



NEC3 Engineering & Construction Contract

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

and

**for REPLACEMENT OF ASH AND SLUICE LINES FOR
EIGHTEEN (18) MONTHS PERIOD AT DUVHA POWER
STATION**

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CONTRACT No.

Part C1: Agreements & Contract Data

Contents:

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C1.1 Form of Offer & Acceptance

Offer

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

REPLACEMENT OF ASH AND SLUICE LINES FOR EIGHTEEN (18) MONTHS PERIOD AT DUVHA POWER STATION

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

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

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

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

Signature(s) _____

Name(s) _____

Capacity _____

**For the
tenderer:**

(Insert name and address of organisation)

Name &
signature of
witness

Date

Tenderer's CIDB registration number (if applicable)

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 signed between them of this document, including the Schedule of Deviations (if any).

Unless the tenderer (now *Contractor*) within five working days of the date of such receipt notifies the Employer in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the Parties.

Signature(s) _____

Name(s) _____

Capacity _____

**for the
Employer** _____

Name &
signature of
witness _____ Date _____

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

C1.2 ECC3 Contract Data

Part one - Data provided by the *Employer*

[Instructions to the contract compiler: (delete these two notes in the final draft of a contract)]

1. Please read the relevant clauses in the conditions of contract before you enter data. 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.
2. Some ECC3 options are always selected by Eskom Holdings SOC Ltd. The remaining ECC3 options are identified by shading in the left hand column. In the event that the option is not required select and delete the whole row. Where the following symbol is used "●" - data is required to be inserted relevant to the specific option selected.]

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

Clause	Statement	Data
1	General	
	The <i>conditions of contract</i> are the core clauses and the clauses for main Option	A: Priced contract with activity schedule
●	dispute resolution Option	W1: Dispute resolution procedure
	and secondary Options	X1: Price Adjustment for inflation
		X2: Changes in the law
		X5: Sectional completion
		X7: Delay damages
		X17: Low Performance damages
		X16: Retention
		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 Ltd (reg no: 2002/015527/30), a state owned company incorporated in terms of the company laws of the Republic of South Africa
	Address	Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg
10.1	The <i>Project Manager</i> is: (Name)	Bongi Mathaphuna
	Address	Duvha Power Station
	Tel	(013) 690 0477
	Fax	086 537 1547
	e-mail	
10.1	The <i>Supervisor</i> is: (Name)	TBC
	Address	Duvha Power Station
	Tel No.	
	Fax No.	

e-mail

11.2(13)	The <i>works</i> are	Replacement of ash and sluice lines for Eighteen (18) months period at Duvha Power Station. Refer to contractor’s works information for more details.		
11.2(14)	The following matters will be included in the Risk Register	<div>1. Slipping and falling</div> <div>2. Dust (inhalation, skin and eye irritation)</div> <div>3. Scorching sun(skin irritation)</div>		
11.2(15)	The <i>boundaries of the site</i> are	Duvha Power Station –Ash and Sluice line		
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 under “Contractor’s works information” and all documents and drawings to which it makes reference.		
12.2	The <i>law of the contract</i> is the law of	the Republic of South Africa		
13.1	The <i>language of this contract</i> is	English		
13.3	The <i>period for reply</i> is	3 working days		
2	The Contractor's main responsibilities	Contained in “ Contractor’s works information”		
3	Time			
11.2(3)	The <i>completion date</i> for the whole of the <i>works</i> is	2024.08.31 (Subject to change due to PTW and other Ash plant constraints)		
11.2(9)	The <i>key dates</i> and the <i>conditions</i> to be met are:	Condition to be met		key date
		1	Submission and approval of a program	Weeks after contract awarded
		2	Kick off meeting	Weeks after contract awarded
		3	Site establishment	Weeks after contract awarded
		4	Execution as per the scope	As per the signed program
		5	Commissioning	As per the signed program
		6	De-establishment and hand over	As per the signed program

30.1	The <i>access dates</i> are:	Part of the Site	Date
		1 Duvha Power station Ash and sluice line	After contract award
		2 Whole of the Site	After all material to be installed arrives on site and program submitted.
31.1	The <i>Contractor</i> is to submit a first programme for acceptance within	1 week of the Contract Date.	
31.2	The <i>starting date</i> is	2023-03-01 or as soon as possible	
32.2	The <i>Contractor</i> submits revised programmes at intervals no longer than	3 weeks.	
35.1	The <i>Employer</i> is not willing to take over the <i>works</i> before the Completion Date.		

4 Testing and Defects

42.2	The <i>defects date</i> is	52 weeks after Completion of the whole of the works.
43.2	The <i>defect correction period</i> is	2 weeks except in those circumstances where correction in such period is not practical, in which case the defect shall be corrected by the contractor within such time as mutually agreed by both parties.

5 Payment

50.1	The <i>assessment interval</i> is	on the 25th of each successive month.
51.1	The <i>currency of this contract</i> is the	South African Rand.
51.2	The period within which payments are made is	4 weeks.
51.4	The <i>interest rate</i> is	<p>(i) zero percent the publicly quoted prime rate of interest (calculated on a 365 day year) charged from time to time by the Standard Bank of South Africa Limited (as certified, in the event of any dispute, by any manager of such bank, whose appointment it shall not be necessary to prove) for amounts due in Rands and</p> <p>(ii) the LIBOR rate applicable at the time for amounts due in other currencies. LIBOR is the 6 month London Interbank Offered Rate quoted under the caption "Money Rates" in The Wall Street Journal for the applicable currency or if no rate is quoted for the currency in question then the rate for United States Dollars, and if no such rate appears in The Wall Street Journal then the rate as quoted by the Reuters Monitor Money Rates Service (or such service as may replace the Reuters Monitor Money Rates Service) on the due date for the payment in question, adjusted <i>mutatis mutandis</i> every 6 months thereafter and as certified, in the event of any dispute, by any manager employed in the foreign exchange department of The Standard Bank of South Africa Limited, whose appointment it shall not be necessary to prove.</p>

6	Compensation events	
60.1(13)	<p>The place where weather is to be recorded is:</p> <p>The <i>weather measurements</i> to be recorded for each calendar month are,</p> <p>The <i>weather measurements</i> are supplied by</p> <p>The <i>weather data</i> are the records of past <i>weather measurements</i> for each calendar month which were recorded at:</p> <p>and which are available from:</p>	<p>Duvha Power Station</p> <p>the cumulative rainfall (mm)</p> <p>the number of days with rainfall more than 10 mm</p> <p>the number of days with minimum air temperature less than 5 degrees Celsius</p> <p>the number of days with maximum air temperature more than 35 degrees Celsius</p> <p>the number of days with snow lying at 09:00 hours South African Time</p> <p>and these measurements:</p> <p>The Contractor</p> <p>Witbank area</p> <p>the South African Weather Bureau and included in Annexure A to this Contract Data provided by the Employer</p>
7	Title	<p>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.</p>
8	Risks and insurance	
80.1	These are additional <i>Employer's</i> risks	<p>1. Availability of an AP/RP safety risk</p> <p>2. Snake bites</p>

- 84.1 The *Employer* provides these insurances from the Insurance Table
The *Employer* is to provide insurances as stated in the Insurance Table

INSURANCE TABLE

Insurance against	Minimum amount of cover or minimum limit of indemnity
Assets All Risk	As per the insurance policy document.
Project insurance	As per the insurance policy document.
Environmental Liability	As per the insurance policy document.
General and Public Liability	As per the insurance policy document.
Transportation (Marine)	As per the insurance policy document.
Motor Fleet and Mobile Plant	As per the insurance policy document.
Terrorism	As per the insurance policy document.
Cyber Liability	As per the insurance policy document.

- 84.1 The *Contractor* provides the insurances stated in the Insurance Table.

The insurances provide cover for events which are at the *Contractor's* risk from the *starting date* until the Defects Certificate or a termination certificate has been issued.

INSURANCE TABLE

Insurance against	Minimum amount of cover or minimum limit of indemnity
Loss of or damage to the <i>works</i> , 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
Liability for loss of or damage to property (except the <i>works</i> , Plant and Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the <i>Contractor</i>) caused by activity in connection with this contract	<u>Loss of or damage to property</u> <u>Employer's property</u> The replacement cost where not covered by the <i>Employer's</i> insurance. The <i>Employer's</i> policy deductible as at contract date, where covered by the <i>Employer's</i> insurance. <u>Other property</u> The replacement cost. <u>Bodily injury to or death of a person</u> The amount required by 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.

