at Duvha prior to commencement of this contract and all the relevant Documentation is to be approved by Safety Officials and the Project Manager before any activities can be started on site.

- The Contractor shall comply with the health and safety requirements contained in SAS0012: Duvha Power Station Contractors safety manual (latest revision obtainable from the Service Manager)
- The documents are completed by the *Contractor's* and submitted to the *Employer* before taking possession of the works.
- These documents are valid for the duration of the works.
- The *Contractor* and all his personnel attend a Health and Safety Induction Course prior to starting with the *works*.
- The induction course is presented by the Safety Risk Department at Duvha Power Station.
- The *Contractor* makes arrangements with Safety Risk Management at telephone number 013-690-0143.
- The *Contractor* submits all the documents as indicated in the Safety, Health & Environmental Specifications relevant to the work to Safety Risk Management before the induction course.
- Training and Competency Records with regard to the skills he uses to carry out the *works* or any other works in the *Employers* premises.
- Compensation Commissioner records and proof of registration.
- Records and documentation with regard to any sub-contractor or labour-only contracts he places or uses to carry out the *works* or any other works in *Employers* premises.
- Personal Protective Equipment and Safety Equipment Inspection, training and competency records and documentation.
- Employment contracts for all sub-contractor or labour-only contracts.
- Compliance to a Safety System, such as NOSA or any other system that is similar in nature.

- Records of all incidents or accidents, and vehicle accidents, incurred during execution of this *works* or any other works in the *Employers* premises.
- Records of all man-hours, including sub-contractors or labour-only contracts, the *Contractor* spends on the *Employers* premises.
- Written Safe Work Procedures for all hazardous tasks the *Contractor* executes on the *Employers* premises.
- A Fall Protection Plan for all elevated work the *Contractor* does on the *Employers* premises.
- Environmental Plan and awareness training.
- Induction training records of his staff by himself/herself.
- Minimum wage compliance for the different skills and to which Bargaining Council compliance is made to and proof of membership, if any.
- Risk Assessment of this type of works
- Proof of authorisation/accreditation from Department of Labour and or other Statutory Body for this type of works, if applicable
- Emergency Evacuation and Rescue Plan for the hazardous tasks related to the works.

3.1.14 Eskom's Cardinal Rules

The Contractor will be responsible to adhere to the following 5 Eskom's cardinal rules:

Rule 1: Open, Isolate, Test, Earth, Bond, and/or Insulate Before Touch

(That is, any plant operating above 1 000 V)

No person may work on any electrical network unless:

- He/She is trained and authorised as competent for the task to be done;
- A pre-task risk assessment to identify all risks and hazards has been conducted prior to any work commencing;
- An equipotential zone is created for each worker on the job site by earthing, bonding, and/or insulating according to approved procedures;
- All conducting material is connected together, all staff on site wear electrical safety shoes, and insulating techniques are applied according to standards; and
- The authorised person (team leader) has certified and shown all team members that the apparatus is safe to work on.

Rule 2: Hook up at Heights

Working at height is defined as any work performed above a stable work surface or where a person puts himself/herself in a position where he/she exposes himself/herself to a fall from or into.

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

- A pre-task risk assessment to identify all risks and hazards has been conducted prior to commencing any work at height;
- He/She is appropriately trained;
- He/She is appropriately secured during ascending and descending; and
- He/She is using an approved fall arrest system where applicable.

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.

"Under the influence" means the use of alcohol, drugs, and/or a controlled substance to the extent that:

- The individual's faculties are in any way impaired by the consumption or use of the substances; or
- The individual is unable to perform in a safe, productive manner; or
- The individual has a level of any such substance in his/her body that corresponds to or exceeds accepted medical/legal standards; or
- The individual has a level of alcohol in his/her body that is greater than 0.02% blood alcohol concentration.

This includes any level of an illegal substance in the body, irrespective of when the substance was used.

Rule 5: Ensure that you have a Permit to Work (PTW)

Where an authorisation limitation exists, no person shall work without the required Permit to Work (PTW), which is governed by the Plant Safety Regulations, Operating Regulations for High Voltage Systems (ORHVS) etc.

- No plant is to be returned to service without the cancellation of all permits on that plant in accordance with procedure.

NB: In the case of live work, a "live work declaration form" is to be completed by the authorised person who is the person responsible for the safe execution of work according to relevant standards and procedures.

