

NEC3 Term Service Contract (TSC3)

Between	ESKOM HOLDINGS SOC Ltd (Reg No. 2002/015527/30)	
and	[Insert at award stage] (Reg No)	
for	MAIN CONDENSER ACID CLEANING AT DUVHA POWER STATION	
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CONTRACT No.	[Insert at award stage]	

ESKOM HOLDINGS SOC LTD

PART C1: AGREEMENTS & CONTRACT DATA

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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:

MAIN CONDENSER ACID CLEANING AT DUVHA POWER STATION

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	
	The first forecast of the total Defined Cost plus the Fee exclusive of VAT is	
	Sub total	
	Value Added Tax @ 15% is	
	The offered total of the amount due inclusive of VAT is¹	
	(in words)	

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

Signature(s)			
Name(s)			
Capacity			
For the tenderer:			
Name & signature of witness	(Insert name and address of organisation)	Date	
Tenderer's CIE	DB registration number:		

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

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

Note:

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

- 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.
- 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		

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C1.2 TSC3 Contract Data

Part one - Data provided by the Employer

Clause	Statement	Data
1	General	
	The conditions of contract are the core clauses and the clauses for main Option:	
		A: Priced contract with price list
	dispute resolution Option	W1: Dispute resolution procedure
	and secondary Options	
		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):	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
	Address	Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg
	Tel No.	
	Fax No.	
10.1	The Service Manager is (name):	Shirly Dhladhla
	Address:	Duvha Power Station PO BOX 2199 Witbank 1035
	Tel:	(013) 295 9465
	Fax:	
	e-mail:	DhladhS@eskom.co.za
11.2(2)	The Affected Property is	Duvha Power Station Units 1 to 6

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

11.2(13)	The service is	Main Turbine Condenser Acid Cleaning
11.2(14)	The following matters will be included in the Risk Register	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.
11.2(15)	The boundaries of the site are	Duvha P/S Unit 2 Turbine Auxiliaries
11.2(16) 11.2(19)	The Site Information is in The works information is in	Part 4: Site Information Part 3: Scope of Work and all documents and drawings to which it makes reference.
12.2	The law of the contract is the law of	the Republic of South Africa
13.1	The language of this contract is	English
13.3	The period for reply is	1 days
2	The Contractor's main responsibilities	As outlined on Part3: Scope of Work
21.1	The Contractor submits a first plan for acceptance within	4 weeks of the Contract Date
3	Time	
30.1	The starting date is.	As soon as the contract is placed
30.2	The service period is	1 Year
30.3	The end date is.	2022
4	Testing and defects	No data is required for this section of the conditions of contract. 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 assessment interval is	1 week after completion of work as per task order
51.1	The currency of this contract is the	South African Rand
51.2	The period within which payments are made is	4 weeks
51.4	The interest rate is	(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

		(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 mutatis mutandis 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.
6	Compensation events	This will be covered by the estimated Risk Contingency
	These are additional compensation events:	Proposed SOW can be greater than expected after inspections, resulting on longer duration
7	Use of Equipment Plant and Materials	No data is required for this section of the conditions of contract.
8	Risks and insurance	
80.1	These are additional <i>Employer</i> 's risks	The program must be flexible as Outages can be shifted as a result of production constraint
		 The Employer will not make payment if the invoice from the Contractor does not corresponds with the price assessed by the Project Manager on the payment certificate. Employer failing to issue the Contractor with the PTW (Permit to Work) due to unavailability of the plant. Appointment Person responsible for Permit to Work might not be available due to shortage of Appointment Persons on Site. Access to Site plant areas might be not be available due to other Contractors working on the same area
9	Termination	 invoice from the Contractor does not corresponds with the price assessed by the Project Manager on the payment certificate. 3. Employer failing to issue the Contractor with the PTW (Permit to Work) due to unavailability of the plant. 4. Appointment Person responsible for Permit to Work might not be available due to shortage of Appointment Persons on Site. 5. Access to Site plant areas might be not be available due to other Contractors working

		follow the proper steps and terminate the contract
10	Data for main Option clause	
Α	Priced contract with price list	
20.5	The <i>Contractor</i> prepares forecasts of the final total of the Prices for the whole of the <i>service</i> at intervals no longer than	2 weeks
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 Adjudicator nominating body 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 arbitration procedure is	the latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.
	The place where arbitration is to be held is	South Africa
	The person or organisation who will	
	choose an arbitrator - if the Parties cannot agree a choice or - if the arbitration procedure does not state who selects an arbitrator, is	the Chairman for the time being or his nominee of the Association of Arbitrators (Southern Africa) or its successor body.
12	Data for secondary Option clauses	
X17.1	The service level table is in	If the Contractor does not perform the work as per the program/schedule submitted, the Employer will apply delay damages of R 3 000.00 per day up to limit of 10% of the contract value.
		A penalty of R5 000.00 will be apply for any defect that can cause low performance of the system/plant that the Contractor has work on

X18	Limitation of liability		
X18.1	The Contractor's liability to the Employer 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 Contractor's liability for Defects due to his design of an item of Equipment is limited to	The greater of the total of the Prices at the Contract Date and the amounts excluded and unrecoverable from the <i>Employer</i> 's insurance (other than the resulting physical damage to the <i>Employer</i> 's property which is not excluded) plus the applicable deductibles	
X18.4	The Contractor's total liability to the Employer, for all matters arising under or in connection with this contract, other than the excluded matters, is limited to	the total of the Prices other than for the additional excluded matters. The Contractor's total liability for the additional excluded matters is not limited. The additional excluded matters are amounts for which the Contractor is liable under this contract for • 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 Employer's property, Plant and Materials), • death of or injury to a person and • infringement of an intellectual property right.	
X18.5	The end of liability date is	5 years after the end of the service period.	
X19	Task Order		
X19.5	The Contractor submits a Task Order programme to the Service Manager within	1 months of receiving the Task Order from the Project Manager	
Z	The additional conditions of contract are	Z1 to Z14 always apply.	
Z 1	Cession delegation and assignment		
Z1.1	The <i>Contractor</i> does not cede, delegate or assign any of its rights or obligations to any person without the written consent of the <i>Employer</i> .		
Z1.2	Notwithstanding the above, the <i>Employer</i> may on written notice to the <i>Contractor</i> 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 <i>Contractor</i> 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 <i>Employer</i> for the performance of this contract.		
Z2.2	Unless already notified to the <i>Employer</i> , the persons or organisations notify the <i>Service Manager</i> within two weeks of the Contract Date of the key person who has the authority to bind the <i>Contractor</i> on their behalf.		
Z2.3	The <i>Contractor</i> 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 <i>Employer</i> having been given to the <i>Contractor</i> in writing.		
Z3	Change of Broad Based Black Economic Empowerment (B-BBEE) status		
Z3.1	Where a change in the <i>Contractor's</i> legal status, ownership or any other change to his business composition or business dealings results in a change to the <i>Contractor's</i> B-BBEE status, the <i>Contractor</i> notifies the <i>Employer</i> within seven days of the change.		
Z3.2	The <i>Contractor</i> is required to submit an updated verification certificate and necessary supporting documentation confirming the change in his B-BBEE status to the <i>Service Manager</i> within thirty days of the notification or as otherwise instructed by the <i>Service Manager</i> .		
Z3.3	Where, as a result, the <i>Contractor's</i> B-BBEE status has decreased since the Contract Date the <i>Employer</i> may either re-negotiate this contract or alternatively, terminate the <i>Contractor's</i> obligation to Provide the Works.		
Z3.4	.4 Failure by the <i>Contractor</i> to notify the <i>Employer</i> of a change in its B-BBEE status may constitute a reason for termination. If the <i>Employer</i> 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 <i>Contractor</i> 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 <i>Contractor</i> , enters the public domain or to information which was already in the possession of the <i>Contractor</i> at the time of disclosure (evidenced by written records in existence at that time). Should the <i>Contractor</i> disclose information to Others in terms of clause 25.1, the <i>Contractor</i> ensures that the provisions of this clause are complied with by the recipient.		
Z4.2	If the <i>Contractor</i> is uncertain about whether any such information is confidential, it is to be regarded as such until notified otherwise by the <i>Service Manager</i> .		
Z4.3	In the event that the <i>Contractor</i> is, at any time, required by law to disclose any such information which is required to be kept confidential, the <i>Contractor</i> , to the extent permitted by law prior to disclosure, notifies the <i>Employer</i> 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 <i>Contractor</i> 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.		

