



NEC3 Engineering & Construction Contract

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

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

**for Refurbishment of HP, LP Heaters, DA/DST, Feed Water,
Soot Blower, Auxiliary Steam Range, FRF, BFPT, MOT
and Stator Water Safety Valves During Planned Outages**

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CONTRACT No. [Insert at award stage]

Part C1: Agreements & Contract Data

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[to be inserted from Returnable Documents at award stage]	
C1.3 Proforma Guarantees	N/A

C1.1 Form of Offer & Acceptance

Offer

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

Refurbishment of HP, LP Heaters, DA/DST, Feed Water, Soot Blower, Auxiliary Steam Range, FRF, BFPT, MOT and Stator Water Safety Valves During Planned Outages

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

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

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

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 CIDB registration number:

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

Acceptance

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

The terms of the contract, are contained in:

Part C1 Agreements and Contract Data, (which includes this Form of Offer and Acceptance)

Part C2 Pricing Data

Part C3 Scope of Work: Works Information

Part C4 Site Information

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

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the 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.

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

Note:

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

No.	Subject	Details
1		
2		
3		
4		
5		

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

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

For the tenderer:

For the Employer

Signature _____

Name _____

Capacity _____

On behalf of *(Insert name and address of organisation)*

(Insert name and address of organisation)

Name & signature of witness _____

Date _____

C1.2 ECC3 Contract Data

Part one - Data provided by the *Employer*

Clause	Statement	Data
1	General	
	The <i>conditions of contract</i> are the core clauses and the clauses for main Option	
	dispute resolution Option	A: Priced contract with activity schedule
	and secondary Options	W1: Dispute resolution procedure
		X1: Price adjustment for inflation
		X2: Change in the law
		X5: Sectional Completion
		X7: Delay damages
	[always used by Eskom]	X18: Limitation of liability
		Z: Additional conditions of contract
	of the NEC3 Engineering and Construction Contract, April 2013 (ECC3)	
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
	Represented by:	Sibongile Masilela
	Tel No.	013 690 0212
	Fax No.	N/A
10.1	The <i>Project Manager</i> is: (Name)	The Project Manager's will be communicated on contract award
	Address	Duvha Power Station PO BOX 2199 Witbank 1035
	Tel	013 690 0111
	Fax	N/A
	e-mail	N/A

10.1	The <i>Supervisor</i> is: (Name)	N/A	
	Address	Duvha Power Station PO BOX 2199 Witbank 1035	
	Tel No.	N/A	
	Fax No.	N/A	
	e-mail	N/A	
11.2(13)	The <i>works</i> are	Refurbishment of HP, LP Heaters, DA/DST, Feed Water, Soot Blower, Auxiliary Steam Range, FRF, BFPT, MOT and Stator Water Safety Valves During Planned Outages	
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 'Works Information' in Part 3 of this contract might change.	
11.2(15)	The <i>boundaries of the site</i> are	Duvha Power Station Unit 1,2,4,5 & 6	
11.2(16)	The Site Information is in	Part 4: Site Information	
11.2(19)	The Works Information is in	Part 3: Scope of Work and all documents and drawings to which it refers.	
12.2	The <i>law of the contract</i> is the law of	The Republic of South Africa	
13.1	The <i>language of this contract</i> is	English	
13.3	The <i>period for reply</i> is	1 day	
2	The Contractor's main responsibilities	Data required by this section of the core clauses is provided by the Contractor in Part 2 and terms in italics used in this section are identified elsewhere in this Contract Data.	
3	Time		
11.2(3)	The <i>completion date</i> for the whole of the <i>works</i> is	31 January 2032	
11.2(9)	The <i>key dates</i> and the <i>conditions</i> to be met are:	Condition to be met	key date (Completion Date)
		START DATE 01 February 2027	END DATE 31 January 2032



Note: These dates are subject to change.

30.1	The <i>access dates</i> are:	Part of the Site	Date
		1 Unit 1,2,4 ,5 & 6 Outage	Dates to be as per the current outage schedule
31.1	The <i>Contractor</i> is to submit a first programme for acceptance within	5 working days of the Contract Date.	
31.2	The <i>starting date</i> is	01 February 2027 or soon as possible thereafter	
32.2	The <i>Contractor</i> submits revised programmes at intervals no longer than	3 working days	
35.1	The <i>Employer</i> is not willing to take over the <i>works</i> before the Completion Date.	Should the contractor finish the works before the Completion Date, the Employer will take over the works.	
4	Testing and Defects		
42.2	The <i>defects date</i> is	52 weeks after Completion of the whole works.	
43.2	The <i>defect correction period</i> is	1 day after the Contractor is being notified about the defect.	
5	Payment		
50.1	The <i>assessment interval</i> is	25th of each successive month.	
51.1	The <i>currency of this contract</i> is the	the South African Rand	
		The Contractor submits his invoice to: Finance department Account Payable (APS) 3rd Floor Admin building	
51.2	The period within which payments are made is	4 weeks.	
51.4	The <i>interest rate</i> 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 Amount Catered on the Contract
60.1(13)	The place where weather is to be recorded is: The <i>weather measurements</i> to be recorded for each calendar month are, The <i>weather measurements</i> are supplied. By The <i>weather data</i> are the records of past. <i>weather measurements</i> for each calendar month which was recorded at: and which are available from:	Duvha Power Station the cumulative rainfall 10 (mm) the number of days with rainfall more than 10 mm the number of days with minimum air temperature less than 0 degrees Celsius the number of days with snow lying at 09:00 hours South African Time and these measurements: The Project Manager or the System Engineer on request. Duvha Power Station The South African Weather Bureau and included in Annexure A to this Contract Data provided by the <i>Employer</i>
7	Title	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data.
8	Risks and insurance	
80.1	These are additional <i>Employer's</i> risks	1. The program must be flexible as outages can be shifted because of production constraints.