Please ensure that these rules are understood and communicated with the urgency that they deserve. If any of these rules are unclear or the consequences not understood, please do not hesitate to discuss it with Eskom, Duvha Power Station.

3.2 Environmental constraints and management

- The *Contractor* shall comply with the environmental criteria and constraints stated in Annexure ENVP 0016: Procedure for environmental handling of waste including redundant and obsolete equipment.
- Refuse Disposal
- The *Employer* will provide special colour coded bins for refuse disposal. The *Employer* will empty these bins.
- The *Contractor* ensures that all workers under his control strictly adhere to the correct use of refuse bins:
 - Maroon bins: - Scrap metal only
 - White bins: - Lagging and general household rubbish
 - Yellow bins: - Ash, dust, coal dust and sand
- For the full duration of the *Works*, the *Contractor* is responsible to keep the work area clean of any rubble, and to place all refuse into the bins provided

WHERE IS THE DISPOSABLE REQUIREMENTS OF THE CONTRACTOR OR THE SUBCONTRACTOR WHICH IS REQUIRED TO CONMPLY WITH. THE DISPOSABLE REQUIREMENTS FOR THE CONTRACTOR TO COMPLY WITH IS THE ONE ABOVE i.e the colour of the bins and the type of waste to be disposed on those bins.

3.4. Quality assurance requirements

- All work is carried out under the supervision of an experienced supervisor.
- The *Contractor* complies with the *Employer's* Quality Requirements as specified in Eskom Generation Standard QM58. Annexure B to this Standard indicates the specific application thereof.
- All quality control documentation is submitted to the *Project Manager* within 7 days of Contract date.
- Proposed QCP will be provided to suppliers after the awarding of the contract.
- The Contractor, when using materials that are required to comply with a standard specification. The *Contractor* shall, if so ordered, furnish the Engineer with certificates showing that the materials do comply.
- Where specified, materials shall bear the official mark of the appropriate standard.
- Samples ordered or specified shall be delivered to the Engineer's office on the Site.
- Unless otherwise specified, all proprietary materials shall be used and placed in strict accordance with the published instructions of the relevant manufacturer.

4. Plant and Materials

4.1 Specifications

The *Contractor* to ensure that the work be performed in accordance to the latest statutory regulations, corporate standards and regulations, SANS and international (where applicable) design standards as well as all associated standards and regulations. This includes but is not limited to the following:

4.1.1 Statutory Safety Regulations:

- Occupational Health and Safety Act, Act 85 of 1993 and its Regulations
- SANS 085 - The Design, Erection, Use and Inspection of Access Scaffolding

4.1.2 Corporate Standards and Regulations:

- ENVP 0016 - Procedure for environmental handling of waste including redundant and obsolete equipment.
- RMP0001 - Risk and Impact Assessment – Duvha Power Station.
- SAP0006 - Work in Confined Spaces

4.2 Plant & Materials provided “free issue” by the *Employer*

- a) The *Employer* will provide power supply, water and land for the storage of equipment and material.
- b) Should the *Contractor* need to use of any of the *Employer's* Equipment, including compressed air, electricity, water supply and crane, it must be specified by the Contractor. The *Employer* does not guarantee continuity of supply of any of these items.

4.3 Contractor's procurement of Plant and Materials

The Contractor shall make use of SABS approved plant and material. Test certificates shall be given to the project manager.

4.4 Contractor's Equipment (including temporary works)

The Contractor must supply all materials, tools and equipment that are needed for the entire contract period.