- 84.2 The insurance against loss of or damage to the *works*, Plant and Materials is to include cover for Plant and Materials provided by the *Employer* for an amount of

R 100 000.00

9	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.
10	Data for main Option clause	
A	Priced contract with activity schedule	
11	Data for Option W1	
W1.1	The <i>Adjudicator</i> is	the person selected from the ICE-SA Division (or its successor body) of the South African Institution of Civil Engineering Panel of Adjudicators by the Party intending to refer a dispute to him. (see www.ice-sa.org.za). If the Parties do not agree on an Adjudicator the Adjudicator will be appointed by the Arbitration Foundation of Southern Africa (AFSA).
	Address	TBA
	Tel No.	[•]
	Fax No.	[•]
	e-mail	[•]
W1.2(3)	The <i>Adjudicator nominating body</i> is:	the Chairman of ICE-SA a joint Division of the South African Institution of Civil Engineering and the London Institution of Civil Engineers. (See www.ice-sa.org.za)

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

12 Data for secondary Option clauses

X1 Price adjustment for inflation

X1.1(a) The *base date* for indices is

X1.1 (c) The proportions used to calculate the Price Adjustment Factor are:

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

As per approved task order

Section (task order)	Description
1.	Submission of : a) Safety file for approval b) Programme for approval. c) QCP's. Site establishment Supply and deliver material.
2.	Installation & Testing
3.	Commissioning a) Site de-establishment

X7	Delay Damages	5% of each activity completed according to priced list capped at 10% of contract value, based on the submitted program – key milestone dates
X16	Retention	5% of the contract value amount
X17	Low Performance Damages	
X17.1	<p>The amounts for low performance damages are:</p> <ul style="list-style-type: none"> • Submissions of the signed of QCP within a week of the completion of an activity (penalty of R1000 per day for non-compliance) • The contractor needs to have an RP trained and authorised within 3 months of the contract start (penalty of R1000 per day for non-compliance until the contractor complies) • Submission of drawings for Eskom approval 3 days before installation. (penalty of R1000 per day for non-compliance) • Submission of all data packs 2 weeks after the final work is complete. (penalty of R1000 per day for non-compliance) • All Quality Control Plans (QCPs) shall be signed and submitted to the Project Manager within 1 week of the completion of the work. A penalty of R2000 per day will be charged for the late submission of the QCP. • All signed test reports/results (concrete, layer works compaction, weld test) are to be submitted to the Project Manager within 3 days of the completion of the test. A penalty of R2500 will be charged for the late submission of the test reports. • The welding procedure must be submitted to the Eskom project Manager 2 weeks before the commencement of the work. A penalty of R2000 will be charged for each day that the welding procedure are late. Days are counted from the date 2 weeks before the start of work. • An Approved Pre-mixed concrete design shall be submitted to Eskom Project Manger 1 week before casting day of concrete. A penalty of R2500 will be charged for the late submission of the concrete mix design approved by Civil Engineer. 	
X18	Limitation of liability	
X18.1	The <i>Contractor's</i> liability to the <i>Employer</i> for indirect or consequential loss is limited to:	R0.0 (zero Rand)
X18.2	For any one event, the <i>Contractor's</i> liability to the <i>Employer</i> for loss of or damage to the <i>Employer's</i> property is limited to:	<p>the amount of the deductibles relevant to the event described in the insurance policy format selected in the data for clause 84.1 above, which policy is available on http://www.eskom.co.za/Tenders/InsurancePoliciesProcedures/Pages/EIMS_Policies_From_1_April_2014_To_31_March_2015.aspx</p>
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:	<p>the total of the Prices other than for the additional excluded matters.</p> <p>The <i>Contractor's</i> total liability for the additional excluded matters is not limited.</p> <p>The additional excluded matters are amounts for which the <i>Contractor</i> is liable under this contract for</p> <ul style="list-style-type: none"> • Defects due to his design which arise before the Defects Certificate is issued, • Defects due to manufacture and fabrication outside the Site,

		<ul style="list-style-type: none"> • loss of or damage to property (other than the <i>works, Plant and Materials</i>), • death of or injury to a person and • infringement of an intellectual property right.
X18.5	The <i>end of liability date</i> is	<p>(i) 1 year after the <i>defects date</i> for latent Defects and</p> <p>(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.</p> <p>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</i> or the <i>Supervisor</i> to have discovered the Defect.</p>
Z	The Additional conditions of contract are	Z1 to Z12 always apply.
Z1	Cession delegation and assignment	
	Z1.1	The <i>Contractor</i> does not cede, delegate or assign any of its rights or obligations to any person without the written consent of the <i>Employer</i> .
	Z1.2	Notwithstanding the above, the <i>Employer</i> may on written notice to the <i>Contractor</i> cede and delegate its rights and obligations under this contract to any of its subsidiaries or any of its present divisions or operations which may be converted into separate legal entities as a result of the restructuring of the Electricity Supply Industry.
Z2	Joint ventures	
	Z2.1	If the <i>Contractor</i> constitutes a joint venture, consortium or other unincorporated grouping of two or more persons or organisations then these persons or organisations are deemed to be jointly and severally liable to the <i>Employer</i> for the performance of this contract.
	Z2.2	Unless already notified to the <i>Employer</i> , the persons or organisations notify the <i>Project Manager</i> within two weeks of the Contract Date of the key person who has the authority to bind the <i>Contractor</i> on their behalf.
	Z2.3	The <i>Contractor</i> does not alter the composition of the joint venture, consortium or other unincorporated grouping of two or more persons without the consent of the <i>Employer</i> having been given to the <i>Contractor</i> in writing.
Z3	Change of Broad Based Black Economic Empowerment (B-BBEE) status	
	Z3.1	Where a change in the <i>Contractor's</i> legal status, ownership or any other change to his business composition or business dealings results in a change to the <i>Contractor's</i> B-BBEE status, the <i>Contractor</i> notifies the <i>Employer</i> within seven days of the change.
	Z3.2	The <i>Contractor</i> is required to submit an updated verification certificate and necessary supporting documentation confirming the change in his B-BBEE status to the <i>Project Manager</i> within thirty days of the notification or as otherwise instructed by the <i>Project Manager</i> .
	Z3.3	Where, as a result, the <i>Contractor's</i> B-BBEE status has decreased since the Contract Date the <i>Employer</i> may either re-negotiate this contract or alternatively, terminate the <i>Contractor's</i> obligation to Provide the Works.

- Z3.4 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 Confidentiality

- Z4.1 The Contractor does not disclose or make any information arising from or in connection with this contract available to Others. This undertaking does not, however, apply to information which at the time of disclosure or thereafter, without default on the part of the Contractor, enters the public domain or to information which was already in the possession of the Contractor at the time of disclosure (evidenced by written records in existence at that time). Should the Contractor disclose information to Others in terms of clause 25.1, the Contractor ensures that the provisions of this clause are complied with by the recipient.
- Z4.2 If the Contractor is uncertain about whether any such information is confidential, it is to be regarded as such until notified otherwise by the Project Manager.
- Z4.3 In the event that the Contractor is, at any time, required by law to disclose any such information which is required to be kept confidential, the Contractor, to the extent permitted by law prior to disclosure, notifies the Employer so that an appropriate protection order and/or any other action can be taken if possible, prior to any disclosure. In the event that such protective order is not, or cannot, be obtained, then the Contractor may disclose that portion of the information which it is required to be disclosed by law and uses reasonable efforts to obtain assurances that confidential treatment will be afforded to the information so disclosed.
- Z4.4 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.
- Z4.5 The Contractor ensures that all his subcontractors abide by the undertakings in this clause.

Z5 Waiver and estoppel: Add to core clause 12.3:

- Z5.1 Any extension, concession, waiver or relaxation of any action stated in this contract by the Parties, the 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.

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

- Z6.1 The *Contractor* undertakes to take all reasonable precautions to maintain the health and safety of persons in and about the execution of the *works*. Without limitation the *Contractor*:
- accepts that the *Employer* may appoint him as the "Principal Contractor" (as defined and provided for under the Construction Regulations 2014 (promulgated under the Occupational Health & Safety Act 85 of 1993) ("the Construction Regulations") for the Site;
 - warrants that the total of the Prices as at the Contract Date includes a sufficient amount for proper compliance with the Construction Regulations, all applicable health & safety laws and regulations and the health and safety rules, guidelines and procedures provided for in this contract and generally for the proper maintenance of health & safety in and about the execution of *works*; and
 - undertakes, in and about the execution of the *works*, to comply with the Construction Regulations and with all applicable health & safety laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the *Contractor's* direction and control, likewise observe and comply with the foregoing.
- Z6.2 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.

