



## NEC3 Engineering & Construction Contract

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

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

**for Refurbishment of Coal Plant Chutes, Rotary Feeders**  
**and Tripper Cars at Matla Power Station**

<b>Contents:</b>	<b>No of pages</b>
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**CONTRACT No. [Insert at award stage]**

## Part C1: Agreements & Contract Data

<b>Contents:</b>	<b>No of pages</b>
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[to be inserted from Returnable Documents at award stage]	
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[to be inserted from Returnable Documents at award stage]	
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## C1.1 Form of Offer & Acceptance

### Offer

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

### Refurbishment of Coal Plant Chutes, Rotary Feeders and Tripper Cars at Matla 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 B, C or D	The offered total of the Prices exclusive of VAT is	R [•]
Option E or F	The first forecast of the total Defined Cost plus the Fee exclusive of VAT is	R [•]
	Sub total	R [•]
	Value Added Tax @ 15% is	R [•]
	The offered total of the amount due inclusive of VAT is <sup>1</sup>	R [•]
	(in words) [•]	

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

Signature(s)

Name(s)

Capacity

**For the  
tenderer:**

(Insert name and address of organisation)

Name &  
signature of  
witness

Date

Tenderer's CIDB registration number (if applicable)

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

Refurbishment of coal Plant chutes, rotary feeders, and tripper cars at Matla Power Station for a period of five (05) years.

## 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**

(Insert name and address of organisation)

Name &  
signature of  
witness

Date

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

Refurbishment of coal Plant chutes, rotary feeders, and tripper cars at Matla Power Station for a period of five (05) years.

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

Note:

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

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

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

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

### For the tenderer:

### For the Employer

Signature

Name

Capacity

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

Name & signature of witness

Date

## 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.
1. 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	<b>General</b>	
	The <i>conditions of contract</i> are the core clauses and the clauses for main Option	
		<b>A: Priced contract with activity schedule</b>
	dispute resolution Option	<b>W1: Dispute resolution procedure</b>
	and secondary Options	
		<b>X1: Price adjustment for inflation</b>
		<b>X2 Changes in the law</b>
		<b>X5: Sectional Completion</b>
		<b>X7: Delay damages</b>
		<b>X16: Retention</b>
		<b>X18: Limitation of liability</b>
		<b>Z: Additional conditions of contract</b>
	of the NEC3 Engineering and Construction Contract, April 2013 (ECC3)	
10.1	The <i>Employer</i> is (Name):	<b>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</b>
	Address	<b>Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg</b>
10.1	The <i>Project Manager</i> is: (Name)	<b>[•]</b>
	Address	<b>[•]</b>

Refurbishment of coal Plant chutes, rotary feeders, and tripper cars at Matla Power Station for a period of five (05) years.

	Tel	[•]	
	Fax	[•]	
	e-mail	[•]	
10.1	The <i>Supervisor</i> is: (Name)	[•]	
	Address	Matla Power Station	
	Tel No.	0132959029	
	Fax No.	0865600879	
	e-mail	msomise@eskom.co.za	
11.2(13)	The <i>works</i> are	Refurbishment of Coal Plant Chutes, Rotary Feeders and Tripper Cars at Matla Power Station	
11.2(14)	The following matters will be included in the Risk Register	NA	
11.2(15)	The <i>boundaries of the site</i> are	Matla Power Station, Area where the contractor has established site and Coal Chutes, Rotary Feeders and Trippers Cars,	
11.2(16)	The Site Information is in	Part 4: Site Information	
11.2(19)	The Works Information is in	Part 3: Scope of Work and all documents and drawings to which it makes reference.	
12.2	The <i>law of the contract</i> is the law of	the Republic of South Africa	
13.1	The <i>language of this contract</i> is	English	
13.3	The <i>period for reply</i> is	3 days	
2	The <b>Contractor's main responsibilities</b>	Data required by this section of the core clauses is provided by the <i>Contractor</i> in Part 2 and terms in italics used in this section are identified elsewhere in this Contract Data.	
3	Time		
11.2(3)	The <i>completion date</i> for the whole of the <i>works</i> is	TBA	
11.2(9)	The <i>key dates</i> and the <i>conditions</i> to be met are:	Condition to be met	key date
		1	Start of construction work activities
		2	Site measurements, procurement and fabrication of material and equipment
			As per the accepted program
			As per the accepted program

Refurbishment of coal Plant chutes, rotary feeders, and tripper cars at Matla Power Station for a period of five (05) years.