5. Working on the Affected Property

5.1 Employer's site entry and security control, permits, and site regulations

- a) The contractor applies for access permits for all works exceeding four (4) weeks via the Project Manager, who will co-ordinate this.
- b) The *Contractor* applies for *Contractor's* Permits for all his employees and/or subcontractors at the Security gate, at least 24 hours prior to entry of the Duvha Power Station Security Area.
- c) The *Contractor* completes the specific form in the Duvha Power Station Contractors Safety Manual, listing all of the personnel that he intends using on site.
- d) The completed list, identified with the *Contractor's* name, contains the following information:
 - *Employee Name*
 - *Employee ID Number*
 - *Eskom Safety Co-ordinator signature*
 - *Eskom Project Manager signature*
 - *Validity Date*
- e) No permits are issued to personnel who have not attended safety induction.
- f) The *Contractor* photocopies the first page of the ID book of every one of his employees; reduced to the size 65%.
- g) This completed list, together with the photocopies of the ID books is delivered to Protective Services for the preparation of the *Contractor's* Permits.
- h) The *Contractor* allows at least 24 hours for the preparation of the security permits, before he collects the permits from the Protective Services offices.
- i) The *Contractor's* personnel are required to be in possession of a *Contractor's* Permit at all times inside Duvha Power Station.
- j) All *Contractors'* permits are submitted back to Protective Services when the workers leave the site after completion of the *works*. If you loose a permit a penalty of R150.00 is needed for a new permit. The *Contractor* compiles detailed Tool Lists (obtainable from Protective Services) of all tools and equipment to be taken on site before arriving at the power station.
- k) Authorised copies of these lists are retained to be used again when the tools and equipment is removed from site.
- l) The *Contractor's* visitors and all personnel conform to the security arrangements that are in force at Duvha Power Station.
- m) Application forms for visitors are filled in by the *Contractor's* Site Manager and approved by the *Project Manager*, and submitted to the *Employer's* Protective Services office one day prior to the visit.
- n) Visitors will not be allowed on site if the necessary forms are not in the possession of security staff.
- o) The Chief Security Officer may, with valid cause, remove any of the *Contractor's* personnel from site, either temporarily or permanently. He may deny access to the site to any person whom, in the opinion of the said Chief Security Officer, constitutes a security risk.
- p) No unauthorised vehicles will be allowed on site. Only *Contractor's* vehicles with displayed Contract Vehicle Permits disks will be allowed on site. Contract Vehicle Applications are directed to the *Project Manager* for consideration and approval.

- q) The *Contractor* is restricted to the Site. The *Contractor* is forbidden to enter any other areas, and ensures that his employees abide by these regulations.
- r) Parking inside the power station is strictly forbidden, except for loading purposes.
- s) No recruiting of casual labour may be done on Eskom premises, including the area outside the Power Station Security Gate.
- t) Security personnel may search any premises, property or person within the security area of Duvha Power Station
- u) No Photographic equipment will be allowed within the security area of the Power Station without obtaining permission.
- v) Application forms for such permission is available from the Protective Services offices.
- w) Any person found in possession of such equipment will be prosecuted in terms of the National Key Point Act

5.2 People restrictions, hours of work, conduct and records

The *Contractor* working hours is required as follows:

- The labour is supplied for 173 hours per month.
- All areas 7:00am - 16:00pm Monday to Thursday.
- Friday 7:00am – 12pm
- Lunch break 12:00pm – 13:00pm
- Overtime Hours Saturday, Sunday & P/Holiday: 07:00am – 15:00pm

It is very important that the *Contractor* keeps records of his people working including those of his Subcontractors. The *Service Manager* shall have access to them at any time. These records will be required when assessment are done.

Take note that a ‘No work, No pay’ approach will be implemented in case the contractors employees embark on a strike or stay away.

5.3 Equipment provided by the *Employer*

- The *Employer* allows the *Contractor* to use Overhead Cranes and Hoists, provided the *Contractor's* employee is an authorised Lifting Machine operator.
- The *Employer* provides scaffolding, the request shall be made through the Service manager or his/ her representative.
- Should the *Contractor* require using any of the *Employer's* Equipment, including compressed air, electricity, water supply and crane, it must be specified by the *Contractor* during the kick off meeting. The *Employer* does not guarantee continuity of supply of any of these items.
- The *Employer* shall be entitled to withdraw use of the said Equipment, should proper maintenance and cleanliness not be ensured. In that event, the *Contractor* shall be obliged to provide the necessary Equipment at his own cost.
- The *Contractor* is responsible for the repair, replacement or correction as necessary of all pieces of tools and equipment supplied by the *Employer* which are damaged and / or lost whilst in the *Contractor's* custody and control.
- The *Contractor* site manager must ensure that any one of his employees or Sub-*Contractor*, operating hoist equipment belonging to the *Employer*, is authorised by an Accredited Company and retraining is done annually. Arrangements for training courses can be made via Duvha Power Station Maintenance Training but the *Contractor* will absorb costs.
- A copy of this accredited and valid training certificate must be given to the *Employer's* Supervisor, who will then arrange access for usage.