Z7	Provision of a Tax Invoice and interest. Add to core clause 51
Z7.1	Within one week of receiving a payment certificate from the 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.
Z7.2	If the Contractor does not provide a tax invoice in the form and by the time required by this contract, the time by when the Employer is to make a payment is extended by a period equal in time to the delayed submission of the correct tax invoice. Interest due by the Employer in terms of core clause 51.2 is then calculated from the delayed date by when payment is to be made.
Z7.3	The <i>Contractor</i> (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 <i>Employer's</i> VAT number 4740101508 on each invoice he submits for payment.
Z8	Notifying compensation events
Z8.1	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".
Z9	Employer's limitation of liability
Z9.1	The Employer's liability to the Contractor for the Contractor's indirect or consequential loss is limited to R0.00 (zero Rand)
Z9.2	The <i>Contractor's</i> entitlement under the indemnity in 83.1 is provided for in 60.1(14) and the <i>Employer's</i> liability under the indemnity is limited.
Z10	<i>Termination: Add to core clause 91.1, at the second main bullet point, fourth sub-bullet point, after the words "against it":</i>
Z10.1	or had a business rescue order granted against it.
Z11	Addition to secondary Option X7 Delay damages (if applicable in this contract)
Z11.1	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.
Z12	Ethics
For the purposes of this Z-clause, the following definitions apply:	
Affected Party means, as the context requires, any party, irrespective of whether it is the Contractor or a third party, such party's employees, agents, or Subcontractors or Subcontractor's employees, or any one or more of all of these parties' relatives or friends,	
Coercive Action means to harm or threaten to harm, directly or indirectly, an Affected Party or the property of an Affected Party, or to otherwise influence or attempt to influence an Affected Party to act unlawfully or illegally,	
Collusive Action means where two or more parties co-operate to achieve an unlawful or illegal purpose, including to influence an Affected Party to act unlawfully or illegally,	
Committing Party means, as the context requires, the Contractor, or any member thereof in the case of a joint venture, or its employees, agents, or Subcontractors or the Subcontractor's employees,	
Corrupt Action means the offering, giving, taking, or soliciting, directly or indirectly, of a good or service to unlawfully or illegally influence the actions of an Affected Party,	
Fraudulent Action means any unlawfully or illegally intentional act or omission that misleads, or attempts to mislead, an Affected Party, in order to obtain a financial or other benefit or to avoid an obligation or incurring an obligation,	

Obstructive Action means a Committing Party unlawfully or illegally destroying, falsifying, altering or concealing information or making false statements to materially impede an investigation into allegations of Prohibited Action and

Prohibited Action means any one or more of a Coercive Action, Collusive Action Corrupt Action, Fraudulent Action or Obstructive Action.

Z 12.1 A Committing Party may not take any Prohibited Action during the course of the procurement of this contract or in execution thereof.

Z 12.2 The Employer may terminate the Contractor's obligation to Provide the Works if a Committing Party has taken such Prohibited Action and the Contractor did not take timely and appropriate action to prevent or remedy the situation, without limiting any other rights or remedies the Employer has. It is not required that the Committing Party had to have been found guilty, in court or in any other similar process, of such Prohibited Action before the Employer can terminate the Contractor's obligation to Provide the Works for this reason.

Z 12.3 If the Employer terminates the Contractor's obligation to Provide the Works for this reason, the procedures and amounts due on termination are respectively P1, P2 and P3, and A1 and A3.

Z 12.4 A Committing Party co-operates fully with any investigation pursuant to alleged Prohibited Action. Where the Employer does not have a contractual bond with the Committing Party, the Contractor ensures that the Committing Party co-operates fully with an investigation.

Annexure A: One-in-ten-year-return *weather data* obtained from SA Weather Bureau for [weather station]

If any one of these *weather measurements* recorded within a calendar month, before the Completion Date for the whole of the *works* and at the place stated in this Contract Data is shown to be more adverse than the amount stated below then the *Contractor* may notify a compensation event.

Month	Weather measurement			
	Average Rainfall (mm)	Average Number of days with rainfall	Absolute High [Low] temperature (C)	Average midday High [Low] temperature (C)
January	138	11	34 [5]	25 [13]
February	89	7	34 [8]	25 [13]
March	75	7	33 [5]	24 [12]
April	52	5	29 [1]	23 [10]
May	9	2	26 [-6]	20 [6]
June	23	2	24 [-3]	18 [4]
July	6	1	25 [-5]	18 [3]
August	11	2	28 [-6]	21 [5]
September	25	3	31 [-2]	24 [8]
October	96	8	33 [0]	25 [10]
November	120	10	33 [-2]	25 [11]
December	159	10	31 [0]	25 [13]

Only the difference between the more adverse recorded weather and the equivalent measurement given above is taken into account in assessing a compensation event.

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. The Contractor must obtain its own advice. 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
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*

[Instructions to the contract compiler: (delete this notes before issue to tenderers with an enquiry)

Whenever a cell is shaded in the left hand column it denotes this data is optional. If not required select and delete the whole row, otherwise insert the required Data.]

Notes to a tendering contractor:

1. Please read both the NEC3 Engineering and Construction Contract (April 2013) 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 156 to 158 of the ECC3 (April 2013) 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:	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 works is	

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

C2.1 ECC3/A PRICING ASSUMPTIONS

PART 2: PRICING DATA

Document reference	Title	No of pages
C2.1	Pricing assumptions: Option A	
C2.2	Activity Schedule	

C2.1 Pricing assumptions: Option A

How work is priced and assessed for payment

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

Identified and defined terms	11	
	11.2	(20) The Activity Schedule is the <i>activity schedule</i> 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 specifications and descriptions of the work or any constraints on 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.

C2.2 the *activity schedule*

ASHLINE REPLACEMENT PROJECT

SCHEDULE OF QUANTITIES : SANS

ASHLINE REPLACEMENT PROJECT						
SCHEDULE OF QUANTITIES : SANS						
No.	REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	B					
	1200	SECTION : PRELIMINARY AND GENERAL				
		CONTRACTOR's GENERAL OBLIGATIONS:				
	8.3.1	Fixed Charge Items				
		1. Site Establishment	Sum	1		
		2. Site De-establishment	Sum	1		
	8.4.1	Time Related Items				
		1. Offices and Storage Sheds	Months	18		
		2. Ablution and latrine Facilities	Months	18		
		3. Living Accommodation and Site Transport for Support Staff	Months	18		
		4. Supervision for the duration of construction	Months	18		
		5. Responsible Person (RP) for the duration of the contract	Sum	1		
	8.10	Compliance with OHS Act and Regulations (including the Construction Regulations, 2003)				
		1. Health and Safety Requirements	Sum	1		
		2. Environmental requirements				
		a) Dust suppression and chemical spillages for the period of the contract (Construction site and all road to be utilised)	Sum	1		
		b) Cleaning of ash spillages for contract duration	Sum	1		
	PB 1	Supply of 25 Ton crane for removal and installation of pipes for project duration	Sum	1		
	PB 2	Supply of 25 Ton crane for removal and installation of pipes.	Per-day	1		For rate only
	PB 3	Transportation of old ash line to stack area : Overhaul distance of 500m from the main access.	Sum	1		

	PB 4	As Build drawing of all bends.(microsoft station)	Sum	1		
	PB 5	Diesel generator for welding on the field where there is no power supply for project duration	sum	1		
	PB 6	Dispose old pipes to Holfontein (228km from site)	Sum	1		
	SABS	<u>CONCRETE (REPAIRING CONCRETE PLINTHS FOR ASH LINES)</u>				
	1200 G					
		<u>SCHEDULED FORMWORK ITEMS</u>				
	8.2.3	Special smooth, repaired and rubbed:				
		i) Vertical formwork to:	m ²	500		
		ii) Horizontal formwork to:	m ²	20		
		<u>SCHEDULED CONCRETE ITEMS</u>				
	8.4.3	Strength concrete:				
		i) Class 30 MPa/ 19 mm concrete in:	m ³	50		
	8.4.4	Unformed surface finishes:				
		i) Steel-floated finishes to:	m ²	170		
TOTAL AMOUNT						
<u>SCHEDULE OF QUANTITIES : SANS</u>						
No.	REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
Amount brought forward				0		
	8.7	Grouting:				
		i) Around the HD bolts:	m ³	3		
	8.15	Epoxy based bonding agent and primer to prepare concrete floors to receive screeding (FOSROC NITROBOND EP slowset or approved equivalent)	m ²	175		
		Surface preparation	m ²	175		
	SABS	<u>MEDIUM-PRESSURE PIPELINES</u>	m			
	1200 L					
	8.2.1	Supply and lay				
		i) Steel pipe line OD 406mm and 10mm thickness. SABS719 GRB	m	3564		
		ii) Two 12m length pipe flanged on one side will be required				
		OD 406mm and 10mm thickness. SABS719 GRB	m	1320		
	8.2.2	Supply and install				
		i) Long barrel Johnson couplings as per specification provide (Johnson couplings)	No.	56		
		ii) Clamps as shown in the sketch provided.	No	1150		

		iii) Flanges as per specification	No	592		
		iv) Bends flanged on both sides (per as built drawing)	No	55		
		v) Saddles	No	2300		
		<u>STRUCTURAL STEELWORK (SUNDRY ITEMS)</u>				
	8.3.2	Supply and install				
		i) M16 Anchoring bolts with nuts	No	2300		
	8.3.6	Corrosion protection: i) Painting of all steel pipe lines	Sum	1		
	SABS 1200 LE	<u>STORMWATER DRAINAGE</u> Supply and lay class C portal and rectangular culverts: i) 3600 mm x 900 mm	m	10		
	SABS 1200 D 8.3.2	<u>EARTHWORKS</u> Bulk excavation (Excavate in-situ ash) (i) Pipe crossing the security fence (see scope of work for details)	m³	70		
	8.3.4	Backfill (Future berms at drywall and ash line intersection) (ii) Compacted in layers not exceeding 150mm to 93% MOD AASHTO density at optimum moisture content	m³	70		
	8.3.4	Temporary ramp (temporary deposition area) (i) Construct a temporary ramp as per scope of work Importing of materials: for importation of materials from commercial sources or approved borrow pit and back fill as per works information (compact to 93% mod AASTHOO)	m³	150		
		(ii) Remove and re-instate site as per original	Sum	1		
TOTAL AMOUNT						