2. 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.

3. Employer failing to issue the Contractor with the 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.

4. Access to Site plant areas might not be available due to other Contractors working on the same area Add under additional risk

83 INSURANCE

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

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

83.1

83.2

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

INSURANCE TABLE A

Insurance against	Minimum amount of cover or minimum limit of indemnity
Loss of or damage caused by the <i>Contractor</i> to the <i>Employer's</i> property	The replacement cost where not covered by the <i>Employer's</i> insurance. The <i>Employer's</i> policy deductible as at Contract Date, where covered by the <i>Employer's</i> insurance.

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

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INSURANCE

86. The *Employer* provides the
1 insurances stated in the
Insurance
Table B

INSURANCE TABLE B

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

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Termination

There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data. However, if the contractor does not provide the work as outlined on the SOW and not adhere to the contract terms and conditions, Project Manager will follow the proper steps and terminate the contract

10	Data for main Option clause			
A	Priced contract with activity schedule	There is no reference to Contract Data in this Option and terms in italics are identified elsewhere in this Contract Data.		
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 C to this Contract Data by the Party intending to refer a dispute to him.		
	Address			
	Tel No.			
	Fax No.			
	e-mail			
W1.2(3)	The <i>Adjudicator nominating body</i> is:	The Chairman of the Joint Civils Division of the South African Institution of Civil Engineering. (See www.jointcivils.co.za)		
W1.4(2)	The <i>tribunal</i> is:	Arbitration.		
W1.4(5)	The <i>arbitration procedure</i> is	the latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.		
	The place where arbitration is to be held is	South Africa		
	The person or organisation who will choose an arbitrator.	the Chairman for the time being or his nominee of the Association of Arbitrators (Southern Africa) or its successor body.		
	- if the Parties cannot agree a choice or			
	- if the arbitration procedure does not state who selects an arbitrator, is			
12	Data for secondary Option clauses			
X1	Price adjustment for inflation			
X1.1(a)	The <i>base date</i> for indices is	October 2026		
X1.1(c)	The proportions used to calculate the Price Adjustment Factor are:	proportion	linked to index for	Index prepared by
		60%	Labour Table C3	SEIFSA
		10%	Transport Table L2B	SEIFSA
		15%	Table 0-I:	SEIFSA

			Statistics SA PPI Selected Final and Intermediate Manufactured Goods: General & Special Purpose Machinery	
		15%	non-adjustable	
		Total	1.00	
X2	Changes in the law	There is no reference to Contract Data in this Option and terms in italics are identified elsewhere in this Contract Data.		
X5	Sectional Completion			
X5.1	The <i>completion date</i> for each section of the works is:	Section	Description As per the task order	Completion date
X5 & X7	Sectional Completion and bonus for early completion used together			
X7.1 X5.1	Delay damages for late Completion of the sections of the works are:	section	Description	Amount per day
		1	Units 1, 2,4,5 & 6 as per programme submitted	R5 000.00 per day up to 10% of contract value per sectional completion
	Remainder of the works			
	The total delay damages payable by the Contractor does not exceed:	10% of contract value		
X16	Retention is 5% per sectional completion			
X18	Limitation of liability			
X18.1	The Contractor's liability to the Employer for indirect or consequential loss is limited to:	10% of the Contract Value.		
X18.2	For any one event, the Contractor's liability to the Employer for loss of or	the amount of the deductibles relevant to the event described in the insurance policy		

	damage to the <i>Employer's</i> property is limited to:	format selected in the data for clause 84.1 above, which policy is available on http://www.eskom.co.za/live/content.php?ItemID=9248
X18.3	The <i>Contractor's</i> liability for Defects due to his design which are not listed on the Defects Certificate 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's</i> assets policy for correcting the Defect (other than the resulting physical damage which is not excluded) plus R15M first amount payable in terms of the <i>Employer's</i> assets policy.
X18.4	The <i>Contractor's</i> total liability to the <i>Employer</i> for all matters arising under or in connection with this contract, other than excluded matters, is limited to:	the total of the Prices other than for the additional excluded matters. The <i>Contractor's</i> total liability for the additional excluded matters is not limited. The additional excluded matters are amounts for which the <i>Contractor</i> is liable under this contract for • Defects due to his design which arise before the Defects Certificate is issued, • Defects due to manufacture and fabrication outside the Site, • loss of or damage to property (other than the <i>works</i>, Plant and Materials), • death of or injury to a person and • infringement of an intellectual property right.
X18.5	The <i>end of liability date</i> is	(i) seven years after the <i>defects date</i> for latent Defects and (ii) the date on which the liability in question prescribes in accordance with the Prescription Act No. 68 of 1969 (as amended or in terms of any replacement legislation) for any other matter. A latent Defect is a Defect which would not have been discovered on reasonable inspection by the <i>Employer</i> or the <i>Supervisor</i> before the <i>defects date</i>, without requiring any inspection not ordinarily carried out by the <i>Employer</i> or the <i>Supervisor</i> during that period. If the <i>Employer</i> or the <i>Supervisor</i> do undertake any inspection over and above the reasonable inspection, this does not place a greater responsibility on the

	<i>Employer or the Supervisor to have discovered the Defect.</i>
Z	The <i>Additional conditions of contract</i> are Z1 to Z12 always apply.