5.4 Site services and facilities

- a) Potable Water Supply
 - Potable water is available at the existing points.
- b) Electrical Power Supply
 - Power is available at the existing points.
 - The Contractor provides his own portable 380V electrical distribution boards, and supply cables to and from the boards, for all his power supply requirements to execute the works.
 - Contractors' Electrical Distribution Boards complies with OHSA as referred to in the Electrical Installation Regulations and the Electrical Machinery Regulations.
 - Each board brought onto site must have a Certificate of Compliance issued by an accredited person.
 - The Contractors' electrical distribution boards are installed at the works on a time negotiated with the project manager, prior to the possession date.
 - The Employer connects distribution boards to a 380V three-phase AC power supply, only after the Contractor has submitted the valid Certificate of Compliance.
 - All Contractors' Electrical Distribution Boards are earthed to the steel structure of the plant.
- c) Toilet Facilities
 - The Employer provides the Contractor access to existing toilet facilities. The Contractor is to provide this facility should the existing facilities not be within reasonable distance from the working area.
- d) Catering Facilities
 - The Contractor are not allowed to use the Employer's dining facilities, unless a specific agreement has been made between the Contractor and Eskom Catering and Accommodation Services (ECAS).
 - The Contractor may buy take away meals from the fast foods outlet on Site.
- e) Medical Facilities
 - The *Contractor* provides a First Aid service to his employees and subcontractors. In cases where these prove to be inadequate, like in the event of a serious injury, the *Employer's* Medical Centre and facilities will be available.
 - Outside the *Employer's* office hours, the *Employer's* First Aid Services are only available for serious injuries and life threatening situations.
 - The *Employer* recovers the costs incurred, in the use of the above *Employer's* facilities, from the *Contractor*

5.5 Any Other Work

5.5.1 Temporary works, Site services & any constraints

The service provider shall provide, operate and maintain sufficient quantity such as pumping equipment, well points, pipes and other equipment as may be necessary.

The Service provider shall also provide any temporally works as may be necessary to minimise damage, inconvenience or interference.

5.5.2 Setting out of the works

- a) The *Service provider* shall properly deal with and disposal of water to ensure that the works are kept sufficiently dry for their proper execution.
- b) The *Service provider* shall provide, operate and maintain in sufficient quantity such pumping equipment, well points, pipes and other equipment as may be necessary.
- c) The *Service provider* shall also provide temporally works as may be necessary to minimise damage, inconvenience or interference.

5.5.3 Underground services, other existing services, cable and pipe trenches and covers

Where underground cables and pipes are present in the area, care must be exercised to ensure that they are not damaged. In the case of damage to existing components, the contractor will be held liable for replacement/repair thereof.

5.5.4 Control of noise, dust, water and waste

- a) The *Service provider* shall take all responsible measure to minimise any dust nuisance, pollution of stream and inconvenience to or interference with public as a result of the execution of the works.
- b) Remove all rubble and dispose to appropriate facility as according Duvha waste management procedure (EVP0005)

5.6 Employer's Site entry and security control, permits, and Site regulations

5.6.1 Restrictions to access on Site, roads, walkways and barricades

- a) Pedestrian crossings are marked on the power station roads and should be used.
- b) Walkways are clearly marked on the Power Station and should be used when walking to keep safe on any object that might fall.
- c) Barricades are provided where there are open trenches and around the sumps and manholes.
- d) The contractor shall occupy only such ground as is necessary to carry out the works.
- e) All fences and other structure that have been damaged or interfered with by the contractor shall be restored to be in a condition at least equivalent to their original condition.

5.6.2 Plant Safety Regulations

- a) The LAR is for the person in charge of the plant to maintain control over activities taking place on his plant that are not covered by the Plant Safety Regulation and Operating Regulations for High Voltage Systems.
- b) Activities that are allowed to be carried out under the LAR must not require a permit and must satisfy the following criteria:
 - i) They must not involve danger to the person carrying out the activity;
 - ii) No plant isolations must be required;
 - iii) The activity must be performed by a skilled person and there must be no risk of a production loss;
 - iv) The duration of the activity must be less than 24 hours
 - v) The *Authorised Supervisor* accompanies the *Contractor* during the first instances of working under a LAR on a specific plant area.
- c) It is very important that the person who plans to do an activity on a plant under the LAR informs the person in charge of the plant (ASS on the panel or PPO at WTP) of what will be done. This means verbally telling the person in charge of the plant what will be done and not just signing the LAR book. The LAR book must also be signed.
- d) It is also important that as soon as the activity is completed the person, who was doing the activity, notify (verbally) the person in charge of the plant that conditions are back to normal and that the LAR has been signed off. Signing the LAR book silently without notifying the person in charge of the plant is not sufficient.
- e) For more information please refer to Plant Safety Regulation C11.
- f) The *Service provider* is required to have as a minimum 3 Responsible Persons/Authorised supervisor/s as per the Eskom's Plant Safety Regulations.