Z	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.	
Z 5		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 <i>Service Manager</i> or the <i>Adjudicator</i> 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.	
Z 6		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. 	
Z 7		Provision of a Tax Invoice and interest. Add to core clause 51	
	Z7.1		
	Z7.2	If the <i>Contractor</i> does not provide a tax invoice in the form and by the time required by this contract, the time by when the <i>Employer</i> 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 <i>Employer</i> in terms of core clause 51.2 is then calculated from the delayed date by when payment is to be made.	
Z 8		Notifying compensation events	
	Z8.1	Delete the last paragraph of core clause 61.3 and replace with:	
		If the <i>Contractor</i> 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 <i>Employer's</i> liability to the <i>Contractor</i> for the <i>Contractor's</i> indirect or consequential loss is limited to R0.00 (zero Rand)	

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The <i>Contractor</i> 's entitlement under the indemnity in 82.1 is provided for in 60.1(12) and the <i>Employer</i> '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.		
Termination: Add to core clause 91.1, at the second main bullet point, fourth sub-bullet point, after the words "against it":		
or had a business rescue order granted against it.		
E Z11 Ethics		
oses	of this Z-clause, the following definitions apply:	
ırty	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,	
ction	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,	
	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,	
J	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,	
tion	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,	
	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,	
)	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	
	means any one or more of a Coercive Action, Collusive Action Corrupt Action, Fraudulen Action or Obstructive Action.	
A Committing Party may not take any Prohibited Action during the course of the procurement of this contract or in execution thereof.		
The <i>Employer</i> may terminate the <i>Contractor</i> 's obligation to Provide the Services if a Committing Party has taken such Prohibited Action and the <i>Contractor</i> did not take timely and appropriate action to prevent or remedy the situation, without limiting any other rights or remedies the <i>Employer</i> has. It is not required that the Committing Party had to have been found guilty, in court or in any other similar process, of such Prohibited Action before the <i>Employer</i> can terminate the <i>Contractor</i> 's obligation to Provide the Services for this reason.		
If the <i>Employer</i> terminates the <i>Contractor</i> '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.		
A Committing Party co-operates fully with any investigation pursuant to alleged Prohibited Action. Where the <i>Employer</i> does not have a contractual bond with the Committing Party, the		
	Term point or he service of the serv	

	Contractor ensures that the Committing Party co-operates fully with an investigation.		
Z12	Insurance		
Z 12 .1 Insurance cover	until the earlier of Completion and the date of the termination certificate. urance 83		
		Minimum amount of cover or minimum limit of indemnity	
		The replacement cost where not covered by the Employer's insurance.	
		The <i>Employer</i> 's policy deductible as at Contract Date, where covered by the <i>Employer</i> 's insurance.	
		The replacement cost where not covered by the Employer's insurance.	
		The <i>Employer</i> 's policy deductible as at Contract Date, where covered by the <i>Employer</i> 's insurance.	
		The replacement cost where not covered by the Employer's insurance.	
		The <i>Employer</i> 's policy deductible as at Contract Date, where covered by the <i>Employer</i> 's insurance.	
	lana akamalaman ka mususum.	Loss of or damage to property The replacement cost	
	and Equipment) and liability for	Bodily injury to or death of a person The amount required by the applicable law.	
	Liability for death of or bodily injury to employees of the Contractor 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 c 86	lause 86 with the following:	

	Insurance by the Employer	
	86.1 The <i>Employer</i> provides the insurances stated in the Insurance Table B	
	INSURANCE TABLE B	
Z13	Nuclear Liability	
Z13.1	The <i>Employer</i> is the operator of the Koeberg Nuclear Power Station (KNPS), a nuclear installation, as designated by the National Nuclear Regulator of the Republic of South Africa, and is the holder of a nuclear licence in respect of the KNPS.	
Z13.2	The <i>Employer</i> is solely responsible for and indemnifies the <i>Contractor</i> or any other person against any and all liabilities which the <i>Contractor</i> or any person may incur arising out of or resulting from nuclear damage, as defined in Act 47 of 1999, save to the extent that any liabilities are incurred due to the unlawful intent of the <i>Contractor</i> or any other person or the presence of the <i>Contractor</i> or that person or any property of the <i>Contractor</i> or such person at or in the KNPS or on the KNPS site, without the permission of the <i>Employer</i> or of a person acting on behalf of the <i>Employer</i> .	
Z13.3	Subject to clause Z13.4 below, the <i>Employer</i> waives all rights of recourse, arising from the aforesaid, save to the extent that any claims arise or liability is incurred due or attributable to the unlawful intent of the <i>Contractor</i> or any other person, or the presence of the <i>Contractor</i> or that person or any property of the <i>Contractor</i> or such person at or in the KNPS or on the KNPS site, without the permission of the <i>Employer</i> or of a person acting on behalf of the <i>Employer</i> .	
Z13.4	The Employer does not waive its rights provided for in section 30 (7) of Act 47 of 1999, or any replacement section dealing with the same subject matter.	
Z13.5	The protection afforded by the provisions hereof shall be in effect until the KNPS is decommissioned.	
Z14	Asbestos	
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 bbreathable 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.	
Compliean ce Monitoring	Means ccompliance 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.	
Parallel	means occupational exposure limit.	
Meaureme nts Safe	Means measurements performed in parallel, yet separately, to existing measurements to verify validity of results.	
Levels	Means airborne asbestos exposure levels conforming to the Standard's requirements for safe processing, handling, storing, disposal and phase-out of asbestos and asbestos containing material, equipment and articles.	