SCHEDULE OF QUANTITIES : SANS

No.	REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
Amount brought forward						0
	PB 1	GUARDRAILS				
	1	1. Guardrails on 3.81m spaced posts a) Complete galvanised system on: (i) Timber posts	m	100		
	2	2. End Treatments End Treatments in accordance with the drawings where single guardrail sections are used	No	8		
	3	3. Reflective Plates	No	27		
	PB 6	OTHER				
		1. Conduct all concrete test as per specification	Sum	1		
		2. Conduct all earth work as per specification	Sum	1		
		3. Conduct all steel work test as per specification	Sum	1		
		4. Conduct all welding work test as per Standard for Welding Requirements on Eskom Plant (240- 106628253)	Sum	1		
	PB 7	<u>LABOUR</u>				
	1	Unskilled	rate/hour	1		For rate purpose only
	2	Semi skilled	rate/hour	1		For rate purpose only
	3	Skilled	rate/hour	1		For rate purpose only
	4	Rigger	rate/hour	1		For rate purpose only
	5	Preliminary and General	rate/day	1		

Document reference	Title: REPLACEMENT OF ASH AND SLUICE LINES	No of pages
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C3.2	<i>Contractor's Works Information</i>	
	Total number of pages	

C3.1: EMPLOYER'S WORKS INFORMATION

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1 Description of the works

1.1 Executive overview

REPLACEMENT OF ASH AND SLUICE LINES.

There are ash lines pipes that are in the sluiceway are not accessible for any maintenance activities as they are covered with build ash and are exposed to moisture. They are currently maintained on the philosophy of run-to-failure, whereas, the rest of the ash line pipes are currently maintained by turning the ash lines 90 degrees was conducted every sixth years. Frequent pipe leaks are being experienced and the thickness test reports done in last year (2009) indicated most of the ash lines are closer and have reached their minimum thickness of 3mm. The accessible lines are also exposed to build up ash due to pipe leakage which shortens their life span as they get corroded quicker.

Leaks frequently occur on the bends and bends joints (Johnson couplings). The bends are not straight and misaligned to the plinths contour. Due to unavailability of drawing for the bends, previously whenever there was a leak it was difficult for Platter shop to make new bend without a drawing hence due to production pressure they would manufacture one with incorrect radius that won't be concurrent to the plinth contour. Bends are joined by short barrel Johnson couplings to the pipes. The plinths are damaged hence no sufficient support for clamps. Temporally the bends are all gaged together for support and to prevent movement.

Based on the above mentioned problem statement, there is a great need to replace the ash lines sections which poses a leak which will subsequently lead to environmental contravention.

1.2 Employer's objectives and purpose of the works

To dismantling, removing of the existing pipe work and the supply, delivery, and installation of the ash pipes for the following Units 2,4,5 to 6. This is based on the thickness test result which was conducted by Eskom. The concluded quantities for all lines required are detailed under section 3.1 of this document. Repairing of the existing plinths, supply and deliver of the clamps are also part of this scope of work.

1.3 Interpretation and terminology

The following abbreviations are used in this Works Information:

1. Abbreviation	2. Description
SANS	South African National Standards
SABS	South African Bureau Standards
SE	System Engineer
SHEQ	Eskom Safety, Health, Environment and Quality
QA	Quality Assurance
QM	Quality Manual
QC	Quality Control
NDT	Non-destructive test
IWE	International Welding Engineer registered with IIW
IIW	International Institute of Welding
IWP	International Welding Practitioner registered with IIW
IWS	International Welding Specialist registered with IIW
IWT	International Welding Technologist registered with IIW

2 Management and start up.

2.1 Management meetings

2.2 Documentation control

- The *Contractor's* site manager must keep a daily log, which needs to be signed by the *Employer's Supervisor* daily.

2.3 Health and safety risk management

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

- a) The *Contractor* complies with the requirements of the Duvha Power Station Safety, Health & Environmental Specifications SAS 0012: Duvha Power Station Contractors safety manual
- b) The documents are completed by the *Contractor's* and submitted to the *Employer* before taking possession of the works.
- c) These documents are valid for the duration of the works.
- d) The *Contractor* and all his personnel attend a Health and Safety Induction Course prior to starting with the *works*.
- e) The induction course is presented by the Safety Risk Department at Duvha Power Station.
- f) The *Contractor* makes arrangements with Safety Risk Management at telephone number 013-690-0143.
- g) The *Contractor* submits all the documents as indicated in the Safety, Health & Environmental Specifications relevant to the work to Safety Risk Management before the induction course.
- h) The *Contractor* completes all appointments required and ensures that the appointee and appointees fully understand their responsibilities and are competent and trained to execute their duties.
- i) The appointees/appointee ensures that all duties are carried out and records are kept by the *Contractor* for review/audit by the *Employer* or Inspector of Machinery.
- j) Management has the right and authority to visit and inspect the *Contractor's* work place or Site establishment.
- k) The *Contractor* supplies and ensures that his employees wear the necessary PPE according the risk assessments performed on the specific tasks to be carried out.
- l) The *Contractor* ensures that everyone entering Duvha Power Station under his supervision is medically, physically and psychologically fit to enter Duvha Power Station.
- m) The medical examination, at the *Contractors* cost, is carried out by a Registered Professional Occupational Health Practitioner and the examination shall include the following tests:
 - n) Eye Test, Blood Pressure,
 - o) Heart Function,
 - p) Hearing Test and
 - q) Lung Function.
- r) A thorough examination is done and previous physical injuries, as well as occupational diseases/complications are covered.
- s) 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 *Employer*, the Medical Station, the Risk Manager and the Safety Risk Management Department.
- t) 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 be sent to the Accelerator 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.
- u) The *Contractor* takes 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.
- v) The *Contractor* ensures that 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 Construction Regulations.
- w) All safety equipment or Machinery used complies with the SANS 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.
- x) The *Contractor* at all times consider himself as "Employer" as defined in the Occupational Health and Safety Act, No 85 of 1993 and do not consider himself as under supervision or

management of the *Employer* with regard to Health and Safety Requirements but only from a Commercial Contractual Condition of Contract. Under no circumstances does the *Contractor* consider himself a sub-ordinate or being given supervision.

- y) The *Contractor* provides and maintains 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 Construction Regulations, if not agreed contractually or arranged by the *Employer*.
- z) The *Contractor* has Safety Systems in place at his premises for the total contract period and these shall include the following:
 - aa) Safety Management Structure and Compliance to these
 - bb) Statutory Appointments
 - cc) Records and documentation of all Risk and Hazard Analyses.
 - dd) Planned Job Observations Records and Documents.
 - ee) Employment history and records of all personnel, part-time or full-time or contract labour.
 - ff) Medical History of all personnel, part-time or full-time or contract labour
 - gg) Training and Competency Records with regard to Safety, Health and Environment.
 - hh) Training and Competency Records with regard to the skills he uses to carry out the *works* or any other works in the *Employers* premises.
 - ii) Compensation Commissioner Records and proof of registration.
 - jj) 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.
 - kk) Personal Protective Equipment and Safety Equipment Inspection, training and competency records and documentation.
 - ll) Employment contracts for all sub-contractor or labour-only contracts.
 - mm) Compliance to a Safety System, such as NOSA or any other system that is similar in nature.
 - nn) Records of all incidents or accidents, and vehicle accidents, incurred during execution of this *works* or any other works in the *Employers* premises.
 - oo) Records of all man-hours, including sub-contractors or labour-only contracts, the *Contractor* spends on the *Employers* premises.
 - pp) Written Safe Work Procedures for all hazardous tasks the *Contractor* executes on the *Employers* premises.
 - qq) A Fall Protection Plan for all elevated work the *Contractor* does on the *Employers* premises.
 - rr) Environmental plan and awareness training.
 - ss) Induction training records of his staff by himself/herself.
 - tt) Minimum wage compliance for the different skills and to which Bargaining Council compliance is made to and proof of membership, if any.
 - uu) Risk Assessment of this type of works
 - vv) Proof of authorisation/accreditation from Department of Labour and or other Statutory Body for this type of works, if applicable
 - ww) Emergency Evacuation and Rescue Plan for the hazardous tasks related to the works.