5.6.3 Provided by the Service provider

The *Service provider* should provide facilities they deem necessary in executing the work. This must be discussed with the Project Manager prior to commencement of work.

5.6.4 Tests and inspections

- The *Service provider* and the Overseer/Project Manager shall conduct plant walk down every Thursdays according to the QCP or scope of work,
- All work must be inspected and approved by the Project manager before monthly assessment.

3.4.4 Completion

Completion of the whole of the *works* is when all activities in the Works Information are completed without any defect.

3.5 Plant and Materials

3.5.1 Specifications

All additional information in connection with specifications needed by the Contractor will be provided by the Project Manager

Thomson to verify

Title	Date or revision	Tick if publicly available
Occupational Health and Safety Act, No 85 of 1993 and any amendments thereafter	Act, No 85 of 1993	NO
Employer's Health and Safety Requirements	Latest Revision	
Eskom Quality Standard QM-58	QM-58	NO *
Duvha Power Station Contractors Safety Manual	SAS 0012 Revision 3	NO
The design, erection, use and inspection of access scaffolding	SABA 085	NO
Draft Construction Regulations		NO
Personal Protective Equipment against falls from a height – Full Body Harnesses	SABS 361:1992* EN	NO
Personal Protective Equipment against falls from a height – Connectors	SABS 362:1992* EN	NO
Personal Protective Equipment against falls from a height – Fall arrest systems	SABS 363:1992* EN	NO
Personal Protective Equipment against falls from a height – Test Methods	SABS 364:1992* EN	NO
Personal Protective Equipment against falls from a height – General requirements for instructions for use and for marking	SABS EN 365:1992	NO
Standard Specifications for Thermal insulation at Power Station	NWS 1454, Rev.3, April 1983	
Specification for Corrosion Protection of Plant and	GSP 36-1126	NO

Title	Date or revision	Tick if publicly available
Equipment with Coatings Doreen and Thabiso	Revision 0	

Standards, standard specifications and procedures specified by the *Employer* are deemed to include all the latest revisions of and/or amendments to and/or additions to such specifications and standards applicable at the Contract Date.

The *Contractor* is responsible for ensuring that he/she is in possession of all relevant documentation.

Eskom Standard Specifications may be obtained from the Conference Centre, Megawatt Park, Maxwell drive, Sunning hill X3, Sandton.

Duvha Power station Standard Specifications may be obtained from the Information Management at the Power Station.

ISA standards will be used, especially for ergonomics.

The Oxford dictionary will be used for spellings and meanings of words

3.5.2 Correction of Defects

The Contractor will be liable for any defect that will be picked during commissioning of the strainers and the defect period for this contract will be 26 weeks.

4 Working on the Affected Property

4.1. Site Services Provided by the Employer

- Electricity at no charge, available at existing points of connection, both 220V AC and 380V 3-phase supply. The Employer does not guarantee continuity of supply and no claims for standing time as a result of power failures will be considered.
- Potable water at no charge, available at existing points of connection.
- A yard with no infrastructure is available on request
- Toilet facilities at no charge, available at existing facilities.
- Should the Contractor qualify for a site, the Employer will provide a site within the premises of the Power Station for the Contractor to establish himself for the execution of the works. The Project Manager together with the Site Manager will allocate a site to the Contractor. A site close to the connection points of the above services cannot be guaranteed.
- At least one Supervisor shall be authorized as a Responsible Person in terms of the Eskom Plant Safety Regulations to take out Permits to Work on plant (PTW).
- At least one two Supervisors and/or one two Riggers will undergo a hoist crane course on site to be authorized to use hoist cranes for material handling if required. These costs will be paid by the *Contractor* for the course.

Warning

Phase rotation may change during a power supply break. The Contractor checks rotation of their equipment before recommencing of work.

4.1.1 Contractor's Site

An area is available on request, to the *Contractor* for the establishment of a site office.