Z1 Cession delegation and assignment

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

Z2 Joint ventures

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

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

- Z3.1 Where a change in the *Contractor's* legal status, ownership or any other change to his business composition or business dealings results in a change to the *Contractor's* B-BBEE status, the *Contractor* notifies the *Employer* within seven days of the change.
- Z3.2 The *Contractor* is required to submit an updated verification certificate and necessary supporting documentation confirming the change in his B-BBEE status to the *Project Manager* within thirty days of the notification or as otherwise instructed by the *Project Manager*.
- Z3.3 Where, as a result, the *Contractor's* B-BBEE status has decreased since the Contract Date the *Employer* may either re-negotiate this contract or alternatively, terminate the *Contractor's* obligation to Provide the Works.
- Z3.4 Failure by the *Contractor* to notify the *Employer* of a change in its B-BBEE status may constitute a reason for termination. If the *Employer* terminates in terms of this clause, the procedures on termination are P1, P2 and P3 as stated in clause 92, and the amount due is A1 and A3 as stated in clause 93.

Z4 Ethics

- Z4.1 Any offer, payment, consideration, or benefit of any kind made by the *Contractor*, which constitutes or could be construed either directly or indirectly as an illegal or corrupt practice, as an inducement or reward for the award or in execution of this contract constitutes grounds for terminating the *Contractor's* obligation to Provide the Works or taking any other action as appropriate against the *Contractor* (including civil or criminal action).
- Z4.2 The *Employer* may terminate the *Contractor's* obligation to Provide the Works if the *Contractor* (or any member of the *Contractor* where the *Contractor* constitutes a joint venture, consortium or other unincorporated grouping of two or more persons or organisations) is found guilty by a competent court, administrative or regulatory body of participating in illegal or corrupt practices.

Such practices include making of offers, payments, considerations, or benefits of any kind or otherwise, whether in connection with any procurement process or contract with the *Employer* or other people or organisations and including in circumstances where the *Contractor* or any such member is removed from the an approved vendor data base of the *Employer* as a consequence of such practice.

- Z4.3 Notwithstanding the provisions of core clause 90.2, the procedures on termination in terms of this clause are P1, P2 and P3 as stated in the core clause 92 and the amount due is A1 and A3 as stated in core clause 93.

Z5 Confidentiality

- Z5.1 The *Contractor* does not disclose or make any information arising from or in connection with this contract available to Others. This undertaking does not, however, apply to information which at the time of disclosure or thereafter, without default on the part of the *Contractor*, enters the public domain or to information which was already in the possession of the *Contractor* at the time of disclosure (evidenced by written records in existence at that time). Should the *Contractor* disclose information to Others in terms of clause 25.1, the *Contractor* ensures that the provisions of this clause are complied with by the recipient.
- Z5.2 If the *Contractor* is uncertain about whether any such information is confidential, it is to be regarded as such until notified otherwise by the *Project Manager*.
- Z5.3 In the event that the *Contractor* is, at any time, required by law to disclose any such information which is required to be kept confidential, the *Contractor*, to the extent permitted by law prior to disclosure, notifies the *Employer* so that an appropriate protection order and/or any other action can be taken if possible, prior to any disclosure. In the event that such protective order is not, or cannot, be obtained, then the *Contractor* may disclose that portion of the information which it is required to be disclosed by law and uses reasonable efforts to obtain assurances that confidential treatment will be afforded to the information so disclosed.
- Z5.4 The taking of images (whether photographs, video footage or otherwise) of the *works* or any portion thereof, in the course of Providing the Works and after Completion, requires the prior written consent of the *Project Manager*. All rights in and to all such images vests exclusively in the *Employer*.
- Z5.5 The *Contractor* ensures that all his subcontractors abide by the undertakings in this clause.

Z6 Waiver and estoppel: Add to core clause 12.3:

- Z6.1 Any extension, concession, waiver or relaxation of any action stated in this contract by the Parties, the *Project Manager*, the *Supervisor*, or the *Adjudicator* does not constitute a waiver of rights, and does not give rise to an estoppel unless the Parties agree otherwise and confirm such agreement in writing.

Z7 Health, safety and the environment: Add to core clause 27.4

- Z7.1 The *Contractor* undertakes to take all reasonable precautions to maintain the health and safety of persons in and about the execution of the *works*. Without limitation the *Contractor*:
- accepts that the *Employer* may appoint him as the "Principal Contractor" (as defined and provided for under the Construction Regulations 2003 (promulgated under the Occupational Health & Safety Act 85 of 1993) ("the Construction Regulations") for the Site;
 - warrants that the total of the Prices as at the Contract Date includes a sufficient amount for proper compliance with the Construction Regulations, all applicable health & safety laws and regulations and the health and safety rules, guidelines and procedures provided for in this contract and generally for the proper maintenance of health & safety in and about the execution of *works*; and
 - undertakes, in and about the execution of the *works*, to comply with the Construction Regulations and with all applicable health & safety laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the *Contractor's* direction and control, likewise observe and comply with the foregoing.
- Z7.2 The *Contractor*, in and about the execution of the *works*, complies with all applicable environmental laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the *Contractor's* direction and control, likewise observe and comply with the foregoing.

Z8 Provision of a Tax Invoice and interest. Add to core clause 51

- Z8.1 Within one week of receiving a payment certificate from the *Project Manager* in terms of core clause 51.1, the *Contractor* provides the *Employer* with a tax invoice in accordance with the *Employer's* procedures stated in the Works Information, showing the amount due for payment equal to that stated in the payment certificate.
- Z8.2 If the *Contractor* does not provide a tax invoice in the form and by the time required by this contract, the time by when the *Employer* is to make a payment is extended by a period equal in time to the delayed submission of the correct tax invoice. Interest due by the *Employer* in terms of core clause 51.2 is then calculated from the delayed date by when payment is to be made.
- Z8.3 The *Contractor* (if registered in South Africa in terms of the companies Act) is required to comply with the requirements of the Value Added Tax Act, no 89 of 1991 (as amended) and to include the *Employer's* VAT number 4740101508 on each invoice he submits for payment.