		3	Supply, installation, commissioning and hand over of all material and equipment	As per the accepted program
30.1	The <i>access dates</i> are:	Part of the Site	Date	
		1	Matla Power Station	After contract award and as per the outage schedule
31.1	The <i>Contractor</i> is to submit a first programme for acceptance within	Two weeks of the Contract Date.		
31.2	The <i>starting date</i> is	TBA		
32.2	The <i>Contractor</i> submits revised programmes at intervals no longer than	2 days.		
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 <i>works</i> .		
43.2	The <i>defect correction period</i> is	1 weeks		
	except that the <i>defect correction period</i> for	Production loss and SHE requirements is 24Hrs		
	and the <i>defect correction period</i> for	Low risk (as determined by the Employer) is 1 weeks		
5	Payment			
50.1	The <i>assessment interval</i> is	between the 25 <sup>th</sup> day 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	60 days after submission of invoice.		
51.4	The <i>interest rate</i> is	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  (ii) the LIBOR rate applicable at the time for amounts due in other currencies. LIBOR is the 6 month London Interbank Offered Rate quoted under the caption “Money Rates” in The Wall Street Journal for the applicable currency or if no rate is quoted for the currency in question then the rate for United States Dollars, and if		



no such rate appears in The Wall Street Journal then the rate as quoted by the Reuters Monitor Money Rates Service (or such service as may replace the Reuters Monitor Money Rates Service) on the due date for the payment in question, adjusted *mutatis mutandis* every 6 months thereafter and as certified, in the event of any dispute, by any manager employed in the foreign exchange department of The Standard Bank of South Africa Limited, whose appointment it shall not be necessary to prove.

<b>6</b>	<b>Compensation events</b>	
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><b>Kriel</b></p> <p><b>the cumulative rainfall (mm)</b></p> <p><b>the number of days with rainfall more than 10 mm</b></p> <p><b>the number of days with minimum air temperature less than 0 degrees Celsius</b></p> <p><b>the number of days with snow lying at 09:00 hours South African Time</b></p> <p><b>and these measurements:</b></p> <p><b>SA Weather Bureau</b></p> <p><b>Kriel</b></p> <p><b>the South African Weather Bureau and included in Annexure A to this Contract Data provided by the <i>Employer</i></b></p>
60.1(13)	Assumed values for the ten-year return <i>weather data</i> for each <i>weather measurement</i> for each calendar month are:	<p><b>As stated in Annexure A to this Contract Data provided by the <i>Employer</i>.</b></p> <p>Note: If this arrangement is used, delete the rows above for 60.1(13) and delete this note.</p>
<b>7</b>	<b>Title</b>	<b>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.</b>
<b>8</b>	<b>Risks and insurance</b>	
80.1	These are additional <i>Employer's</i> risks	<b>NA</b>
<b>9</b>	<b>Termination</b>	<b>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.</b>
<b>10</b>	<b>Data for main Option clause</b>	

<b>A</b>	<b>Priced contract with activity schedule</b>	There is no reference to Contract Data in this Option and terms in italics are identified elsewhere in this Contract Data.		
<b>11</b>	<b>Data for Option W1</b>			
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 <a href="http://www.ice-sa.org.za">www.ice-sa.org.za</a> ). If the Parties do not agree on an Adjudicator the Adjudicator will be appointed by the Arbitration Foundation of Southern Africa (AFSA).		
	Address	[•]		
	Tel No.	[•]		
	Fax No.	[•]		
	e-mail	[•]		
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 <a href="http://www.ice-sa.org.za">www.ice-sa.org.za</a> ) 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.		
<b>12</b>	<b>Data for secondary Option clauses</b>			
<b>X1</b>	<b>Price adjustment for inflation</b>			
X1.1(a)	The <i>base date</i> for indices is	A month prior tender publicised		
X1.1(c)	The proportions used to calculate the Price Adjustment Factor are:	proportion	linked to index for	Index prepared by
		0. [•]	[•]	[•]
		0. [•]	[•]	[•]
		0. [•]	[•]	[•]
		0. [•]	[•]	[•]