The *Contractor* shall supply, install, properly maintain and remove all temporary construction facilities and utilities necessary for the complete performance of the *works* including the following:

- Any damage to installed lighting will be repaired at the *Contractor's* expense.
- The reticulation of electricity, water and any other services required by the *Contractor* from a supplied central distribution point.
- All temporary buildings including change rooms and all related work including temporary fire fighting equipment.
- All first aid facilities.
- Fuel and lubricants.
- Heating fuels.
- Transportation facilities on and off site.
- Communication facilities.
- Compressed air and gases.
- Maintenance of lay down and storage areas.
- Electric panels and distribution wiring for erection and within *Contractor's* yard. The *Contractor* will be responsible for any fees charged by the client for connections up to their electric panels.
- Construction and potable water connections.
- Security of *Contractor's* yard.
- Temporary lighting to ensure safe working conditions.

4.1.2 Medical Facilities

- a) The *Contractor* provides a First Aid service to his employees and Subcontractor. In the case where these prove to be inadequate, like in the event of a serious injury, the *Employer's* Medical Centre and facilities will be available.
- b) Outside the *Employer's* office hours, the *Employer's* First Aid Services will only be available for serious injuries and life threatening situations.
- c) The *Employer* shall be entitled, however, to recover the costs incurred, in the use of the above *Employer's* facilities, from the *Contractor*.
- d) The *Contractor* to ensure that qualified and competent First Aiders and Emergency Care staff is permanently on site and at actual construction site for emergency situations, as and when they arrive.
- e) The *Contractor* or his staff shall not move the injured party from the incident position and site unless the person/person's life is in danger or the person is moved by a qualified and trained Emergency Care Worker.

4.1.3 Refuse Disposal

- a) The *Employer* will provide special colour coded bins for refuse disposal. The *Employer* will empty these bins.
- b) The *Contractor* ensures that all workers under his control strictly adhere to the correct use of refuse bins:
 - Maroon bins: - Scrap metal only
 - White bins: - Lagging and general household rubbish
 - Yellow bins: - Ash, dust, coal dust and sand
- c) For the full duration of the works, the *Contractor* is responsible to keep the work area clean of any rubble, and to place all refuse into the bins provided.

- d) Removal of scrap and waste, including concrete/ash/refractory material/guniting material, to a location within the Duvha Power Station security gates and/or the ash dams must be included in the Price Schedule or Bill of Quantities. This must be inclusive of labour and equipment i.e. forklifts spades, shovels, transport, etc.

4.1.4. Emergency Services

- Medical Station available on site during normal working hours. The emergency telephone number internal to Duvha is 2222/2235 or 013 690-0222/0235 from an external land line or cell phone and can be used to obtain emergency assistance.
- Fire protection and rescue available on site 24 hours per day also at the above number. The Contractor complies with the requirements of Employer's Standard NWS 1494 Revision 4 "Fire prevention and protection of Contractor's premises on Engineering Sites" and of Site Regulations pertaining to fire protection.

4.2 Security Arrangements

- a) A access permit will only be issued to that Contractor staffs that has done Safety Induction at Duvha Safety Risk Management, where induction would have only been done if a copy of the person's valid medical certificate was given to the Safety Officer prior to induction. Before induction, a *Contractors* Safety Manual should have been completed and signed by the relevant parties.
- b) The *Contractor* applies for temporary access permits (*Contractor's* Permit) at the Security Gate, 48 hours prior to the *Possession Date* (refer to 2.2.3 below). The *Contractor* personnel shall be required to be in possession of a *Contractor's* Permit at all times.
- c) All *Contractor* personnel shall be issued with a temporary access permit (*Contractor's* Permit) which will contain the following information:
- Name
 - ID Number
 - Company
 - Validity date
- d) All *Contractor's* permits must be returned to Protective Services when the workers leave the site on the last working day. Salaries/Wages should be paid to contract staff on the last working day outside of Duvha Power Station or at other pay points outside of the *Employers* property.
- e) In order to assist Protective Services with the issuing of permits and the identification of personnel on site, the successful area. This list must be delivered to Protective Services, or can be faxed to (013) 6900348. The list, identified with the *Contractor* is to supply a list of all personnel that he intends using on site, at least 48 hours prior to entry of the Security *Contractor's* name, is to contain the following information:
- Employee Name
 - Employee ID Number
 - Eskom Safety Co-ordinator signature
 - Eskom *Employers* Representative signature
 - Copy of the first page of the ID book of every employee of the *Contractor*, photocopied to reduce the size to 65%.
 - The list of details has to be completed on the special form attended to the *Contractors* Safety Manual, referred to in Section 2.3.2 (b).