Standsrd	
SANAS	Means the <i>Employer's</i> Asbestos Standard 32-303: Requirements for Safe Processing, Handling, Storing, Disposal and Phase-out of Asbestos and Asbestos Containing Material, Equipment and Articles.
	Meansthe 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 <i>Contractor</i> , the <i>Employer</i> certifies that these conditions prevail. All measurements and reporting are effected by an independent, competent, and certified occupational hygiene inspection body, i.e. a SANAS accredited and Department of Employment and Labour approved AAIA. The <i>Contractor</i> may perform Parallel Measurements and related control measures at the <i>Contractor</i> '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 <i>Contractor</i> '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 <i>Contractor</i> continues to Provide the Services, without additional control measures presented, on presentation of Safe Levels. The contractually agreed dates to Provide the Services, including the Completion Date, are adjusted accordingly. The contractually agreed dates are extended by the notification periods required by regulations 3 and 21 of the Asbestos Regulations, 2001.
Z14.7	Any removal and disposal of asbestos, asbestos containing materials and waste, is done by a registered asbestos contractor, instructed by the <i>Employer</i> at the <i>Employer</i> 's expense, and conducted in line with South African legislation.

C1.2 Contract Data

Part two - Data provided by the Contractor

Clause	Statement	Data
10.1	The Contractor is (Name):	
	Address	
	Tel No.	
	Fax No.	
11.2(8)	The direct fee percentage is	%
	The subcontracted fee percentage is	%
11.2(14)	The following matters will be included in the Risk Register	
11.2(15)	The Service Information for the Contractor's 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:	
	Job	
	Responsibilities:	
	Qualifications:	
	Experience:	
		CV's (and further key person's data including CVs) are in
Α	Priced contract with price list	
11.2(12)	The price list is in	
11.2(19)	The tendered total of the Prices is	R

CONTRACT NO. _____

MAIN CONDENSER ACID CLEANING AT DUVHA POWER STATION

C1.3 Forms of Securities

Pro formas for Bonds & Guarantees

For use with the NEC3 Term Service Contract (TSC3)

[Note to contract compiler:

Once it has been decided which securities are required for this contract delete from this file the ones not required, revise the notes below accordingly and delete this note.]

The conditions of contract stated in the Contract Data Part 1 include the following Secondary Options:

Option X4: Parent company guarantee

Option X13: Performance Bond

Each of these secondary Options requires a bond or guarantee "in the form set out in the Service Information". Pro forma documents for these bonds and guarantees are provided here for convenience but are to be treated as part of the Service Information.

The Contractor shall guarantee his ASGI-SA Obligations by providing the Employer with an ASGI-SA Guarantee in the form provided here.

[Note to contract compiler: If there are no ASGI-SA Obligations in this contract, delete the above statement and the ASGI_SA bond]

The organisation providing the bond / guarantee does so by copying the pro forma document onto his letterhead without any change to the text or format and completing the required details. The completed document is then given to the *Employer* within the time stated in the contract.

Pro forma Parent Company Guarantee (for use with Option X4)

(to be reproduced exactly as shown below on the letterhead of the Contractor's Parent Company)

Eskom Holdings SOC Ltd Megawatt Park Maxwell Drive Sandton Johannesburg

Date:

Dear Sirs,

Parent Company Guarantee for Contract No

With reference to the above numbered contract made or to be made between

Eskom Holdings SOC Ltd	(the <i>Employer</i>) and
{Insert registered name and address of the Contractor}	(the Contractor), for
{Insert details of the works from the Contract Data}	(the works).

I/We the undersigned	
on behalf of the <i>Contractor</i> 's parent company	
of physical address	

and duly authorised thereto do hereby unconditionally guarantee to the *Employer* that the *Contractor* shall Provide the Service in accordance with the above numbered Contract.

- 1. If for any reason the *Contractor* fails to Provide the Service, we hereby agree to cause to Provide the Service at no additional cost to the *Employer*.
- 2. If we fail to comply with the terms of this Deed of Guarantee, the *Employer* may itself procure such performance (whether or not the Agreement be formally determined). The *Employer* is to notify us and we shall indemnify the *Employer* for any additional cost or expense it incurs.
- 3. Our liability shall be as primary obligor and not merely as surety and shall not be impaired or discharged by reason of any arrangement or change in relationship made between the *Contractor* and the *Employer* and/or between us and *Contractor*, nor any alteration in the obligations undertaken by the *Contractor* or in the terms of the Agreement; nor any indulgence, failure, delay by you as to any matter; nor any dissolution or liquidation or such other analogous event of the *Contractor*.
- 4. The *Employer* shall not be obliged before taking steps to enforce the terms of this Deed of Guarantee to obtain judgement against the *Contractor* in any court or other tribunal, to make or file any claim in liquidation (or analogous proceedings) or to seek any remedy or proceed first against the *Contractor*.
- 5. This Deed of Guarantee shall be governed by and construed in accordance with the laws of the Republic of South Africa and we hereby submit to the non-exclusive jurisdiction of the High Court of South Africa.

Position in parent company

Signature of Witness(s)

Name(s) (printed)

Pro forma Performance Bond – Demand Guarantee (for use with Option X13)

(to be reproduced exactly as shown below on the letterhead of the Bank providing the Guarantee)

Eskom Holdings SOC Ltd	Reference No.	[●]
Megawatt Park		
Maxwell Drive		
Sandton		
Johannesburg	Date:	

Dear Sirs

Performance Bond - Demand Guarantee: [Drafting Note: Name of Contractor to be inserted]

Project [] Contract Reference: [Drafting Note: Contractor contract reference number to be inserted]