		0. [•]	[•]	[•]
		[•]	non-adjustable	
	Total	1.00		
<b>X2</b>	<b>Changes in the law</b>	There is no reference to Contract Data in this Option and terms in italics are identified elsewhere in this Contract Data.		
<b>X5</b>	<b>Sectional Completion</b>			
X5.1	The <i>completion date</i> for each <i>section</i> of the <i>works</i> is:	<b>Section</b>	<b>Description</b>	<b>Completion date</b>
		1	Unit 1	As per the accepted program
		2	Unit 2	As per the accepted program
		3	Unit 3	As per the accepted program
		4	Unit 4	As per the accepted program
		5	Unit 5	As per the accepted program
		6	Unit 6	As per the accepted program
<b>X7</b>	<b>Delay damages (but not if Option X5 is also used)</b>			
X7.1	Delay damages for Completion of the whole of the <i>works</i> are	R[•] per day up to a limit of R[•]		
<b>X16</b>	<b>Retention (not used with Option F)</b>			
X16.1	The <i>retention free amount</i> is	Zero		
	The <i>retention percentage</i> is	10 % of every assessed amount		
<b>X17</b>	<b>Low performance damages</b>			
<b>X18</b>	<b>Limitation of liability</b>			
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	the amount of the deductibles relevant to the event		

	limited to:	
X18.3	The <i>Contractor's</i> liability for Defects due to his design which are not listed on the Defects Certificate is limited to	<p>The greater of</p> <ul style="list-style-type: none"> <li>• the total of the Prices at the Contract Date and</li> <li>• the amounts excluded and unrecoverable from the <i>Employer's</i> assets policy for correcting the Defect (other than the resulting physical damage which is not excluded) plus the applicable deductible as at contract date.</li> </ul>
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"> <li>• Defects due to his design which arise before the Defects Certificate is issued,</li> <li>• Defects due to manufacture and fabrication outside the Site,</li> <li>• loss of or damage to property (other than the works, Plant and Materials),</li> <li>• death of or injury to a person and</li> <li>• infringement of an intellectual property right.</li> </ul>
X18.5	The end of liability date is	<p>(i) 7 years 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 Z15 always apply.
Z1	Cession delegation and assignment	

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

## **Z2 Joint ventures**

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

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

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

## **Z4 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 *Contractor* (if registered in South Africa in terms of the companies Act) is required to comply with the requirements of the Value Added Tax Act, no 89 of 1991 (as amended) and to include the *Employer's* VAT number 4740101508 on each invoice he submits for payment.

**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 *Contractor’s* entitlement under the indemnity in 83.1 is provided for in 60.1(14) and the *Employer’s* liability under the indemnity is limited.

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

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

**Z11 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 Subcontractor 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.

- Z12.1 A Committing Party may not take any Prohibited Action during the course of the procurement of this contract or in execution thereof.
- Z12.2 The *Employer* may terminate the *Contractor's* obligation to Provide the Services if a Committing Party has taken such Prohibited Action and the *Contractor* did not take timely and appropriate action to prevent or remedy the situation, without limiting any other rights or remedies the *Employer* has. It is not required that the Committing Party had to have been found guilty, in court or in any other similar process, of such Prohibited Action before the *Employer* can terminate the *Contractor's* obligation to Provide the Services for this reason.
- Z12.3 If the *Employer* terminates the *Contractor's* obligation to Provide the Services for this reason, the amounts due on termination are those intended in core clauses 92.1 and 92.2.
- Z12.4 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.

### Z13 Insurance

#### Z 13.1 Replace core clause 84 with the following:

#### Insurance cover 84

- 84.1** When requested by a Party, the other Party provides certificates from his insurer or broker stating that the insurances required by this contract are in force.
- 84.2** The *Contractor* provides the insurances stated in the Insurance Table A.
- 84.3** The insurances provide cover for events which are at the *Contractor's* risk from the *starting date* until the earlier of Completion and the date of the termination certificate.