The *Contractor* shall comply with the health and safety requirements contained in this Works Information.

2.4 Environmental constraints and management

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.

2.5 Quality assurance requirements

The Contractor shall be required to read and fully understand the contents of the Supplier Contract Quality Requirement Specification (QM58). The contractor may be subjected to scheduled assessments and/or audits if the Employer deems it necessary. Fundamentally the contractor shall comply with the Eskom Quality management procedures and processes applicable to this project. The QM58 guide will be made available upon request.

2.6 Programming constraints

The *Contractor* submits a programme within 1 week of the Contract Award.
The program shall be in Microsoft Excel/MSPProjects or MicrosoftWord format

- The programme indicates
- The hour duration of each activity,
- The working calendar (number of work hours per day, days per week),
- The exact quantity of people per day
- All phases and interfaces

2.7 Contractor's management, supervision and key people

The contractor shall provide a site supervisor or project manager to supervise, monitor, control and co-ordinate all activities during the execution of the project.

The contractor needs to have an authorised Responsible Person (RP).

2.8 Invoicing and payment

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 showing the amount due for payment equal to that stated in the *Project Manager's* payment certificate.

The *Contractor* shall address the tax invoice to Eskom Holdings SOC Ltd and include on each invoice the following information:

Name and address of the *Contractor* and the *Project 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;

All invoices should be submitted to our accounts department electronically and copy the Project Manager.

2.9 Contract change management

The contract or the Project Manager notifies each other of any event which may lead to a change in agreed terms as per NEC3.

2.10 Records of Defined Cost, payments & assessments of compensation events to be kept by the Contractor

The contractor may keep records of payments, assessments of compensation events if he deems it necessary

2.11 Training workshops and technology transfer

N/A

3 Engineering and the Contractor's design

N/A

3.1 Employer's design.

N/A

3.2 Parts of the works which the Contractor is to design

N/A

3.3 Procedure for submission and acceptance of *Contractor's* design

N/A

3.4 Other requirements of the *Contractor's* design

N/A

3.5 Use of *Contractor's* design

N/A

3.6 Design of Equipment

N/A

3.7 Equipment required to be included in the *works*

Contractor to provide:

- Transportation of old equipment (piping) from the plant to an identified storage area.
- Crane, Qualified Rigger, fork lift, Low bed, etc. for the lifting of pipes and other equipment.

3.8 As-built drawings, operating manuals and maintenance schedules

N/A

4 Procurement

The *Contractor* shall comply with Basic Condition of Employment Act and Labour Relation Act for the use of labour in executing the works to give effect to the right to fair labour practices referred to in section 23(1) of the Constitution by establishing and making provision for the regulation of basic condition of employment, and thereby to comply with the obligations of the Republic as a member state of the Internal Labour Organisation, and to provide matters connected therewith

4.1 People

4.1.1 Minimum requirements of people employed on the Site

People providing the works will have been declared competent in writing to carry out the works. They will abide by all the rules and regulations as set out by Duvha Power Station. They are prohibited from being or going to any other site other than the one where the work is being executed.

4.1.2 BBBEE and preferencing scheme

Eskom's policy is to maximise purchases from Black or Black Empowering Enterprises (BEE's) whether Black Woman-owned, small or Large Black or Black empowering suppliers. The purpose is to promote entrepreneurship in black communities and give black business access to the mainstream of business opportunity

4.1.3 Supplier Development and Localisation

Eskom Holdings SOC Limited ("Eskom"), as a State Owned Company, is required to drive and implement government's socio-economic initiatives

Eskom's Supplier Development and Localisation (SD&L) Programme, which is an essential component of its overall Transformation Programme, has as its primary objective the achievement of maximum and sustainable local development impact through leveraging Eskom's procurement spend in a manner that allows flexibility within the business in order to accommodate Government local development initiatives and policies

The SD&L programme seeks to maximise the following transformation objectives:

- i) B-BBEE: The focal point of Eskom's B-BBEE Strategy is the sustainable development and empowerment of local black businesses, while continuing to uphold Eskom's core values. During the exemption phase, Eskom's stated policy was to give preference to level 1-4 B-BBEE contributors.
- ii) Local Content: Means the target committed by contractors as a percentage of the contract value that will be spent in South Africa. The total local content amount is calculated by adding rand value amounts as reported by suppliers in their quarterly report submissions.
- iii) Industrialisation: Means any investment made by the supplier that results in building new and/or enhancing local capacity as well as increasing the export, thus enhancing industrialisation. The objective is to maximise Eskom and supplier spend to foster the establishment of new plants, expanding of existing plant and purchasing of machinery/equipment for local development.
- iv) Skills Development: Eskom seeks to influence the development of skills through procurement spend, in order to contribute to the reduction of scarce skills and to build the country's capacity to compete globally.
- v) Supplier Development: Means providing a platform to develop emerging suppliers, through first-tier and second-tier contracting, and opportunities for national and international suppliers using the joint venture mechanisms
- vi) Job Creation: Means the number of jobs created by suppliers as a result of Eskom's contract. This contributes towards the achievement of localisation objectives of alleviating poverty through job creation.
- vii) Corporate Social Investment: In terms of the integrated Socio-Economic Development (SED) policy approved in 2014, Eskom together with its Subsidiaries, Contractors, Suppliers and Service Providers are required to participate in Corporate Social Investments (CSI) initiatives / programmes that are aimed at maximising the direct beneficiation of the Local communities around areas where Eskom operates its plant.

4.2 Plant and Materials

4.2.1 Quality

- a) All work is carried out under the supervision of an experienced supervisor.
- b) The *Contractor* complies with the *Employer's* Quality Requirements as specified in Eskom Generation Standard GGS 0462. The Contractor, when using materials that are required to comply with a standard specification
- c) Shall, if so ordered, furnish the Engineer with certificates showing that the materials do so comply.
- d) Where so specified, materials shall bear the official mark of the appropriate standard.
- e) Samples ordered or specified shall be delivered to the Engineer's office on site.
- f) Unless otherwise specified, all proprietary materials shall be used and placed in strict accordance with the published instructions of the relevant manufacturer.
- g) All quality control documentation is submitted to the *Project Manager* within 7 days of Contract date.

4.2.2 Plant & Materials provided "free issue" by the *Employer*

- a) The Employer will provide power supply, water and land for the storage of equipment and material.
- b) The *Contractor shall* supplies all the necessary equipment and material required to execute the works.

Should the *Contractor* require using of any of the *Employer's* Equipment, including compressed air, electricity, water supply and crane age, it must be specified in the Works Information supplied by the *Contractor*. The *Employer* does not guarantee continuity of supply of any of these items.

4.2.3 Contractor's procurement of Plant and Materials

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

4.2.4 Spares and consumables

N/A

4.3 Tests and inspections before delivery

N/A

4.4 Marking Plant and Materials outside the Working Areas

All plant and materials outside working areas are to be marked "for contractor" until such time that they are tested and installed at the site/plant.

4.5 Contractor's Equipment (including temporary works).

N/A

5 Construction

5.1 Temporary works, Site services & construction constraints

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

- a) The contractor applies for access permits for all works exceeding two (2) weeks via the Project Manager, who will co-ordinate this.
- b) The *Contractor* applies for *Contractor's* Permits for all his employees and/or subcontractors at the Security gate, at least 24 hours prior to entry of the Duvha Power Station Security Area. .
- c) The *Contractor* completes the specific form in the Duvha Power Station Contractors Safety Manual, listing all of the personnel that he intends using on site.
- d) The completed list, identified with the *Contractor's* name, contains the following information:
 - Employee Name
 - Employee ID Number
 - Eskom Safety Co-ordinator signature
 - Eskom Project Manager Signature
 - Validity Date
- e) No permits are issued to personnel who have not attended safety induction.
- f) The *Contractor* photocopies the first page of the ID book of every one of his employees; reduced to the size 65%.
- g) This completed list, together with the photocopies of the ID books is delivered to Protective Services for the preparation of the *Contractor's* Permits.
- h) The *Contractor* allows at least 24 hours for the preparation of the security permits, before he collects the permits from the Protective Services offices.
- i) The *Contractor's* personnel are required to be in possession of a *Contractor's* Permit at all times inside Duvha Power Station.
- j) All *Contractors'* permits are submitted back to Protective Services when the workers leave the site after completion of the *works*. Failure returns the permits will result in a R25, 00 penalty for each non returned permit.
- k) The *Contractor* compiles detailed Tool Lists (obtainable from Protective Services) of all tools and equipment to be taken on site before arriving at the power station.
- l) Authorised copies of these lists are retained to be used again when the tools and equipment is removed from site.
- m) The *Contractor's* visitors and all personnel conform to the security arrangements in force at Duvha Power Station.