- 1. In this Guarantee the following words and expressions shall have the following meanings:-
- 1.1 "Bank" means [●], [●] Branch, (Registration No. [●]); [Drafting Note: Name of Bank to be inserted]
- 1.2 "Bank's Address" means [•]; [Drafting Note: Bank's physical address to be inserted]
- "Contract" means the written agreement relating to the Services, entered into between Eskom and the Contractor, on or about the [●] day of [●] 200[●] (Contract Reference No. [.] as amended, varied, restated, novated or substituted from time to time; [Drafting Note: Signature Date and Contract reference number to be inserted]
- 1.4 "Contractor" means [●] a company registered in accordance with the laws of [●] under Registration Number [●]. [Drafting Note: Name and details of Contractor to be inserted]
- "Eskom" means Eskom Holdings SOC Ltd, a company registered in accordance with the laws of the Republic of South Africa under Registration Number 2002/015527/30].
- 1.6 "Expiry Date" means the earlier of
 - the date that the Bank receives a notice from Eskom stating that all amounts due from the Contractor as certified in terms of the contract have been received by Eskom and that the Contractor has fulfilled all his obligations under the Contract, or
 - the date that the Bank issues a replacement Bond for such lesser or higher amount as may be required by Eskom
- 1.7 "Guaranteed Sum" means the sum of R [●] ([●] Rand);
- 1.8 "Services" means [insert as applicable.].
- 2. At the instance of the Contractor, we the undersigned _____ and ____, in our respective capacities as _____ and ____ of the Bank, and duly authorized thereto, confirm that we hold the Guaranteed Sum at the disposal of Eskom, as security for the proper performance by the Contractor of all of its obligations in terms of and arising from the Contract and hereby undertake to pay to Eskom, on written demand from Eskom received prior to the Expiry Date, any sum or sums not exceeding in total the Guaranteed Sum.
- 3. A demand for payment under this guarantee shall be made in writing at the Bank's address and shall:
- 3.1 be signed on behalf of Eskom by a Group Executive, Divisional Executive, Senior General Manager or its delegate;

Bank Signatory: _____

Bank Signatory: _____

MAIN CONDENSER ACID CLEANING AT DUVHA POWER STATION Witness: Witness: Bank's seal or stamp CONTRACT NO
Witness: Witness:
Bank's seal or stamp

Pro forma ASGI-SA Guarantee

(to be reproduced exactly as shown below on the letterhead of the Bank providing the Guarantee)

Eskom Holdings SOC Ltd Megawatt Park Maxwell Drive Sandton Johannesburg

Reference No [•] [Drafting Note: Bank reference number to be inserted?

Date:

Dear Sirs

Pro-Forma ASGI-SA Guarantee: [Drafting Note: Name of Contractor to be inserted]

Project [] Contract Reference: [•] [Drafting Note: Contractor contract reference number to be inserted]

In this Guarantee the following words and expressions shall have the following meanings:-1. "Bank" - means [●], [●] Branch, (Registration No. [●]); [Drafting Note: Name of Bank to be 1.1 inserted] 1.2 "Bank's Address" - means [●]; [Drafting Note: Bank's physical address to be inserted] 1.3 "Contract" - means the written agreement relating to the Project, entered into between the Employer and the Contractor, on or about the [●] day of [●] 200[●] (Contract Reference No. [●] as amended, varied, restated, novated or substituted from time to time; [Drafting Note: Signature Date and Contract reference number to be inserted] 1.4 "Contractor" – means [●] a company registered in accordance with the laws of [●] under Registration Number [•]. [Drafting Note: Name and details of Contractor to be inserted] "Contractor's ASGI-SA Obligations" - means the Contractor's ASGI-SA Obligations under and 1.5 as defined in the Contract. "Employer" - means Eskom Holdings SOC Ltd, a company registered in accordance with the 1.6 laws of the Republic of South Africa under Registration Number 2002/015527/30. 1.7 "Expiry Date" - means the [●] day of [●] 200[●]; [Drafting Note: anticipated date of issue of ASGI-SA Performance Certificate to be inserted.] 1.8 "Guaranteed Sum" - means the sum of R [●] ([●] Rand); 1.9 "Project" – means the 2. At the instance of the *Contractor*, we the undersigned and our respective capacities as and of the Bank, and duly authorized thereto, confirm that we hold the Guaranteed Sum at the disposal of the *Employer*, as security for the proper performance by the Contractor of the Contractor's ASGI-SA Obligations and hereby undertake to pay to the Employer, on written demand from the Employer received prior to the Expiry Date, any sum or sums not exceeding in total the Guaranteed Sum. 3. A demand for payment under this guarantee shall be made in writing at the Bank's address and shall: 3.1 state the amount claimed ("the Demand Amount');

the Contract.

3.2

state that the Demand Amount is payable to the Employer in the circumstances contemplated in

- 4. Notwithstanding the reference herein to the Contract the liability of the Bank in terms hereof is as principal and not as surety and the Bank's obligation/s to make payment:
- 4.1 is and shall be absolute provided demand is made in terms of this bond in all circumstances; and
- 4.2 is not, and shall not be construed to be, accessory or collateral on any basis whatsoever.
- 5. The Bank's obligations in terms of this Guarantee:
- 5.1 shall be restricted to the payment of money only and shall be limited to the maximum of the Guaranteed Sum; and
- 5.2 shall not be discharged and compliance with any demand for payment received by the Bank in terms hereof shall not be delayed, by the fact that a dispute may exist between the *Employer* and the *Contractor*.
- 6. The *Employer* shall be entitled to arrange its affairs with the *Contractor* in any manner which it sees fit, without advising us and without affecting our liability under this Guarantee. This includes, without limitation, any extensions, indulgences, release or compromise granted to the *Contractor* or any variation under or to the Contract.
- 7. Should the *Employer* cede its rights against the *Contractor* to a third party where such cession is permitted under the Contract, then the *Employer* shall be entitled to cede to such third party the rights of the *Employer* under this Guarantee on written notification to the Bank of such cession.
- This Guarantee:
- 8.1 shall expire on the Expiry Date until which time it is irrevocable;
- 8.2 is, save as provided for in **7** above, personal to the *Employer* and is neither negotiable nor transferable;
- 8.3 shall be returned to the Bank upon the earlier of payment of the full Guaranteed Sum or expiry hereof;
- 8.4 shall be regarded as a liquid document for the purpose of obtaining a court order; and
- 8.5 shall be governed by and construed in accordance with the law of the Republic of South Africa and shall be subject to the jurisdiction of the courts of the Republic of South Africa.
- 8.6 Any claim which arises or demand for payment received after expiry date will be invalid and unenforceable.
- The Bank chooses domicilium citandi et executandi for all purposes in connection with this Guarantee at the Bank's Address.

Signed at	Date
For and behalf of the Bank	
Bank Signatory:	Bank Signatory:
Witness:	Witness:
Bank's seal or stamp	

PART 2: PRICING DATA

TSC3 Option A

Document reference	Title	No of pages
C2.1	Pricing assumptions: Option A	1
C2.2	The price list	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 *price list* 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 *Contractor* has completed and

where a quantity is stated for an item in the Price List, an amount calculated by multiplying the quantity which the *Contractor* 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.

ESKOM HOLDINGS SOC LTD CONTRACT NO.