Z9 Notifying compensation events

- Z9.1 Delete from the last sentence in core clause 61.3, “unless the *Project Manager* should have notified the event to the *Contractor* but did not”.

Z10 *Employer’s* limitation of liability

- Z10.1 The *Employer’s* liability to the *Contractor* for the *Contractor’s* indirect or consequential loss is limited to R0.00 (zero Rand)
- Z10.2 The *Contractor’s* entitlement under the indemnity in 83.1 is provided for in 60.1(14) and the *Employer’s* liability under the indemnity is limited to compensation as provided for under the compensation events stated in this contract.

Z11 **Termination: Add to core clause 91.1, at the second main bullet point, fourth sub-bullet point, after the words "against it":**

- Z11.1 or had a judicial management order granted against it.

Z12 Addition to secondary Option X7 Delay damages (if applicable in this contract)

- Z12.1 If the amount due for the *Contractor’s* payment of delay damages reaches the limits stated in this Contract Data for Option X7 or Options X5 and X7 used together, the *Employer* may terminate the *Contractor’s* obligation to Provide the Works using the same procedures and payment on termination as those applied for reasons R1 to R15 or R18 stated in the Termination Table.

Z13 Permit to Work

- Z13.1 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. At least 2 x Responsible Person and 2 x Authorised Supervisor on both Turbine & Boiler Aux Plant (The Contractor/Partner will work night shift were necessary). The *Contractor* must be fully authorized within two (2) week after the contract placement.
-

Annexure B: Insurance provided by the Employer

These notes are provided as guidance to tendering contractors and the Contractor about the insurance provided by the Employer. Details of the insurance itself are available from the internet web link given below.

1. For the purpose of works contracts, insurance provided by Eskom (the *Employer*) has been arranged on the basis of “project” or “contract” value, where the value is the total of the Prices at Completion of the whole of the works including VAT.

A “project” is a collection of contracts or work packages to be undertaken as part of a single identified capital expansion or refurbishment of a particular asset or facility.

A “contract” is a single contract not linked to or being part of a “project”.

2. For ECC3 there are three main “formats” of cover and deductible structure; Format A, Format B and Format Dx.

Format A is for a project or contract value less than or equal to R350M (three hundred and fifty million Rand) inclusive of VAT.

Format B is for a project or contract value greater than R350M (three hundred and fifty million Rand) inclusive of VAT.

In the case of contracts / packages within a project:

- For a contract / package of R50M which is part of a R400M project, Format B will apply
- For a contract / package of R250M which is part of a R6 billion project, Format B will apply;
- For a contract / package of R120M which is part of a R350M project Format A will apply;

For a contract which is not part of a project the same limits apply:

- For a contract of R50M, Format A will apply
- For a contract of R355M, Format B will apply.

Format Dx applies only to Distribution Division projects and contracts. If a Distribution Division project or contract exceeds the Format A limit, the Eskom Insurance Management Services [EIMS] need to be contacted for advice on how to formulate the insurance cover. Cover and deductibles for Distribution Division are per the relevant policy available on the internet web link given below.

Format A generally applies to Transmission Division projects and contracts. If a Transmission Division project or contract exceeds the Format A limit, the Eskom Insurance Management Services [EIMS] need to be contacted for advice on how to formulate the insurance cover.

3. Tendering contractors should note that cover provided by the *Employer* is only per the policies available on the internet web link listed below and may not be the cover required by the tendering contractor or as intended by each of the listed insurances in the left hand column of the Insurance Table in clause 84.2. In terms of clause 84.1 “the *Contractor* provides the insurances stated in the Insurance Table except any insurance which the *Employer* is to provide”. Hence the *Contractor* provides insurance which the *Employer* does not provide and

in cases where the *Employer* does provide insurance the *Contractor* insures for the difference between what the Insurance Table requires and what the *Employer* provides.

4. When the Marine Insurance is required the *Contractor* needs to obtain a copy of the latest edition of Eskom's Marine Policies Procedures found at internet website given below.
5. **Further information and full details of all Eskom provided policies and procedures may be obtained from:**

http://www.eskom.co.za/live/content.php?Item_ID=9248

Annexure C: The *Employer's* Panel of Adjudicators

The following persons listed in alphabetical order of their surname have indicated their willingness to be included in the Eskom Panel of Adjudicators. Their CV's may be obtained by using the contact details provided.

Name	Location	Contact details (phone & e mail)
Nigel ANDREWS	Gauteng	+27 11 836-6760 nigela@quoin.net
Andrew BAIRD	Gauteng	+27 11 803 3008 andrewbaird@ecsconsult.co.za
Christopher BINNINGTON	Gauteng	+27 11 888-6141 cdb@bca.co.za
Peter HIGGINS	UK	+44 1293 873 868 peterhiggins@pdconsult.co.uk
Bruce LEECH	Gauteng	+27 11 290 4000 leech@counsel.co.za
Nigel NILEN	Gauteng	+27 11 465 3601; nilences@global.co.za
Robert St. LEGER	Cape Town	+27 21 794 7488 bobst@iafrica.com
Peter THURLOW	Gauteng	+27 11 787 6226 info@thurlowassoc.com

Information about the Panel and appointment of the selected Adjudicator is available from Eskom Supply Chain Operations management, by contacting Leighton Itholeng (Tel.: +27 (0)11 800 4031) (Fax :+27 (0)86 668 0419) E-mail: Leighton.Itholeng@eskom.co.za

C1.2 Contract Data

Part two - Data provided by the *Contractor*

Notes to a tendering contractor:

1. Please read both the NEC3 Engineering and Construction Contract (June 2005) and the relevant parts of its Guidance Notes (ECC3-GN)² in order to understand the implications of this Data which the tenderer is required to complete. An example of the completed Data is provided on pages 152 to 154 of the ECC3 Guidance Notes.
2. The number of the clause which requires the data is shown in the left hand column for each statement however other clauses may also use the same data
3. Where a form field like this [] appears, data is required to be inserted relevant to the option selected. Click on the form field **once** and type in the data. Otherwise complete by hand and in ink.