**INSURANCE TABLE A**

Insurance against	Minimum amount of cover or minimum limit of indemnity
Loss of or damage to the works, Plant and Materials	The replacement cost where not covered by the <i>Employer's</i> insurance  The <i>Employer's</i> policy deductible, as 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 works, 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	<u>Loss of or damage to property</u> <u><i>Employer's</i> property</u> The replacement cost where not covered by the <i>Employer's</i> insurance  The <i>Employer's</i> policy deductible, as



Refurbishment of coal Plant chutes, rotary feeders, and tripper cars at Matla Power Station for a period of five (05) years.

this contract	Contract Date, where covered by the <i>Employer's</i> insurance  <u>Other property</u> The replacement cost  <b><u>Bodily injury to or death of a person</u></b> 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

### Z 13.2

#### Replace core clause 87 with the following:

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

**INSURANCE TABLE B**

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

### Z14 Nuclear Liability

Z14.1 The *Employer* is the operator of the Koeberg Nuclear Power Station (KNPS), a nuclear installation, as designated by the National Nuclear Regulator of the Republic of South Africa, and is the holder of a nuclear licence in respect of the KNPS.

Z14.2 The *Employer* is solely responsible for and indemnifies the *Contractor* or any other person against any and all liabilities which the *Contractor* or any person may incur arising out of or resulting from nuclear damage, as defined in Act 47 of 1999, save to the extent that any liabilities are incurred due to the unlawful intent of the *Contractor* or any other person or the presence of the *Contractor* or that person or any property of the *Contractor* or such person at or in the KNPS or on the KNPS site, without the permission of the *Employer* or of a person acting on behalf of the *Employer*.

Z14.3 Subject to clause Z14.4 below, the *Employer* waives all rights of recourse, arising from the

aforesaid, save to the extent that any claims arise or liability is incurred due or attributable to the unlawful intent of the *Contractor* or any other person, or the presence of the *Contractor* or that person or any property of the *Contractor* or such person at or in the KNPS or on the KNPS site, without the permission of the *Employer* or of a person acting on behalf of the *Employer*.

- Z14.4 The *Employer* does not waive its rights provided for in section 30 (7) of Act 47 of 1999, or any replacement section dealing with the same subject matter.
- Z14.5 The protection afforded by the provisions hereof shall be in effect until the KNPS is decommissioned.

## **Z15 Asbestos**

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

<b>AAIA</b>	means approved asbestos inspection authority.
<b>ACM</b>	means asbestos containing materials.
<b>AL</b>	means action level, i.e. a level of 50% of the OEL, i.e. 0.1 regulated asbestos fibres per ml of air measured over a 4 hour period. The value at which proactive actions is required in order to control asbestos exposure to prevent exceeding the OEL.
<b>Ambient Air</b>	means breathable air in area of work with specific reference to breathing zone, which is defined to be a virtual area within a radius of approximately 30cm from the nose inlet.
<b>Compliance Monitoring</b>	means compliance sampling used to assess whether or not the personal exposure of workers to regulated asbestos fibres is in compliance with the Standard's requirements for safe processing, handling, storing, disposal and phase-out of asbestos and asbestos containing material, equipment and articles.
<b>OEL</b>	means occupational exposure limit.
<b>Parallel Measurements</b>	means measurements performed in parallel, yet separately, to existing measurements to verify validity of results.
<b>Safe Levels</b>	means airborne asbestos exposure levels conforming to the Standard's requirements for safe processing, handling, storing, disposal and phase-out of asbestos and asbestos containing material, equipment and articles.
<b>Standard</b>	means the <i>Employer's</i> Asbestos Standard 32-303: Requirements for Safe Processing, Handling, Storing, Disposal and Phase-out of Asbestos and Asbestos Containing Material, Equipment and Articles.
<b>SANAS</b>	means the South African National Accreditation System.
<b>TWA</b>	means the average exposure, within a given workplace, to airborne asbestos fibres, normalised to the baseline of a 4 hour continuous period, also applicable to short term exposures, i.e. 10-minute TWA.

- Z15.1 The *Employer* ensures that the Ambient Air in the area where the *Contractor* will Provide the Services conforms to the acceptable prescribed South African standard for asbestos, as per the regulations published in GNR 155 of 10 February 2002, under the Occupational Health and Safety Act, 1993 (Act 85 of 1993) ("Asbestos Regulations"). The OEL for asbestos is 0.2 regulated asbestos fibres per millilitre of air as a 4-hour TWA, averaged over any continuous period of four hours, and the short term exposure limit of 0.6 regulated asbestos fibres per

millilitre of air as a 10-minute TWA, averaged over any 10 minutes, measured in accordance with HSG248 and monitored according to HSG173 and OESSM.