To speed up the process of gaining access to the site, the *Contractor*, must compile detailed lists of all tools and equipment to be taken on site before arriving at the Power Station Security gate. A special Tool list form (SCP-0001/2) is available at Protective Services. An authorised copy of this list must be retained to be used again when the tools and equipment is removed from site after the completion of the *Works*.

The *Contractor's* visitors and all personnel shall conform at all times to the security arrangements in force at the site. Application forms for visitors must be filled in by the *Contractor's* Site Manager and approved by the *Employers* Representative, one day before the visit and submitted to the *Employer's* Protective Services office. Visitors will not be allowed on site if the necessary forms are not in the possession of the security staff.

The Chief of Protective Services may, with valid cause, remove any of the *Contractor's* personnel from the site, either temporarily or permanently. He may deny access to the site to any person whom, in the opinion of the said Chief of Protective Services, constitutes a security risk.

No un-authorized vehicles will be allowed on site. Only *Contractor's* vehicles with displayed Contract Vehicle Permits disks will be allowed on site. *Contractor* Vehicle Applications should be directed to the *Employers* Representative. All vehicles entering the site must be roadworthy. No overloading of personnel or equipment will be tolerated on site.

The *Contractor* will be restricted to the *working areas* associated with his place of work. The *Contractor* is forbidden to enter any other areas, and must ensure that his employees abide by these regulations.

Parking inside the Power Station is strictly forbidden, except for loading purposes *Employers* Representative will indicate designated parking areas.

No recruiting of casual labour may be done on Eskom premises, including the area outside the Power Station Security Gates.

Process to be followed to gain access to the site:

- Signed Contract in place via Purchasing Department
- Collect and complete a *Contractors* Safety Manual, which must then be checked and accepted by *Employers Representative*. Original back to Safety Risk Management.
- Arrange for all *Contractors* staff for induction with Safety Risk Management.
- Each *Contractors* staff to arrive for induction with a valid Medical Certificate. Failure to do so will result in no induction being given to those person/persons.
- Proceed to Security Department for access cards.

4.3 Power Supply Arrangements

- a) Where required, the *Contractor* must provide his own portable 380V electrical distribution boards, and supply cables to and from the boards, for all his power supply requirements to execute the *Works*.
 - b) *Contractors'* Electrical Distribution Boards shall comply with OHS&A as referred to in the Electrical Installation Regulations and the Electrical Machinery Regulations. Each DB board brought on site shall have a certificate of compliance issued by an accredited person.
- i)
- This certificate shall be submitted to *Employers* Representative prior to connection, who will then submit to Duvha Power Stations Electrical Maintenance Department.

- c) The *Contractors'* Electrical Distribution Boards must be installed at the works on a time negotiated with the *Employers* Representative, prior to the *possession date*. The *Employer* will connect distribution boards to a 380V three-phase AC power supply, only after the *Contractor* has submitted the valid certificate of compliance.
- d) All *Contractors'* Electrical Distribution Boards must be earthed to the steel structure of the plant.
- e) A qualified and competent electrician, as per Electrical Installation Regulations, to be present when connecting DB Boards to Duvha supply to prevent damage to equipment.

4.4 Plant Identification Labels

The *Contractor* is responsible to replace and make good all plant identification labels that were removed or damaged during the execution of the *Works*.

4.5 Commissioning and Take Over

The *Contractor* will supply personnel to assist the *Employer* with cold and hot commissioning of the *Works* were necessary

4.6 Electrical Welding Machines

- a) Boiler Area - Apply earth cable to steel structure closest to the welding spot.
- b) Turbine Casings - Apply earth cable on the particular component as close as possible to the welding spot.
- c) Do not apply the earth across the valve or on the valve body. This will damage the valve internals.
- d) When welding a valve to pipe work, connect the earth cable to the pipe work close to the area being welded.
- e) Bearings - Do not apply the earth across the bearing or on the bearing shell. This will damage the bearing internals.

4.7 Barricading and Screens

- a) The *Contractor* will provide and install solid barricades and warning devices to ensure that equipment and persons are not exposed to danger or to prevent access to dangerous areas.
- b) All welding, flame cutting and grinding work shall be properly screened to protect persons from any injury.
- c) All gratings shall be covered with adequate protective screening when welding or flame cutting in the vicinity to prevent falling sparks and welding slag.
- d) If a Category C or D injury has occurred, the scene and all access or entry points shall be immediately solidly barricaded and prohibitive signs shall be installed.