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

MAIN CONDENSER ACID CLEANING AT DUVHA POWER STATION

- 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
- 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 240-163544997 under works information

Item nr	Description	Unit	Expected Quantity	Rate	Price
1.	Site Establishment	EA	1		
2.	Waterbox coating repair as described in the works information for an entire condenser (80 m²)	EA	1		
3.	Tubesheet coating per condenser (8 tubesheets)	EA	8		
4.	Additional coating per m ²	EA	1		
5.	Supply of 4 off spades/blank flanges (once off)	EA	4		
6.	Acid cleaning per condenser as described in the works information (Hot and cold condenser both passes)	EA	1		
7.	Removal of rubber lining and surface preparation to start coating. Per waterbox (i.e. 6 waterboxes per condenser)	EA	1		
8	Site de establishment	EA	1		
			I		

1

PART 3: SCOPE OF WORK

Document reference	Title	No of pages
	This cover page	1
C3.1	Employer's Service Information	2
C3.2	Contractor's Service Information	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 Turbine loop and Generator loop strainers that need to be refurbished during Outages as well as during normal day to day Maintenance. This work will be done during IN/AD, IR and GO Outages.

1.2 Employer's Requirements for the Service

The works consists of the refurbishment of the Turbine loop and Generator loop strainers. The strainers need to be stripped, refurbished and no leaks must be experienced during commissioning of the strainers. Dye pen (NDT) testing need to be performed to identify the cracks on the changeover valve seats were necessary. Replace all old gaskets on all removed flanges and ensure that no potential leaks must be encountered while the system is in service (all gaskets sheeting required will be provided by the Employer, but take note that the Contractor will be responsible for cutting gasket to the correct size).

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
IN/AD	Inspection/Air Heater & Ducting Inspection

1.4. Work to be Performed by the Contractor

The Contractor will be responsible for performing the following works:

Refer to DOCUMENT NO 240-162132296 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

2.1 The Contractor's Plan for the Service

It is Contractor's responsibility to submit Program/Schedule, QCP and Manpower/Resources list as soon as the Task Order issued by the Project Manager.

2.2 Management Meetings

Progress meetings will be held on a daily basis if the Project Manager and the *Contractor* agreed to do so, and if there is a need for any other meeting the Project Manager will communicate the details of the meeting to the *Contractor*. This could be used to discuss work progress, safety, compensation events, subcontracting, overall co-ordination and other matters of a general nature that might arise

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.

2.3 Use of Standard Forms

The Contractor is to make use of the NEC standard forms or formal written letters during the administration of the contract. The Contractor will be responsible for compiling the following:

- Standard Report to be drafted by the Contractor and influenced and agreed upon by Employer.
- Reports of all the inspections and testing applicable to the strainers will be supplied by the Contractor.

2.4 Documentation Control

2.4.1. The Final Data Book

The *Contractor* is responsible for the provision of a final data book. The data book will be broken down in two main categories:

- Technical category
- · Cost and planning category

The document will contain all relevant documentation, materials certificates, quality documents, tests and results etc. which where applicable during the full contract.

All planning, scheduling, bar charts, mile stones, detailed cost breakdown information are included in the final document.

Although the *Employer's Representative* does not intend duplicating the *Contractor's* programming, portions or high level extractions of the *Contractor's* program may be used in an overall project program if this is deemed necessary for control purposes.

2.5 Invoicing and payment

2.7.1. Accounts and Records

Invoicing:

- a) The Project Manager assesses the amount due for invoicing at each assessment date. The Contractor submits an invoice for the amount assessed by the Project Manager before the 25th of the month of assessment in order that payment can be certified.

 Invoices are in triplicate and are made out to: The Duvha Finance Manager, Eskom, and mailed to PO Box 2199, Witbank 1035 or delivered to the Duvha Power Station Accounts Payable Section.
- b) The Contractor is to keep records of all invoices submitted and paid up to the end of the project, as well as details of actual costs.
- c) The Contractor submits monthly forecasts rate of invoicing for the complete project as well as an annual budget estimate in accordance with the documentation required by the Employer. The format will be discussed and agreed with the Contractor.
- d) The *Contractor* submits a detailed invoicing plan with the program that conforms to the activity schedule to the Project Manager. This is also submitted with each revised program.

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 the Employer 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;

2.6 Contract Change Management

The Contractor is to make use of the NEC standard forms or formal written letters during the administration of the contract. All communication between the Project Manager and the Contractor must be in writing.

2.7 Training Workshops and Technology Transfer

The Contractor must employ and arrange necessary training of at least 2 x Artisans and 2 x Technician during the contract period (5 Years).

2.8 Management of Work Done by Task Order

Project Manager will issue Task Order to the Contractor at least 3 months prior to the Outage, as to give the Contractor enough time to make all necessary arrangement (this include all resources to be used during Outage, Program, QCP etc).

3 Health and Safety, the Environment and Quality Assurance

3.1 Health and Safety Risk Management

The Contractor will comply as a mandatory with the following:

- Section 37.2 of the Occupational Health and Safety Act, No 85 of 1993.
- Health and Safety Standards, as per Duvha Power Station Contractors Safety file. This file will be handed over on contract award.
- All staff will undergo a one day Safety Induction training course one week before site Occupation
- Adhere to Eskom & Duvha Power Station No Smoking Policy
- All Employer Safety and Operating Procedures, which are attached hereto.
- All applicable Eskom and statutory requirements, as defined in the Occupational Health and Safety Act, No 85 of 1993, and the applicable Codes of Practices, as defined, referred to or available with regard to Occupational Health and Safety. The following items are highlighted because of their specific importance:

The *Contractor* acknowledges that it is fully aware of the requirements of all the above and undertakes to employ only people who have been duly authorized in terms thereof and who have received sufficient safety training to ensure that they can comply therewith.

The *Contractor* undertakes not to do, or not to allow anything to be done which will contravene any of the provisions of the Act, Regulations or Safety and Operating Procedures.

Employer may, at any stage during the currency of this agreement be entitled to:

a) Do safety audits at the Contractor's premises, its work places and on its Employees.

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b) Issue the Contractor with a work stop order or a compliance order should Employer become aware of any unsafe working procedures or conditions or any non-compliance with the Act, Regulations and Procedures referred to in 5.4.1 above by the Contractor or any or its Employees, sub-Contractors or agents

The Contractor must appoint Safety Representatives to assist the Employer Representative to:

- a) Identify possible hazards, dangers and risks
- b) Eliminate potentially dangerous conditions and actions
- c) Ensure a safe working environment

Note: Refer to NEC condition of contract, Clause 27.4 and Z7 in the additional conditions of contract.

3.1.1 Plant Safety Regulations

- The Employer shall, on request from the Contractor, isolate required plant from all sources of danger as described in the Plant Safety Regulations.
- The *Employer* shall, on request, make available a copy of the latest revision of the Plant Safety Regulations to the *Contractor*.
- a) The *Contractor* shall conform to all rules and regulations applicable to Plant Safety and shall complete each and every Workman's Register prior to working on the plant.
- b) At every permit change the *Contractor* shall ensure he withdraws himself/herself/his staff for that period of permit suspension/revocation and thereafter only proceed with the Works after signing onto the new permit.
- c) The Contractor to ensure that he/she/all sub-Contractors/personnel/staff/his visitors are medically, physically and psychologically fit to enter the Duvha Power Station and specifically any confined space.
- d) The *Contractor* is prohibited from entering Radiation Areas. The *Employer* in exceptional cases shall give special permission.
- e) The onus is on the *Contractor* to ensure that the correct confined space requirements and tests have been done/met by the *Employer* prior to entry into any confined space or hazardous plant areas.
- f) The Contractor shall ensure that all personnel including himself are competent to carry out the Works. Proof of competency for technical and safety aspects must be available as and when required on site.