- n) Application forms for visitors are filled in by the *Contractor's* Site Manager and approved by the *Project Manager*, and submitted to the *Employer's* Protective Services office one day prior to the visit.
- o) Visitors will not be allowed on site if the necessary forms are not in the possession of security staff.
- p) The Chief Security Officer 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 Security Officer, constitutes a security risk.
- q) No unauthorised vehicles will be allowed on site. Only *Contractor's* vehicles with displayed Contract Vehicle Permits disks will be allowed on site. Contract Vehicle Applications are directed to the *Project Manager* for consideration and approval.
- r) The *Contractor* is restricted to the Site. The *Contractor* is forbidden to enter any other areas, and ensures that his employees abide by these regulations.
- s) Parking inside the power station is strictly forbidden, except for loading purposes.
- t) No recruiting of casual labour may be done on Eskom premises, including the area outside the Power Station Security Gate.
- u) Security personnel may search any premises, property or person within the security area of Duvha Power Station
- v) No Photographic equipment will be allowed within the security area of the Power Station without obtaining permission.
- w) Application forms for such permission is available from the Protective Services offices.
- x) Any person found in possession of such equipment will be prosecuted in terms of the National Key Point Act.
- y) The contractor technicians and artisan must have mechanical qualifications and experience.

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

- a) Pedestrian crossing are make on the road they should be used when crossing the road
- b) Inside the plant walkways are clear makes they should be used when walking inside the plant to keep safe on any object that might fall.
- c) Barricades are provided where there are open trenches and around the sumps and manholes.
- d) The contractor shall occupy only such ground as is necessary to carry out the works.

5.1.3 People restrictions on Site; hours of work, conduct and records

- a) The LAR is for the person in charge of the plant to maintain control over activities taking place on his plant that are not covered by the Plant Safety Regulation and Operating Regulations for High Voltage Systems.
- b) Activities that are allowed to be carried out under the LAR must not require a permit and must satisfy the following criteria:
- c) They must not involve danger to the person carrying out the activity;
- d) No plant isolations must be required;
- e) The activity must be performed by a skilled person and there must be no risk of a production loss;
- f) The duration of the activity must be less than 24 hours
- g) The *Supervisor* accompanies the *Contractor* during the first instances of working under a LAR on a specific plant area.
- h) 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.
- i) 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 is also signed.
- j) 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.
- k) For more information please refer to Plant Safety Regulation.

5.1.4 Health and safety facilities on Site

- (a) The *Contractor* provides a First Aid service to his employees and sub-*Contractor*. 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. The *Employer* shall be entitled, however, to recover the costs incurred, in the use of the above *Employer's* facilities, from the *Contractor*.
- (c) 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.

The *Contractor* or his staff shall not move the injured party from the incident position and site unless the person/s life is in danger or the person is moved by a qualified and trained Emergency Care Worker.

5.1.5 Environmental controls, fauna & flora, dealing with objects of historical interest

- a) No fauna or flora will be collected or removed from any farm by any visitor without written permission of the landowner, in which case cognizance will be taken of appropriate provincial legislation pertaining to fauna and flora.
- b) Under such cases Eskom Holding's ethical policies and guidelines will be strictly applied.

5.1.6 Cooperating with and obtaining acceptance of Others

- a) The *Contractor* shall co-operate with others in obtaining and providing information which they need in connecting with the works.
- b) The *Contractor* shall share the working area with others in executing the works.

The contractor cooperates with others in obtaining and providing information which they need in connection with the works.

5.1.7 Publicity and progress photographs

- a) Should publicity and or progress photographs be required an application shall be made via the Project Manager.

5.1.8 *Contractor's* Equipment

- a) The *Contractor's* attention is drawn to the applicable regulation framed under the Machinery and Occupational Safety Act, 1983 (Act No. 6 OF 1983)
- b) When working in built-in areas , the contractor shall provide and use suit able and effective silencing devices for pneumatic tools and other plant would otherwise cause a noise level exceeding 85 Db(A) during excavation and other works.
- c) Alternatively the *Contractor* shall by means barriers, effectively isolate the source of any such noise in order to comply with the said regulation.

5.1.9 Equipment provided by the *Employer*

- a) Should the *Contractor* require using of any of the *Employer's* Equipment, including compressed air, electricity, water supply and crane age, it must be specified in the Works Information supplied by the *Contractor*. The *Employer* does not guarantee continuity of supply of any of these items.
- b) The *Employer* shall be entitled to withdraw use of the said Equipment, should proper maintenance and cleanliness not be ensured. In that event, the *Contractor* shall be obliged to provide the necessary Equipment at his own cost.
- c) The *Contractor* is responsible for the repair, replacement or correction as necessary of all pieces of tools and equipment supplied by the *Employer* which are damaged and / or lost whilst in the *Contractor's* custody and control.

5.1.10 Site services and facilities

a) Potable Water Supply

- Potable water is available at the existing points.

b) Electrical Power Supply

- Power is available at the existing points.

c) Toilet Facilities

- The *Employer* provides the *Contractor* access to existing toilet facilities.

d) Catering Facilities

- The *Contractor* are not allowed to use the *Employer's* dining facilities, unless a specific agreement has been made between the *Contractor* and Eskom Catering and Accommodation Services (ECAS).
- The *Contractor* may buy take away meals from the fast foods outlet on Site.

e) Medical Facilities

- The *Contractor* provides a First Aid service to his employees and subcontractors. In 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.
- Outside the *Employer's* office hours, the *Employer's* First Aid Services are only available for serious injuries and life threatening situations.
- The *Employer* recovers the costs incurred, in the use of the above *Employer's* facilities, from the *Contractor*

5.1.11 Facilities provided by the *Contractor*

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

The *Contractor shall* supplies all the necessary equipment and material required to execute the *works*, including portable ablution facilities and proper eating facilities for their employees.

5.1.12 Existing premises, inspection of adjoining properties and checking work of Others

The Contractor will cooperate with others who might be working in adjacent premises.

5.1.13 Survey control and setting out of the *works*

Regular plant walks on safe work execution and production will be carried out by the Project Manager randomly.

5.1.14 Control of noise, dust, water and waste

Earplugs should be worn if excessive noise will be generated by machinery. Dust masks will be worn to prevent dust inhalation.

5.1.15 Giving notice of work to be covered up

Project Manager to be notified about any issues that poses a risk to the plant or employees before any specific task in relation to that risk is undertaken.

5.1.16 Hook ups to existing works

- a) The Contractor must inform the project manager and the engineer if a need arise of hooking up on existing work.
- b) The project engineer will then verify the safe use of any existing structure as a support.

5.2 Completion, testing, commissioning and correction of Defects

5.2.1 Work to be done by the Completion Date

On or before the Completion Date the *Contractor* shall have done everything required to provide the Works. The *Project Manager* cannot certify Completion until all the work is done and also free of Defects which would have, in his opinion, prevented the *Employer* from using the *works* and others from doing their work.

	Item of work	To be completed by
	As built drawings of	Within days after Completion
	Performance testing of the <i>works</i> in use as specified in paragraph of this Works Information.	See performance testing requirements.

5.2.2 Use of the *works* before Completion has been certified

The Employer will take over the completed ash lines after commissioning without any defects.

5.2.3 Materials facilities and samples for tests and inspections

5.2.4 Commissioning

- The Contractor shall conduct commissioning under the supervision of the Project Manager and Engineer.
- The Contractor shall carry out sufficient checks to satisfy himself that the material use and the workmanship comply consistently with the specified requirement.

5.2.5 Start-up procedures required to put the *works* into operation

5.2.6 Take over procedures.

Takeover will be on after the Completion Date. The *Contractor* shall have done everything required to provide the works and the Engineer has done all the necessary inspections and the approval of the works done.

5.2.7 Access given by the *Employer* for correction of Defects

The Project Manager issues the defects certificate at the later defect date and the end of the last defect correction period. The Employer's right in respect of the defect which the supervisor has not found and notified are not affected by the issue of the defect certificate.

The Contractor contacts the Project Manager to gain access to the site to correct defects.

5.2.8 Performance tests after Completion

Duvha Quality department together with the Project Manager, Engineer and Contractor will sign off the works as having met all the requirements as set out in the works information after completion.