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

Clause	Statement	Data
10.1	The <i>Contractor</i> is (Name): Address Tel No. Fax No.	
11.2(8)	The <i>direct fee percentage</i> is The <i>subcontracted fee percentage</i> is	% %
11.2(18)	The <i>working areas</i> are the Site and	
24.1	The <i>Contractor's</i> key persons are: 1 Name: Job: Responsibilities: Qualifications: Experience: 2 Name: Job: Responsibilities: Qualifications: Experience:	

² Available from Engineering Contract Strategies Tel 011 803 3008, Fax 011 803 3009

		CV's (and further key persons data including CVs) are appended to Tender Schedule entitled .
11.2(3)	The <i>completion date</i> for the whole of the <i>works</i> is	31 January 2032
11.2(14)	The following matters will be included in the Risk Register	
11.2(19)	The Works Information for the <i>Contractor's</i> design is in:	
31.1	The programme identified in the Contract Data is	
A	Cost reimbursable contract	
11.2(20)	The <i>activity schedule</i> is in	
11.2(30)	The tendered total of the Prices is	(in figures) (in words), excluding VAT

PART 2: PRICING DATA
ECC3 Option A

Document reference	Title	No of pages
C2.1	Pricing assumptions: Option A	1 – 2
C2.2	The activity schedule	1

C2.1 Pricing Assumptions: Option A

The *conditions of contract*

How work is priced and assessed for payment

Clause 11 in NEC3 Engineering and Construction Contract, June 2005 (ECC3) Option A states:

Identified and defined terms 11
11.2 (20) The Activity Schedule is the *activity schedule* unless later changed in accordance with this contract.

(27) The Price for Work Done to Date is the total of the Prices for

- each group of completed activities and
- each completed activity which is not in a group.

A completed activity is one which is without Defects which would either delay or be covered by immediately following work.

(30) The Prices are the lump sum prices for each of the activities on the Activity Schedule unless later changed in accordance with this contract.

This confirms that Option A is a lump sum form of contract where the work is broken down into activities, each of which is priced by the tendering contractor as a lump sum. Only completed activities are assessed for payment at each assessment date; no part payment is made if the activity is not completed by the assessment date.

Function of the Activity Schedule

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

Link to the programme

Clause 31.4 states that "The *Contractor* provides information which shows how each activity on the Activity Schedule relates to the operations on each programme which he submits for acceptance". Ideally the tendering contractor will develop a high level programme first then resource each activity and thus arrive at the lump sum price for that activity both of which can be entered into the *activity schedule*.

Preparing the *activity schedule*

Generally it is the tendering contractor who prepares the *activity schedule* by breaking down the work described within the Works Information into suitable activities which can be well defined, shown on a programme and priced as a lump sum.

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 his *activity schedule* and be priced accordingly.

It is assumed that in preparing his *activity schedule* the *Contractor*:

- Has taken account of the guidance given in the ECC3 Guidance Notes pages 19 and 20;
- Understands the function of the Activity Schedule and how work is priced and paid for;
- Is aware of the need to link the Activity Schedule to activities shown on his programme;
- Has listed and priced activities in the *activity schedule* which are inclusive of everything necessary and incidental to Providing the Works in accordance with the Works 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 activity within the Prices of other listed activities in order to fulfil the obligation to complete the *works* for the tendered total of the Prices.
- Understands there is no adjustment to the lump sum Activity Schedule price if the amount, or quantity, of work within that activity later turns out to be different to that which the *Contractor* estimated at time of tender. The only basis for a change to the Prices is as a result of a compensation event See clause 60.1

C2.2 the activity schedule

Price List

The Price List is as follows and as per activities noted on the Works Information. The rates and Prices entered for each item includes for all work and other things necessary to complete the item. This is mechanical work and CIDB should be 3ME OR HIGHER

Price List A: Turbine & Boiler Aux Safety Valves

Item No.	Description	Unit	Qty	Rate	Price
1	HP Htr 5A/BCrosby 4" JO 66 e.4.p.6 (6" inlet=150 mm inlet, 8" outlet=200 mm outlet): RF11S041 & RF12S039 (4M/Level)				
1.1	Valve Removal	EA	16		
1.2	Strip & Assessment	EA	16		
1.3	Refurbishment / Repairs & Pressure Test (including Sandblasting & Painting)	EA	16		
1.4	Valve Installation	EA	16		
	Sub-total				
2	HP Htr 6A/B Crosby 6" JO 35ce 6 q.8 (4" inlet=100 mm inlet, 6" outlet=150 mm outlet): RF21S037 & RF31S035 (+/-10M/Level)				
2.1	Valve Removal	EA	8		
2.2	Strip & Assessment	EA	8		
2.3	Refurbishment / Repairs & Pressure Test (including Sandblasting & Painting)	EA	8		
2.4	Valve Installation	EA	8		
	Sub-total				
3	LP Heater 3 Crosby 4" JO 25 3e.4.p.6 (100mm inlet, 150 mm outlet): RH53S027 (4M/Level)				
3.1	Valve Removal	EA	8		
3.2	Strip & Assessment	EA	8		
3.3	Refurbishment / Repairs & Pressure Test (including Sandblasting & Painting)	EA	8		
3.4	Valve Installation	EA	8		
	Sub-total				
4	FW BIRKETT (25 mm inlet, 40mm=outlet): RL31S108 & RL32S112 (0M/Level)				
4.1	Valve Removal	EA	16		
4.2	Strip & Assessment	EA	16		
4.3	Refurbishment / Repairs & Pressure Test (including Sandblasting & Painting)	EA	16		
4.4	Valve Installation	EA	16		
	Sub-total				
5	DA/DST Crosby 8" jo 36 e stm 8.t.10 (8" inlet=200 mm inlet, 10" outlet=250 mm outlet): RF61S033, RF61S034, RF61S063, RF61S064, RF61S065, RF61S066, RF61S067, RF61S068, RF61S069, RF61S072, RF61S073, RH62S028 &				