3.1.2 Limited Access Register

- 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. Activities that are allowed to be carried out under the LAR must not require a permit and must satisfy the following criteria:
 - They must not involve danger to the person carrying out the activity;
 - No plant isolations must be required;
 - The activity must be performed by a skilled person;
 - There must be no risk of a production loss;
 - The duration of the activity must be less than 24 hours
- 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.
- 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. Just signing the LAR book is not sufficient.

3.1.3 Health and Safety Arrangements

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- a) The Contractor must ensure that himself/herself/and all personnel attend a Health and Safety Induction Course prior to starting with their work. The Induction Course can, on request, be provided by the Employer and will have to be renewed annually preferably 2 weeks before contract anniversary date.
- b) The Contractor shall comply with the requirements as set out in the Duvha Power Station Contractors Safety Manual SAS 0012. The sheet on the first page of the Safety Manual must be completed and signed by the Contractor, Site Manager and submitted to the Employers Representative before taking possession of the Works or starting the Works. This sheet will only be valid for the duration of the Works.
- c) The Contractor to ensure that all appointments required are completed and that the appointee and appointees fully understand their responsibilities and are competent and trained to execute their duties. The appointees/appointee shall ensure that all duties are carried out and records are kept by the Contractor for review/audit by the Employer or Inspector of Machinery.
- d) Duvha Safety Risk Management and the Inspector of Machinery has the authority to visit and inspect the Contractor's workplace or site establishment to ensure that tools, machinery and equipment comply with the minimum safety requirements or the Contractors Safety Management Plan is enforced or complied with.
- e) The Employers Representative shall be entitled to instruct the Contractor to stop work, without penalty to the Employer, where the Contractor's personnel fail to conform to safety standards or contravene health and safety regulations. The Employers Representative is entitled to cause the Contractor to discipline his employees, take disciplinary action and to submit disciplinary action reports to the Employers Representative. The Contractor shall implement additional health and safety precautions where necessary or has required in the Occupational Health and Safety Act, No 85 of 1993.
- f) The wearing of Safety Glasses when working in the plant and Duvha Site, as well as walking through the plant is compulsory.
- g) The *Contractor* to ensure that he/she/all sub-Contractors/personnel/staff/his visitors are medically, physically and psychologically fit to enter the Duvha Power Station.
- h) A Medical Certificate shall be submitted to the Duvha Safety Induction Officer prior to induction. Once submitted, then only will induction take place.
- i) The Medical Examination, at the Contractors cost, shall be carried out by a Registered Professional Occupational Health Practitioner and the examination shall include the following tests: Eye Test, Blood Pressure, Heart Function, Hearing Test, Lung Function and a Blood Test. A thorough examination should be done and previous physical injuries, as well as occupational diseases/complications should be covered. Allergies, especially to 'bee stings' and chemicals should be covered. Psychological evaluation should be covered for personnel working in elevated positions on scaffolds, confined spaces where ventilation and skin/physical irritation is prevalent, and humid conditions. Epileptic conditions must be covered as well.
- j) If at any point in time during the execution of the Works, the Contractor has a radiation-related incident/exposure, the onus is on the Contractor to immediately notify the Employers Representative, the Medical Station, the Risk Manager and the Safety Risk Management Department. The onus thereafter is for the Contractor to immediately arrange, at his/her cost, for blood samples to be taken by a Registered Laboratory and for this sample to send to the Excellerator Laboratory in Cape Town for full radiation exposure tests. This test results are then to be discussed with the Duvha Occupational Health Practitioners, who will then advise the Power Station Management on the risk, if any, of the incident/exposure.
- k) The Contractor shall conform to all applicable Eskom and statutory requirements, as defined in the Occupational Health and Safety Act, No 85 of 1993.

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- The Contractor shall and will take full responsibility and accountability for all other people/staff/personnel/labour that he/she employs or utilises, whether in full-time/part-time/contract basis, in executing the works or other work whilst on the Employers premises.
- m) The Contractor shall understand, participate and be fully competent in the NOSA Safety Management Systems that the Employer complies with.
- n) The Contractor shall ensure that he is aware, understands and complies with any amendments, regulations or changes or gazetted changes to the Occupational Health and Safety Act, No 85 of 1993.
- o) The Contractor may on request of the Employer participate in Safety Related audits or investigations with permission of the Employers Representative.
- p) The Contractor shall familiarise himself with the proposed draft Construction Regulations, issued by the Department of Labour and shall ensure that as soon as they are promulgated, he complies fully during the execution of the works or when working on the Employers premises but also shall ensure he immediately starts aligning his business/operation to comply with these regulations.
- q) The Contractor shall ensure that only Safety Harnesses are used for all work carried out in elevated positions, as defined in the Occupational Health and Safety Act, No 85 of 1993 or any other Code of Practice or standard or the draft Construction Regulations.
- r) All Safety Equipment or Machinery used shall only be those that comply with the SABS Codes of Quality and Practice or any Code as stipulated in the Occupational Health and Safety Act, No 85 of 1993, and any amendments thereto.
- s) The Contractor shall at all times consider himself as "Employer" as defined in the Occupational Health and Safety Act, No 85 of 1993 and shall not consider himself as under supervision or management of the Employer with regard to Health and Safety Requirements but only from a Commercial Contractual Condition of Contract. Under no circumstances shall the Contractor consider himself a sub-ordinate or being given supervision.
- t) The Contractor shall provide and maintain his own facilities as required in the Occupational Health and Safety Act, No 85 of 1993 or any other Code of Practice or standard or the draft Construction Regulations, if not agreed contractually or arranged by the Employer.
- u) The Contractor shall comply with the Smoking Policy of the Employers, available on request from Employers Representative.
- v) The Contractor shall have Safety Systems in place at his premises for the total contract period and these shall include the following:
 - Safety Management Structure and Compliance to these
 - Statutory Appointments
 - Records and documentation of all Risk and Hazard Analysis.
 - Planned Job Observations Records and Documents.
 - Employment history and records of all personnel, part-time or full-time or contract labour.
 - Medical History of all personnel, part-time or full-time or contract labour
 - Training and Competency Records with regard to Safety, Health and Environment.
 - Training and Competency Records with regard to the skills he/she 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.

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- Records of all incidents or accidents, Category A, B, C or D 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 checklists and where applicable test certificates, regarding contractor's tools, equipment, machinery, mobile equipment, vessels under pressure and any other applicable checks required by the Act.
- 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.

The Principle Contractor must ensure that his contractors (Subcontractors) do also have a Health and Safety File and that must be accepted by the Principle Contractor.