5.2.9 Training and technology transfer

N/A

5.2.10 Operational maintenance after Completion

The contractor accepts full responsibility once he executes the works that the product will last for the minimum operational duration as stated in the data packs after project completion and commissioning.

6 Plant and Materials standards and workmanship

6.1 Dealt with in the scope of work Investigation, survey and Site clearance

Thorough site inspection will take place with Contractor, Project Manager and System Engineer in attendance prior to commencement of work on site.

6.2 Electrical & mechanical engineering works

All engineering works, electrical and mechanical will be carried out according to Plant Safety Regulations (Permit to Works System) and any other station specific rules and regulations.

7 List of drawings

7.1 Drawings issued by the *Employer*

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

Note: Some drawings may contain both Works Information and Site Information.

Drawing number	Revision	Title

7 Appendices

7.1 Appendix A Environmental Management Policy

7.2 Appendix B ENV0005- Procedure for waste management



Microsoft Word
Document

7.3 Appendix C Supplier Contract Quality Requirement



QM-58 Supplier
Contract Quality Req

7.4 Appendix D Access Control Visitors Appointment



Access Control
Visitors Appointment

7.5 Appendix E AKZ Plant labelling standard



Microsoft Word
97-2003 Document

7.6 Appendix F SHE Requirements



32-726 (0) SHE
Requirements for the

C3.2 **CONTRACTOR'S WORKS INFORMATION**

SCOPE OF WORK

This document provides the scope for the **Replacement of ash and sluice lines**.

NOTE:

- Contractor to provide with an authorized Responsible Person for the mechanical isolation required.
- Contractor to provide an authorized Rigger.

1. WORK TO BE PERFORMED BY THE CONTRACTOR FOR THE WORK

The scope of work is about dismantling, removing of the existing pipe work and the supply, delivery, and installation of the ash pipes at units 2,3,4,5 to 6.

The works includes the following:

- A total of 3564m length of pipe will be replaced. This is a total for all five lines, with partial replacement on unit 4 ash line.
- The total number of bends to manufacture and supply is 55 Flanged on both sides (Flange table 16 BS4504, 16 holes and M24 bolts).
- Connection of bends to the straight section line must be flange to flange. All bends to be manufactured as built due to the unavailability of drawings. The contractor to provide drawings (in a CAD format or software that is compatible with CAD) for all bends supplied. It is the responsibility of the contractor to confirm measurements before fabrication (fabricate as per sample or as built). For each bend two 12m length pipe flanged on one side will be required, this means a total length of 1320m pipe is required.
- Supply long barrel Johnson couplings as per specification provided (56 Johnson couplings). On the straight section Johnson couplings needs to be 36m apart. The gap between two pipes when connecting Johnson coupling must be between 20mm -40mm.
- Supply clamps (1150 clamps) as shown in the sketch provided.
- Supply of 25 Ton crane for removal and installation of pipes.
- Old pipe line will have to be removed and stacked neatly at the site 500m away from Duvha Power station main entrance. This site will be provided and shown to the contractor by Eskom.
- Refurbished plinths (230) or pipe supports with brackets and hold down bolts. For refurbished plinths and where brackets/hold down bolts are missing, chemical anchors to be utilized for the hold down bolts. Grouting on the gap between the pipe and the plinth must be supplied by contractor.
- Paint the entire line till the distribution point once it is completed.

1.1.WELDING REQUIREMENTS

- All welding activities shall be in-line with the *Standard for Welding Requirements on Eskom Plant*, doc. no.: 240-106628253 attached under Appendix C.
- Welding procedure qualification for welds shall be in accordance with the appropriate welding standard incorporated into the relevant design and construction code. Combination or mixing of different codes shall not be permitted.
- A WPS supported by a valid WPQR/PQR, approved by a registered IWE or IWT, shall be submitted to Eskom for review.
- Welders and welding operators shall be qualified in accordance with the requirements of the latest applicable construction code or engineering specification relevant to the plant.
- NDT on welds shall be performed according to the requirements of the relevant design and construction codes, applicable (additional) engineering or product specifications and Eskom standard 240-83539994.
- Company to perform welding shall have accreditation to ISO 3834 Part 3 as minimum (for Eskom Level 2 plant).
- Records pertaining to the repairs or modifications shall be compiled as per the requirements of QM 58.

1.1.1 Quality Control

All work is carried out under the supervision of an experienced supervisor. The Contractor complies with the Employer's Quality Requirements as specified in Eskom Generation Standard GGS 0462. All quality control documentation is to be submitted to the Project Manager within 7 days before the work can commence to be approved by system engineer.

- The contractor to provide a Quality Control Plan to Eskom Duvha for approval prior to commencement with the works. The contractor shall also assure that the following quality control documentation are available during the work and are submitted to ESKOM on completion.
- QCP plan with signed off witness and hold points by Eskom's Engineer.

PART 4: SITE INFORMATION

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

PART 4: SITE INFORMATION

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

Safety Risk Management

- 1) The Contractor complies with the requirements of the Duvha Power Station Safety, Health & Environmental Specifications SAS 0012 rev 8.
- 2) **The documents are completed by the Contractor and submitted to the Employer before taking possession of the works.**
- 3) These documents are valid for the duration of the works.
- 4) The Contractor and all his personnel attend a Health and Safety Induction Course prior to starting with the works.
- 5) The induction course is presented by the Safety Risk Department at Duvha Power Station.
- 6) The Contractor makes arrangements with Project manager who will arrange with Safety Risk Management, for a slot and the date scheduled for the course.
- 7) The Contractor submits all the documents as indicated in the Safety, Health & Environmental Specifications relevant to the work to Safety Risk Management before the induction course.
- 8) The Contractor completes all appointments required and ensures that the appointee and appointees fully understand their responsibilities and are competent and trained to execute their duties.
- 9) The appointees/appointee ensures that all duties are carried out and records are kept by the Contractor for review/audit by the Employer or Inspector of Machinery.
- 10) Duvha Safety Risk Management has the right and authority to visit and inspect the Contractor's work place or Site establishment.
- 11) The Contractor supplies and ensures that his employees wear the necessary PPE according the risk assessments performed on the specific tasks to be carried out.
- 12) The Contractor ensures that everyone entering Duvha Power Station under his supervision are medically, physically and psychologically fit to enter Duvha Power Station.
- 13) The medical examination, at the Contractors cost, is carried out by a Registered Professional Occupational Health Practitioner and the examination shall include the following tests:
 - a. Eye Test, Blood Pressure,
 - b. Heart Function,
 - c. Hearing Test and
 - d. Lung Function.
- 14) A thorough examination is done and previous physical injuries, as well as occupational diseases/complications are covered.
- 15) 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 Employer, the Medical Station, the Risk Manager and the Safety Risk Management Department.
- 16) 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 be sent 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.

- 17) The Contractor takes 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.
- 18) The Contractor ensures that 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 Construction Regulations.
- 19) All safety equipment or Machinery used complies with the SANS 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.
- 20) The Contractor at all times consider himself as "Employer" as defined in the Occupational Health and Safety Act, No 85 of 1993 and do not consider himself as under supervision or management of the Employer with regard to Health and Safety Requirements but only from a Commercial Contractual Condition of Contract. Under no circumstances does the Contractor consider himself a sub-ordinate or being given supervision.
- 21) The Contractor provides and maintains 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 Construction Regulations, if not agreed contractually or arranged by the Employer.
- 22) The Contractor has Safety Systems in place at his premises for the total contract period and these shall include the following:
 - a. Safety Management Structure and Compliance to these.
 - b. Statutory Appointments.
 - c. Records and documentation of all Risk and Hazard Analyses.
 - d. Planned Job Observations Records and Documents.
 - e. Employment history and records of all personnel, part-time or full-time or contract labour.
 - f. Medical History of all personnel, part-time or full-time or contract labour
 - g. Training and Competency Records with regard to Safety, Health and Environment.
 - h. Training and Competency Records with regard to the skills he uses to carry out the works or any other works in the Employers premises.
 - i. Compensation Commissioner records and proof of registration.
 - j. 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.
 - k. Personal Protective Equipment and Safety Equipment Inspection, training and competency records and documentation.
 - l. Employment contracts for all sub-contractor or labour-only contracts.
 - m. Compliance to a Safety System, such as NOSA or any other system that is similar in nature.
 - n. Records of all incidents or accidents, and vehicle accidents, incurred during execution of this works or any other works in the Employers premises.
 - o. Records of all man-hours, including sub-contractors or labour-only contracts, the Contractor spends on the Employers premises.