Item No.	Description	Unit	Qty	Rate	Price
	RH62S029 (+/-36M/Level)				
5.1	Valve Removal	EA	104		
5.2	Strip & Assessment	EA	104		
5.3	Refurbishment / Repairs & Pressure Test (including Sandblasting & Painting)	EA	104		
5.4	Valve Installation	EA	104		
	Sub-total				
6	Aux Steam Manifold Sempell VSE (200/250mm): RQ80S104 (26M/Level)				
6.1	Valve Removal	EA	8		
6.2	Strip & Assessment	EA	8		
6.3	Refurbishment / Repairs & Pressure Test (including Sandblasting & Painting)	EA	8		
6.4	Valve Installation	EA	8		
	Sub-total				
7	Crosby 0,74 (25mm inlet, 25mm outlet): RM16S099, RM16S100, RM16S101, RM62S102, VG01S193 & SG71S513 (0M/Level)				
7.1	Valve Removal	EA	56		
7.2	Strip & Assessment	EA	56		
7.3	Refurbishment / Repairs & Pressure Test (including Sandblasting & Painting)	EA	56		
7.4	Valve Installation	EA	56		
	Sub-total				
8	Soot Blower Bob & Reuter 80/125 NB: NV03S103 (+/-82M/Level)				
8.1	Valve Removal	EA	8		
8.2	Strip & Assessment	EA	8		
8.3	Refurbishment / Repairs & Pressure Test (including Sandblasting & Painting)	EA	8		
8.4	Valve Installation	EA	8		
	Sub-total				
9	Three (3) Way lube/Seal Oil Change Over Valve 80mm: SC71S521, SC71S522, SU11S045 & SU11S046 (0M/Level)				
9.1	Valve Removal	EA	40		
9.2	Strip & Assessment	EA	40		
9.3	Refurbishment / Repairs & Pressure Test (including Sandblasting & Painting)	EA	40		
9.4	Valve Installation	EA	40		
	Sub-total				
10	Three (3) Way Lube Oil Change Over Valve 250mm: SC11S004 & SC11S005				
10.1	Valve Removal	EA	16		
10.2	Strip & Assessment	EA	16		
10.3	Refurbishment / Repairs & Pressure Test (including Sandblasting & Painting)	EA	16		
10.4	Valve Installation	EA	16		
	Sub-total				

Item No.	Description	Unit	Qty	Rate	Price
11	Lube Oil Relief Valve 100mm: SC71S503, SC71S509 & SC71S520 (0M/Level)				
11.1	Valve Removal	EA	24		
11.2	Strip & Assessment	EA	24		
11.3	Refurbishment / Repairs & Pressure Test (including Sandblasting & Painting)	EA	24		
11.4	Valve Installation	EA	24		
	Sub-total				
12	AC/DC/Lube oil Relief Valve 50mm: SC71S515, SC71S518, SC71S523 & SC71S527 (0M/Level)				
12.1	Valve Removal	EA	32		
12.2	Strip & Assessment	EA	32		
12.3	Refurbishment / Repairs & Pressure Test (including Sandblasting & Painting)	EA	32		
12.4	Valve Installation	EA	32		
	Sub-total				
13	Power Oil Relief Valve 40mm: SC72S506, SC72S512 & SC72S528 (0M/Level)				
13.1	Valve Removal	EA	24		
13.2	Strip & Assessment	EA	24		
13.3	Refurbishment / Repairs & Pressure Test (including Sandblasting & Painting)	EA	24		
13.4	Valve Installation	EA	24		
	Sub-total				
14	FRF Main Pump A & B PRV 40mm: SJ21S013 & SJ21S014 (0M/Level)				
14.1	Valve Removal	EA	16		
14.2	Strip & Assessment	EA	16		
14.3	Refurbishment / Repairs & Pressure Test (including Sandblasting & Painting)	EA	16		
14.4	Valve Installation	EA	16		
	Sub-total				
15	Stator Water Inlet Manifold RH A & B and LH A & B PRV 25mm: SP11S045, SP11S046, SP11S047, SP11S048				
15.1	Valve Removal	EA	32		
15.2	Strip & Assessment	EA	32		
15.3	Refurbishment / Repairs & Pressure Test (including Sandblasting & Painting)	EA	32		
15.4	Valve Installation	EA	32		
	Sub-total				
16	MOT Lube Oil Filter Bypass 4 Port Changeover Double Valve 200/250mm:				
16.1	Valve Removal	EA	8		
16.2	Strip & Assessment	EA	8		
16.3	Refurbishment / Repairs & Pressure Test (including Sandblasting & Painting)	EA	8		
16.4	Valve Installation	EA	8		
	Sub-total				