The Safety Officer employed by Duvha Power Station will audit these Health and Safety Plan to ensure compliance with the provisions of the Act.

3.1.4 SHE. Documentation Required from the Contractor

The following documents must be provided together with the tender by the Contractor in terms of Health, Safety and Environmental performance, should the Contractor not provide this information it will be assumed that it does not exist

- Letter of good standing with COID or any insurance body.
- An Organogram indicating the names of all persons that will hold legal appointments on the project in terms of the Act.
- The expected roles, responsibilities and authority of those who are proposed to receive legal appointments.
- The resume'(s) of the proposed Safety Officer(s) and Environmental Officer(s) his/their roles, responsibilities and authority is required in terms of the scope of work.
- The Contractor's company Safety, Health and Environment policy.
- Provide an overview of the system/program that is utilized to manage Safety, Health and Environment
- Proof of environmental, health and safety awareness training (provided by a recognized training body) for all employees required to perform work at Duvha Power Station. The Contractor shall be responsible to ensure that his employees are trained before commencing work at Duvha Power Station. Proof of training provided, i.e. attendance registers and the training content, shall be submitted to the Eskom Agents and/or Environmental and Safety Officers for approval before commencing work on-site. Failure to do so shall result in an immediate termination of the contract.

3.1.5 Fire Precautions

- a) Any tampering with the *Employer's* fire equipment is strictly forbidden. Cost of damages will be for the *Contractor*.
- b) All exit doors, fire escape routes, walkways, stairways, stair landings and access to electrical distribution boards must be kept free of obstruction, and not be used for work or storage at any time. Fire fighting equipment must remain accessible at all times.

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- c) In case of a fire, report the location and extent of the fire to the Electrical Operating Desk at extension **2222** or **2690**.
- d) Take the necessary action to safe guard the area to prevent injury and spreading of the fire.
- e) Falling sparks and welding slag, when carrying out hot work, is prohibited. The onus is on the *Contractor* to prevent and contain falling sparks. All hot work above zero metre Boiler and Turbine floors must be adequately protected and screened to prevent falling sparks.

3.1.6 Reporting of Accidents

- a) The Employer follows an accident prevention policy that includes the investigation of all accidents involving personnel and property. This is done with the intention of introducing control measures to prevent a recurrence of the same incidents. The Contractor is expected to fully co-operate to achieve this objective. The Employers Representative must be informed immediately of any Category B or C or D incidents. Category A incidents and any damage to property or equipment must be reported to the Employers Representative within 24 hours. Incident investigation report forms to be completed within 24 hours for category A, B, or C or D injuries.
- b) Radiation incidents must be immediately reported.
- c) The Employer can and shall issue safety contraventions which, if of a recurring nature or risk to others Health and Safety poses a threat, can result in breach of contract conditions and terms and can lead to cancellation of contracts.
- d) In reporting Category C and D incidents, the *Contractor* shall include and submit the following documents, or any additional as required by the *Employers* investigation team or *Employers* Representative:
 - Proof of Contract of Employment.
 - Proof of WCL notification to Department of Labour and Workmen's Compensation Fund.
 - Proof of Medical Doctors Note/Certificate detailing nature of injury and period of rest.
 - Death Certificate, if Category C fatality.
 - Risk and Hazard Analysis, if not in place prior to injury.
 - · Written Safe Working Procedure, if not in place prior to injury,
 - Or any other document from Section 4v. as requested.

Note: This report does not relieve the *Contractor* of his legal obligation to report certain incidents to the Department of Labour, or to keep records in terms of the Occupational Health and Safety Act, and Compensation for Occupational Injuries and Diseases Act.

3.1.7 Radiation Protection

The Contractor conforms to Duvha Power Station Procedure HMS0002 when performing any industrial radiography.

3.1.8 Hazardous Substances

It is required in terms of the General Administrative Regulation (Regulation 7) that any Manufacture, Importer, Seller or Supplier of hazardous chemical substances shall supply the receiver, free of charge with sufficient information for the user. These enable the user to introduce the necessary measures as regards the protection of the health and safety of persons. It is therefore the responsibility of the *Contractor* to supply the information as per attached list. If information is not available for whatever reason, the *Contractor* must indicate on the form and give reasons to Eskom.

3.1.9. Thermal Insulation Containing Asbestos

a) The *Contractor* shall not disturb any thermal insulating material on the plant until it has been positively identified as not containing asbestos. Approval has to be obtained from the *Supervisor* before any thermal insulation is disturbed.

- b) All stripping of asbestos material shall be undertaken strictly in accordance with the *Employer*'s Standard, SAP 0022, available from Safety Risk Management.
- c) The Employers Representative shall advise the Contractor whether areas that are to be stripped of lagging have been identified as containing asbestos.
- d) The Contractor shall be obliged to ascertain from the Employers Representative in advance whether areas required to be stripped are non-asbestos. No lagging material containing asbestos fibres shall be stripped by any Contractor, other than the Contractor appointed to remove asbestos.
- e) The Contractor appointed to remove asbestos, may not begin removal without first obtaining the necessary permission from the Department of Labour, AIA and the Employers Representative.
- f) If the Contractor suspect exposure to himself or any other personnel, he shall then within 24 hours notify the following people Employers Representative, Department of Labour, Workmen's Compensation and Duvha Medical Station.
- g) All *Contractors* carrying out asbestos related 'work' or 'demolition', as defined in the promulgated Asbestos Regulation of 10 February 2002 must be accredited and authorised to execute this type of work by the Department of Labour.

3.1.10 Housekeeping

The *Contractors* equipment does not impair the operation of the plant or access to the plant. Working areas are cleaned daily. All cables and hoses are routed so as not to cross over floors and walkways or roads. Where walkways, floors or roads need to be crossed a proper checked plate ramp shall be positioned over cable and hoses to prevent disruption of the traffic in that specific area. All equipment is packed neatly without interference to access. All excess scaffolding material is removed from working areas after the scaffolding has been erected. Scrap bins are available and emptied daily by the Employer.

3.1.11 Speed Limit

All vehicles must be driven with due consideration for personnel and property. A maximum speed limit of 40KM per hour will be adhered to on the premises at all times.

3.1.12 Barricading

Symbolic safety signs depicting "Danger" and "No entry" are to be used when cordoning danger zones.

3.1.13 Scaffolding

The Employer will be responsible to arrange with the Scaffolding Contractor on site, to build a scaffold from ground level up to desired level on behalf of the Contractor. The Employer will arrange all scaffolding that needed by the Contractor to be able to execute the work.

All scaffolds must be erected in accordance with SANS 10085. Scaffolds shall be erected, altered or dismantled under the supervision of a competent person who has been appointed in writing for this purpose. No scaffolds and platforms are used without having been safety cleared and the documentation completed.