- p. Written Safe Work Procedures for all hazardous tasks the Contractor executes on the Employers premises.
- q. A Fall Protection Plan for all elevated work the Contractor does on the Employers premises.
- r. Environmental Plan and awareness training.
- s. Induction training records of his staff by himself/herself.
- t. Minimum wage compliance for the different skills and to which Bargaining Council compliance is made to and proof of membership, if any.
- u. Risk Assessment of this type of works
- v. Proof of authorisation/accreditation from Department of Labour and or other Statutory Body for this type of works, if applicable
- w. Emergency Evacuation and Rescue Plan for the hazardous tasks related to the works.

Specific Risks

23) The following risks are identified by the Employer and Contractor specifically addresses these risks to ensure that the works is carried out safely:

- a. Working at heights
- b. High temperatures
- c. Low temperatures
- d. High pressures
- e. High voltage
- f. Windy conditions
- g. Dusty conditions
- h. High noise area
- i. Work is being carried out overhead
- j. Work is being carried out below
- k. Possibility of drowning exists
- l. Work in confined spaces
- m. Possibility of noxious gasses
- n. Possibility of steam release
- o. Possibility of fires or explosions
- p. Chemicals
- q. Biological Hazards

24) Gaskets used are fit for the type of liquid, solid or gas being transported and do not contain any asbestos fibres.

25) The ash dust is harmful if inhaled and the Contractor provides proper dust masks to all his personnel working in dusty environments.

Plant Safety Regulations

- 26) The Employer, on request from the Contractor, isolates required plant from all sources of danger as described in the Plant Safety Regulations.
- 27) The Project Manager, on request, makes available a copy of the latest revision of the Plant Safety Regulations available to the Contractor.
- 29) The Contractor conforms to all rules and regulations applicable to plant safety and completes the Workman's Register prior to working on the plant.
- 30) The Contractor declares any grinding and welding to be carried out on the workers register.
- 31) At every permit change the Contractor withdraws himself/herself/his staff for that period of permit suspension/revocation and thereafter only proceeds with the works after signing onto the new permit.
- 32) The Contractor ensures 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.
- 33) The Contractor is prohibited from entering Radiation Areas.
- 34) 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.
- 35) The Contractor ensures that all personnel are competent to carry out the works.
- 36) Proof of competency for technical and safety aspects must be available as and when required on site.

Limited Access Register (LAR)

- 37) 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.
- 38) Activities that are allowed to be carried out under the LAR must not require a permit and must satisfy the following criteria:
- 39) They must not involve danger to the person carrying out the activity;
- 40) No plant isolations must be required;
- 41) The activity must be performed by a skilled person and there must be no risk of a production loss;
- 42) The duration of the activity must be less than 24 hours
- 43) The Supervisor accompanies the Contractor during the first instances of working under a LAR on a specific plant area.
- 44) 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.
- 45) 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 is also signed.
- 46) 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.
- 47) For more information please refer to Plant Safety Regulation C11.

Fire precautions

- 48) Any tampering with the Employer's fire equipment is strictly forbidden.
- 49) All exit doors, fire escape routes, walkways, stairways, stair landings and access to electrical distribution boards must be kept free of obstruction, and not be used for work or storage at any time.
Fire fighting equipment remains accessible at all times.
- 50) In case of a fire, report the location and extent of the fire to the Electrical Operating Desk at extension 2222.
- 51) Take the necessary action to safe guard the area to prevent injury and spreading of the fire.
- 52) Reporting of accidents
- 53) 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.
- 54) The Contractor is expected to fully co-operate to achieve this objective.
- 55) The Project Manager is informed immediately of any Category B or C incidents. Category A incidents and any damage to property or equipment must be reported to the Supervisor within 24 hours.
- 56) Radiation incidents must be reported immediately.
- 57) In reporting Category C and D incidents, the Contractor submits the following documents, or any additional as required by the Employers investigation team.
 - a. Proof of Contract of Employment.
 - b. Proof of WCL notification to Department of Labour.
 - c. Proof of Medical Doctors Note/Certificate detailing nature of injury and period of rest.
 - d. Death Certificate, if Category C fatality.
 - e. Risk and Hazard Analysis, if not in place prior to injury.
 - f. Written Safe Working Procedure, if not in place prior to injury.

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.

Occupational Health and Safety Act 1993 - SECTION 37

- 58) The Contractor and Employer agrees to the arrangements and procedures between them to ensure compliance by the main Contractor (as the mandatory) with the provisions of Section 37.2 of the Occupational Health and Safety Act, No 85 of 1993.
- 59) The Contractor complies with:
 - a. the Occupational Health and Safety Act, 1993, and all Regulations made hereunder;
 - b. all Eskom Safety and Operating Procedures.
- 60) The Contractor acknowledges that he is fully aware of the requirements of all the above and undertakes to employ only people who have been duly authorised in terms thereof and who received sufficient safety training to ensure that they can comply therewith.
- 61) 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.

- 62) The Contractor appoints a person who liaises with the Eskom Safety Officer responsible for the premises relevant to the Contract.
- 63) The person so appointed on request:
- a. supplies the Eskom Safety Officer with copies of minutes of all Health and Safety Committee meetings, whenever he is required to do so;
 - b. supplies the Eskom Safety Officer with copies of all appointments in respect of employees employed on this Contract, in terms of the Act and Regulations and notifies the Eskom Safety Officer of any changes thereto.
- 64) Eskom may, at any stage during the currency of this agreement, be entitled to:
- a. Do safety audits at the Contractor's premises, its work-places and its employees;
 - b. Refuse any employee, Subcontractor or agent of the Contractor access to its premises if such person has been found to commit any unsafe act or any unsafe working practice or is found to be not authorised or qualified in terms of the Act;
 - c. issue the Contractor with a work stop order or a compliance order should Eskom become aware of any unsafe working procedures or conditions or any non-compliance with the Act, Regulations and Procedures referred to in the Occupational Health and Safety Act - 1993 and all Regulations made there under as well as all Eskom Safety and Operating Procedures.
- 65) No extension of time will be allowed, as a result of any action taken by Eskom in terms of the foregoing Clause and the Contractor has no claim against Eskom as a result thereof.

Hazardous Substances

- 66) It is required in terms of the General Administrative Regulation (Regulation 7) that any Manufacture, Importer, Seller or Supplier of hazardous chemical substance supplies the receiver, free of charge, with sufficient information for the user.

Radiation protection

- 67) The Contractor conforms to Duvha procedure HMS0002 when performing any industrial radiography. Thermal insulation containing asbestos.
- 68) The Contractor does not disturb any thermal insulating material on the plant until it has been positively identified as not containing asbestos. Approval is obtained from the Supervisor before any thermal insulation is disturbed.
- 69) All stripping of asbestos material is undertaken strictly in accordance with the Employer's Standard, SAP 0022, available from Safety Risk Management.
- 70) The Project Manager advises the Contractor whether areas that are to be stripped of lagging have been identified as containing asbestos.
- 71) The Contractor is obliged to ascertain from the Project Manager in advance whether areas required to be stripped, are non-asbestos. Any contractor, other than the contractor appointed to remove asbestos strips no lagging material containing asbestos fibres.
- 72) The Contractor appointed to remove asbestos, does not begin removal without first obtaining the necessary permission from the Deputy Director of Labour and the Project Manager.

Barricading and screens

- 73) The Contractor provides and installs barricades and warning devices to ensure that equipment and persons are not exposed to danger or to prevent access to dangerous areas.
- 74) Additional to barricading, the Contractor installs screening, such as black plastic, on the roadside to keep dust away from the road. This is in the interest of transport safety.
- 75) All welding, flame cutting and grinding work is prohibited inside and directly outside the fabric filter plant area. All such work is done on ground level.
- 76) All gratings are covered with adequate protective screening when welding or flame cutting in the vicinity.

Housekeeping

- 77) The Contractors equipment does not impair the operation of the plant or access to the plant.

Vehicle Safety

- 78) No driver may disregard road signs, drive recklessly, exceed the speed limit, exceed the alcohol limit, or do anything contrary to the National Road Traffic Act while on Eskom business.
- 79) No driver may drive a vehicle while holding a cellular or mobile telephone or radio in one or both hands or with any other part of the body. A cellular or mobile telephone or radio equipment may only be used while driving if such telephone or radio device is fitted with a hands-free device, otherwise it must be switched off.
- 80) All drivers including contractor and contractor employees, when performing work for Eskom, must ensure that they and their passengers remain seated and wear seatbelts at all times.
- 81) No employee may be transported in the back of an open vehicle.
- 82) No driver should park a car in such a way that it will be a hazard to other road users.
- 83) No driver may use a vehicle without being authorised.
- 84) No employee is allowed to drive any Eskom-owned or scheme vehicle if not in possession of a valid national driver's licence as well as an Eskom driver permit.

1. Quality assurance requirements

- 1) All work will be carried out under the CONSTANT Supervision of an Experienced Competent Supervisor.