Item No.	Description	Unit	Qty	Rate	Price
17	BFPT Power Oil 4 Port Changeover Double Valve 100mm (0M/Level)				
17.1	Valve Removal	EA	16		
17.2	Strip & Assessment	EA	16		
17.3	Refurbishment / Repairs & Pressure Test (including Sandblasting & Painting)	EA	16		
17.4	Valve Installation	EA	16		
	Sub-total				
18	BFPT Power Oil 4 Port Changeover Double Valve 50mm (0M/Level)				
18.1	Valve Removal	EA	8		
18.2	Strip & Assessment	EA	8		
18.3	Refurbishment / Repairs & Pressure Test (including Sandblasting & Painting)	EA	8		
18.4	Valve Installation	EA	8		
	Sub-total				
19	Supply of graphite gasket sets for the above	EA	8		
20	All Transportation including manpower, tools, equipment etc. (per trip in kilometres)	EA	8		
21	Accommodation (per person)	EA	8		
22	Safety (all safety requirements to cover for risks related to this contract)	EA	8		
	Total of the Prices (Excluding VAT):				

Note:

- The price list can be extended were necessary and all above items (22 points) will be based on fixed cost each of every Outage.
- Find detailed Scope under Part 3: Scope of Work (SOW) and take into consideration all points raised under **(1.4.1.)** and take note of the Contract Special Requirements.
- Any additional work that might arise after inspection needs to be addressed to the Employer for approval. This include replacement of worn equipment/component/parts with new ones such as spindles, revolving nut, studs/bolts & nuts, machine of spares etc and any other activities/task that might be discovered during inspection.
- The material for some of Safety Valves might be Carbon Steel, 15Mo3/16Mo3, Stainless Steel, 10Crmo910, 13Crmo44, 17CrMo55, 2.25CrMo, 15NiCuMoNb 6-6-4 etc. This can be verified by performing NDT (PMI) before resuming with refurbishment.
- There valves are Sempell,

Special Requirements (Contract Agreement Conditions)

- Take note that the period of reply and defect correction period is 48 Hours or 2 days (Contract Agreement Conditions) on all issues that needs urgent attention from this Contract (e.g. Additional Manpower Request, Defects to be attended during Commissioning, any repairs that must be carried out during Outages). The Project Manager will notify a Contractor/Partner in writing via email but in terms where the Project Manager has no access to the Computer, an SMS or Phone call will be used (Formal Instruction will be sent as soon as the Project Manager gets access to the computer).

- Take into consideration that delay damages will be applied if the Contractor/Partner delays the activities (Contract Agreement Conditions).
- Also take note that if defects appear within 52 weeks on the same area that repairs have been done by Contractor/Partner, the defect repairs will be compensated by the Contractor/Partner.

Contractor:

_____	_____	_____
Int & Surname	Signature	Date

Document reference	Title	No of pages
	This cover page	1
C3.1	<i>Employer's Works Information</i>	2 – 23
C3.2	<i>Contractor's Works Information</i>	24
	Total number of pages	

C3.1: EMPLOYER'S WORKS INFORMATION

1.4. Work to be performed by the Contractor for the Works

As per the attached scope of work.

2.3. Health and Safety Risk Management

2.3.1. Health and Safety Requirements

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
- Adherent 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 regarding 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 workplaces and on its Employees](#).
- 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.

2.3.2. 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 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.

2.3.3. 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.

2.3.4. Health and Safety Arrangements

- 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.
- l) 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 always 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 regarding 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 Worksor any other works in the Employers premises.
 - Compensation Commissioner records and proof of registration.
 - Records and documentation with regard to any *Sub-Contractor* or labour-only contracts he places or uses to carry out the Works or any other works in Employers premises.

- Personal Protective Equipment and Safety Equipment Inspection, training and competency records and documentation.
- Employment contracts for all *Sub-Contractor* or labour-only contracts.
- Compliance to a Safety System, such as NOSA or any other system that is similar in nature.
- Records of all incidents or accidents, 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 Principal Contractor must ensure that his *Contractors (Sub-Contractors)* do also have a Health and Safety File and that must be accepted by the Principal 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.

2.3.5. 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 indicates the names of all people 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(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.

2.3.6. 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. Firefighting equipment must always remain accessible.
- 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 safeguard 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.

2.3.7. 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.

2.3.8. Radiation Protection

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

2.3.9. 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.

2.3.10. 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.

2.3.11. 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.

2.3.12. Speed Limit

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

2.3.13. Barricading

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

2.3.14. 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.

2.3.15. 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, 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.

2.4. Environmental Constraints and Management

Duvha Power Station is ISO 14001 compliant. All spillages (whether oil, grease, diesel, chemical, etc.) are always prevented 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.

2.5. 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 GGS 0462 in the Works Information. Annexure B to this Standard indicates the specific application thereof.

All Quality Control documentation must be submitted to the *Employer* within 7 (Seven) days after contract award. 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:

2.5.1. Contractor's Quality Assurance and Quality Control

The *Contractor* compiles, in conjunction with the *Employer*, *Engineer* 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.

2.5.2. Quality Control Plan

The Quality Control Plan consists of the following as a minimum and is accepted by the Engineer, *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.

2.6. Programming Constraints

2.6.1. Program to be Submitted

The *Contractor* will be responsible to prepare and submit the Provision of Manpower and Consumables to Perform High Pressure Welding during Unit 4 IR Outage program (this will be done as per SOW provided) in a specified format by the employer, at least 7 working days 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/her performance.

The Contractor will submit a Bar Chart program (MS Project or Primavera) 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.

2.6.2. 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 04 January 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.
- Take note that, the revised programme should be submitted to the *Employer* within 1 day after any change has occurred.

2.6.3. Progress Reporting

Progress reports are submitted to the *Project Manager* weekly by the *Contractor*.

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.

Note: Refer to Clause 31.2 of the NEC conditions of contract document.

2.6.4. Completion

Completion of the whole of the *works* is when all activities in the Works Information are completed without any defect. The Contractor will be liable for any defect that will be picked during commissioning of the systems and the defect period for this contract will be 26 weeks.