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

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Duvha Power Station is ISO 14001 compliant. All spillages (whether oil, grease, diesel, chemical, etc) are prevented at all times and where accidents occurred in line with any spillages, immediate remedial actions are taken to clean-up the affected land using the appropriate spill-cleaning chemicals/absorbents.

The *Contractor* is required to ensure that all goods, services or *works* supplied in terms of the Contract conform to all applicable environmental legislation. Where work is done on Eskom's Sites, the goods, services or *works* supplied will also to Eskom's environmental specifications.

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3.3 Quality Assurance Requirements

The *Contractor's* ISO 9001:2000 Registration certificate of compliance or equivalent must be supplied with tender. If the *Contractor* is not Register he/she will supply with his tender document his quality policy.

The *Contractor* will comply with the *Employer's* Quality Requirements as specified in Eskom Generation Standard ISO 9001:2008 in the Works Information. Annexure B to this Standard indicates the specific application thereof.

All Quality Control documentation must be submitted to the *Employer* prior an Outage, at least one month before Outage start. Quality Plans must include hold and witness points, must clearly state 2nd and 3rd party interfaces and quality/test specifications.

The Quality Control documentation that will be handed over within one week of order placement by the successful *Contractor* to the Employer will have the Following:

3.3.1 Contractor's Quality Assurance and Quality Control

The *Contractor* compiles, in conjunction with the *Employer* and the *Supervisor*, a product verification plan. This document shows at which stages during the contract involvement is required, and what types of inspection, testing, witnessing etc. are carried out to ensure that the requirements of the specifications are met.

3.3.2 Quality Control Plan

The Quality Control Plan consists of the following as a minimum and is accepted by the *Supervisor* and the *Contractor* prior to commencement of the work. The QCP will also include welding procedures were necessary.

A covering page which includes and makes provision for the following:

- Document unique number.
- Revision number.
- Page number
- Provision to incorporate all inspection report numbers.
- System worked on
- High level description of work execution
- Provision for review and approval signatures by the Contractor, the Project Manager and the Supervisor.
- Provision for final releases signatures by the Contractor, Project Manager and the Supervisor.

The work execution logic and sequence for the fabrication and erection addition to this hold, witness points etc. are also detailed.

Test Reports

Where tests were performed they are recorded and the positions of measurements are traceable to the specific area of testing against the records. Therefore the Contractor will submit all test reports that has been performed to the Project Manager.

Procedure

Contractor to submit all working procedure/instruction for the strainers refurbishment before any work commences. This must be submitted together with QCP for approval.

3.4 Requirements for the Programme

3.4.1 Program to be Submitted

The contractor will be responsible to prepare and submit Refurbishment of Turbine Loop and Generator Loop Strainers on Unit 1 to 6 during Outages program in a specified format by the employer, at least 3 Months before work starts.

The *Contractor* submits a high-level programme with his tender, showing the time required to perform the *works* on the unit.

The *Contractor* ensures that his planning is co-ordinated with the requirements of the user/s and others dependent on his performance.

The Contractor will submit a Bar Chart program format to the Project Manager, indicating daily time scale and also showing the required Witness and Hold points in terms of Quality Control.

a) Accepted Program

At the time period stated in the Contract Data, the *Contractor* submits his program for the *Project Manager's* acceptance.

A summary program (Hammock) is provided where the summarised activities including the possession dates, and major interfaces of services and or other contracts logically required for the completion of the contract are clearly shown.

b) Forecast Rate of Payment

The forecast rate of payment schedule linking the values of completed activities as per the Accepted Program indicates (at base date values) the following:

(i) The expected value of monthly invoicing from the starting date to the completion date including a statement of all payments made by the Employer.

VAT

The project values do not reflect retention or price adjustment for inflation.

The values are at base date and in every way relate to the Accepted Program, the resources to be applied and the level of the *activity schedule*.

c) Resource Schedule(s)

Resource information for manpower, Plant and Equipment based on the Accepted Program and reflected in resource histograms is provided.

3.4.2 Information to be shown:

The Contractor shows the following on each programme he/she submits to the Employer for acceptance:

- The starting date and the Completion Date.
- The start and finish of each item in the Price List.
- All non-working days
- A method statement for each operation identifying the Equipment and other resources which the *Contractor* plans to use.
- Planned Completion.
- All interfaces required from the Employer and others.
- The dates when the Contractor plans to complete work allowing the Employer and others to do their work.
- Provisions for float and time risk allowance.
- The dates when the *Contractor* will need access to a part of the *site*, acceptance and Plant and Material and other things to be provided by the *Employer*.
- Access to site will be on 01 August 2016 but the actual start date of the works will be determined by National Control, the Employer will give notice of 24 hours.

In addition to the above information the *Contractor* shows the following information on each revised programme:

- The actual progress achieved as well as the forecast for the remaining work.
- The effect of implemented compensation events and of notified early warning matters.
- How the Contractor plans to deal with any delays and to correct notified Defects.

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 Take note that, the revised programme should be submitted to the Employer within 1 day after any change has occurred.

3.4.3 Progress Reporting

Progress reports are submitted to the *Project Manager* daily by the *Contractor*, if agreed to do so.

The Contractor submits, together with the progress reports, a written report, which contains the following:

- (a) Statement and report on those sections of the works where delay against program has occurred (if any), together with the reasons why delay has occurred and a plan denoting the action to be taken and the period of time necessary to recover such delay.
- (b) Statement and report on those sections of the works that are currently ahead of program (if any).
- (c) The impact of any programming changes arising is reflected in revised forecast rate of payment schedules and resource schedules.

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

Title	Date or revision	Tick if publicly available
Occupational Health and Safety Act, No 85 of 1993 and any	Act, No 85 of 1993	NO
amendments thereafter		
Employer's Health and Safety Requirements	Latest Revision	
Eskom Quality Standard GGS 01462	GGS 01462	NO *
Duvha Power Station Contractors Safety Manual	SAS 0012 Revision 3	NO
The design, erection, use and inspection of access	SABA 085	NO
scaffolding		
Draft Construction Regulations		NO
Personal Protective Equipment against falls from a height –	SABS EN 361:1992*	NO
Full Body Harnesses		
Personal Protective Equipment against falls from a height –	SABS EN 362:1992*	NO
Connectors		
Personal Protective Equipment against falls from a height –	SABS EN 363:1992*	NO
Fall arrest systems		
Personal Protective Equipment against falls from a height –	SABS EN 364:1992*	NO
Test Methods		
Personal Protective Equipment against falls from a height –	SABS EN 365:1992	NO
General requirements for instructions for use and for marking		
Standard Specifications for Thermal insulation at Power	NWS 1454, Rev.3,	
Station	April 1983	
Specification for Corrosion Protection of Plant and	GSP 36-1126	NO
Equipment with Coatings	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.

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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-authorised 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.

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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 OHSA 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.

- 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 *Contrator*

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
N/A		

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 Duyha 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.