4.8 Construction, Erection and Maintenance Work on Site

- a) The *Contractor* will be responsible for the provision of all or any temporary or expendable materials required for the temporary storage of material.
- b) The *Contractor* will be responsible for the safeguarding, care and security of all items supplied by the *Employer* whilst in the *Contractor's* custody and control, until completion of the whole of the *works*.

- c) The *Contractor* will be responsible for all hoisting and lifting, by qualified riggers, and equipment that is required to complete the *works*, unless otherwise clearly identified and stated in the contract.
- d) The *Contractor* will be responsible to check and verify correctness of civil and structural (temporary/permanent) work installed by others prior to commencement of installation / erection or during usage.
- e) The *Contractor* will be responsible for cleaning where necessary of all mating surfaces before erection.
- f) The *Contractor* will be responsible for the repair, replacement or correction as necessary of any and all items of Plant and / or Materials supplied by the *Employer* which are damaged and / or lost whilst in the *Contractor's* custody and control.
- g) The *Contractor* Site Manager shall ensure that only competent and medically fit personnel will be allowed to work on the *works*.
- h) All cutting of pressure parts will be done with pneumatic grinders only.
- i) *Contractor* to have a copy of the draft Construction Regulations and to understand and implement the required safety systems.

4.9 Adjacent Plant, Foundations and Buildings

The adjacent plant and equipment may not be modified without written permission from the *Employer*. Modification in this sense includes, but is not limited to the following:

- Welding onto existing plant
- Cutting into existing pipe work
- Drilling into Civil structures

4.10 Restrictions on the Use of *Contractor's* Equipment

The *Contractor's* equipment does not impair the operation or access to the plant. Therefore no compressed air is tapped off from the *Employer's* compressed air system.

4.11 Restrictions Applicable to the *Contractor*

a) Installation Restrictions

b) Adjacent plant, foundations and buildings:

The adjacent plant and equipment may not be modified without written permission from the *Employer*.

Modification in this sense includes, but is not limited to the following:

- Welding onto existing plant
- Cutting into existing pipework
- Drilling into civil structures

c) General

- The *Contractor's* equipment does not impair the operation or access to the plant.
- The *Contractor* does not use barrier tape for barricading, but use solid barricading.
- No compressed air is tapped off from the *Employer's* compressed air system.
- The *Contractor* is responsible for cleaning where necessary of all mating surfaces before erection.

d) Refuse Disposal

The *Contractor* is responsible to keep the work area clean of any rubble. All waste introduced and/or produced on the Employer’s premises by the *Contractor* for this contract is handled in accordance with the minimum requirements for the Handling & Disposal of Hazardous Waste in terms of Government Legislation as proclaimed by the Department of Water Affairs and Forestry Act 1994 Ref: ISBN0621-16296-5. All refuse is disposed of at a registered dump site. There is no such dump site at Duvha.

4.12 Title

The *Contractor* transfers ownership of all plant, inclusive of all drawings and design manuals for the *works*, to the *Employer*. The *Contractor* has no title to material from demolition. All equipment that is removed or replaced remains the property of the *Employer* and is stored in a place designated by the *Employer*.

4.13 Drawings Issued by the Employer

This is the list of drawings issued by the *Employer* at or before the Contract Date and which apply to this contract.

Drawing Number	Revision	Title
Refer to the scope of work		

5. Description of the Site and its Surroundings

5.1 Topographical

- Duvha Power Station is situated in the Mpumalanga Province, on the Bethal road, off Johannesburg – Witbank N12 motorway.
- Weather data can be obtained from the EOD at Duvha Power Station, telephone number (013) 690-2235.
- The Contractor conforms to the requirements set out in the document called “ Health and Safety Practices for Contractors at Duvha Power Station”
- The *Contractor* conforms to the requirements set out in the document called “Eskom Environmental practices and Standards”.

5.2 Plant Area

The work will be performed on Unit 1 to Unit 6 Turbine Auxiliary side during the planned outages in 2016 to 2021. Other contractors will be working in this area as well. Existing buildings, structures, and plant & machinery on the site.

C3.2: CONTRACTOR'S SERVICE INFORMATION