2.6.5 Training Workshops and Technology Transfer

The Contractor must employ and arrange necessary training of at least 1 x Artisans and 1 x Technician during the contract period (4 Month).

2.7. 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.

2.8. 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.

3. Services and Other Things Provided by the Employer

3.1. 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 because 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).
- You need to be authorised in terms of plant safety regulation 6 month after placement of the contract. No other contractor will be responsible to take a permit for your contract
- 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.

3.1.1. 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.

3.1.2. 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.

3.1.4. 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) An 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 always be in possession of a Contractor's Permit.
- 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) 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 attached 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 always conform 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.

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. 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*.

4.6. Electrical Welding Machines

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

4.7. Barricading and Screens

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

4.8. Construction, Erection and Maintenance Work on Site

- a) The *Contractor* will be responsible for the provision of all, or any temporary or expendable materials required for the temporary storage of material.
- b) The *Contractor* will be responsible for the safeguarding, care and security of all items supplied by the *Employer* whilst in the *Contractor's* custody and control, until completion of the whole of the *works*.
- c) The *Contractor* will be responsible for all hoisting and lifting, by qualified riggers, and equipment that is required to complete the *works*, unless otherwise clearly identified and stated in the contract.
- d) The *Contractor* will be responsible to check and verify correctness of civil and structural (temporary/permanent) work installed by others prior to commencement of installation / erection or during usage.
- e) The *Contractor* will be responsible for cleaning where necessary of all mating surfaces before erection.

- f) The *Contractor* will be responsible for the repair, replacement or correction as necessary of any and all items of Plant and / or Materials supplied by the *Employer* which are damaged and / or lost whilst in the *Contractor's* custody and control.
- g) The *Contractor* Site Manager shall ensure that only competent and medically fit personnel will be allowed to work on the *works*.
- h) All cutting of pressure parts will be done with pneumatic grinders only.
- i) *Contractor* to have a copy of the draft Construction Regulations and to understand and implement the required safety systems.

4.9. Adjacent Plant, Foundations and Buildings

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

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

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

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

4.11. Restrictions Applicable to the *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*.

5. Drawings

All drawing will be provided by the Employer if available. In case were drawings are unavailable, Contractor/Partner can make use of hand drawings or any rough sketch that can help a Contractor/Partner to execute the work/activity.

Drawing number	Revision	Title

6. Specifications

Title	Date or revision	Tick if publicly available
Occupational Health and Safety Act, No 85 of 1993 and any amendments thereafter	Act, No 85 of 1993	Yes
Supplier Contract Quality Requirements Specification (QM-58)	QM-58	Yes
Duvha Power Station <i>Contractors</i> Safety Manual	SAS 0012 Revision 3	Yes
The design, erection, use and inspection of access scaffolding	SABA 085	Yes
Draft Construction Regulations		Yes
Personal Protective Equipment against falls from a height – Full Body Harnesses	SABS EN 361:1992*	Yes
Personal Protective Equipment against falls from a height – Connectors	SABS EN 362:1992*	Yes
Personal Protective Equipment against falls from a height – Fall arrest systems	SABS EN 363:1992*	Yes
Personal Protective Equipment against falls from a height – Test Methods	SABS EN 364:1992*	Yes
Personal Protective Equipment against falls from a height – General requirements for instructions for use and for	SABS EN 365:1992	Yes

Title	Date or revision	Tick if publicly available
marking		
Standard Specifications for Thermal insulation at Power Station	NWS 1454, Rev.3, April 1983	Yes
Requirements for Radiographic Acceptance Levels for Welds Inspection on Eskom Plant (36-732)	Rev 0, September 2014	Yes
Eskom NDT Personnel Approval (NPA) for Quality Related Special Processes on Eskom Plant Standard (240-83539994)	Rev 1, January 2018	Yes
Requirements for Non-Destructive Testing (NDT) on Eskom Plant Standard (240-83540088)	Rev 1, January 2018	Yes
Construction and Repair Welding of Primary Air, Induced and Forced Draught Fans Standard (240-56241639)	Rev 2, December 2017	Yes
Control of Welding during Construction, Repair and Maintenance Activities Standard (240-56241933)	Rev 2, November 2017	Yes
Qualification, Certification and Accreditation Requirements for Personnel and Entities Performing Welding Related Work on Eskom Plant Standard (240-56246601)	Rev 2, November 2017	Yes
Welding of High Pressure Temperature Tube and Pipework Standard (240-56355225)	Rev 2, October 2017	Yes
Heat Treatment of Welded Components Standard (240-77196678)	Rev 1, November 2017	Yes

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

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

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

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

ISA standards will be used, especially for ergonomics.

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

C3.2 CONTRACTOR'S WORKS INFORMATION

This section of the Works Information will always be contract specific depending on the nature of the *works*.

It is most likely to be required for design and construct contracts where the tendering contractor will have proposed specifications and schedules for items of Plant and Materials and workmanship, which once accepted by the *Employer* prior to award of contract now become obligations of the *Contractor* per core clause 20.1.

Typical sub headings could be

- a) *Contractor's* design
- b) Plant and Materials specifications and schedules
- c) Other

This section could also be compiled as a separate file.

PART 4: SITE INFORMATION

Document reference	Title	No of pages
C4	This cover page	1
	Site Information	2
	Total number of pages	

PART 4: SITE INFORMATION

1. Description of the Site and its Surroundings

1.1. Topographical

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

1.2. Plant Area

The work will be performed on Unit 1 to 6 Turbine and Boiler House side during planned outage. *Contractor* to bear in mind that, this work will be done during outage, and other *Contractors* will be working in the same area as well.

Contractor/Partner not allowed to temper with the existing buildings, structures, and plant & machinery on the site during the period of this contract.