- Z15.2 Upon written request by the *Contractor*, the *Employer* certifies that these conditions prevail. All measurements and reporting are effected by an independent, competent, and certified occupational hygiene inspection body, i.e. a SANAS accredited and Department of Employment and Labour approved AAIA. The *Contractor* may perform Parallel Measurements and related control measures at the *Contractor's* expense. For the purposes of compliance the results generated from Parallel Measurements are evaluated only against South African statutory limits as detailed in clause Z15.1. Control measures conform to the requirements stipulated in the AAIA-approved asbestos work plan.
- Z15.3 The *Employer* manages asbestos and ACM according to the Standard.
- Z15.4 In the event that any asbestos is identified while Providing the Services, a risk assessment is conducted and if so required, with reference to possible exposure to an airborne concentration of above the AL for asbestos, immediate control measures are implemented and relevant air monitoring conducted in order to declare the area safe.
- Z15.5 The *Contractor's* personnel are entitled to stop working and leave the contaminated area forthwith until such time that the area of concern is declared safe by either Compliance Monitoring or an AAIA approved control measure intervention, for example, per the emergency asbestos work plan, if applicable.
- Z15.6 The *Contractor* continues to Provide the Services, without additional control measures presented, on presentation of Safe Levels. The contractually agreed dates to Provide the Services, including the Completion Date, are adjusted accordingly. The contractually agreed dates are extended by the notification periods required by regulations 3 and 21 of the Asbestos Regulations, 2001.
- Z15.7 Any removal and disposal of asbestos, asbestos containing materials and waste, is done by a registered asbestos contractor, instructed by the *Employer* at the *Employer's* expense, and conducted in line with South African legislation.

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

### **General**

The Matla Power Station is situated approximately half way between Bethal and Ogies on the R545, being just over 30 km from each town and 13 km north-west of Kriel town.

### **Climate**

Matla Power Station is situated in a summer rainfall area with an average annual precipitation of about 750-mm falling almost entirely during the months of October to April. The average rainfall per month generally exceeds 40 mm during this period, although drought periods do occur which can last for 20 days or longer. Drought periods occur most frequently during the months of October/November and March/April. January is statistically the highest rainfall month with an average monthly rainfall of about 130-mm. June has the lowest rainfall with an average monthly rainfall of about 7 mm.

Approximately 85% of the annual rainfall occurs in the summer months and heavy falls of 125 to 150 mm occasionally occur in a single day. The annual average number of thunderstorms is about 75. These storms are often violent with severe lightning and strong (but short-lived) gusty winds and are sometimes accompanied by hail. This region has among the highest hail frequencies in South Africa; about 4 to 7 occurrences (depending mainly on altitude) may be expected annually.

January is normally the hottest month with an average daily maximum temperature of 27°C with a mean daily temperature in winter being about 16°C. Winter average daily temperatures vary from 18, 5°C maximum to -1°C minimum. The extreme temperatures recorded range from 34, 7°C to minus 12, 4°C for the period 1920 - 1984. (Source: Weather Bureau, Pretoria)

Winds are generally light to moderate except during thunderstorms. Generally the prevailing wind directions are from the North West during the day and from the east at night. During daytime, the prevailing winds are from the north-western direction. During night-time, the prevailing winds are from the north-eastern direction. The highest recorded average wind speed is 17, 6 km/hour. The average wind velocity over the year is 14, 5 km/hour.

(Source: MSN weather & Weather 24, average records 2008 - 2009.)

### **Weather Data**

The assumed 1 in 10 year rainfall figures are:

<b>Month</b>	<b>Cumulative rain (mm)</b>	<b>No of days with rainfall &gt; 10mm</b>
January	200	6
February	150	6
March	120	5
April	110	4
May	40	3
June	20	2
July	30	2
August	30	2
September	60	3
October	140	6
November	160	7
December	170	6

### **Relative Humidity**

Records for Bethal (2008 - 2009)

The average relative humidity on an annual base are as follows:

08:00 = 80%

14:00 = 52%

20:00 = 73%

## **Prevailing Winds**

Records for Bethal (2008 - 2009)

Winds are mostly north-westerly except for February and March when they are easterly to south-easterly. The highest wind speeds are recorded from the south-east: on average 14km/h.

## **Other Climatic Factors**

Records for Bethal (2008 - 2009)

Thunder occurs mostly from November to January with average of 35.7 days annually.

- a) Hail occurs mostly in December with average of 2.8 days annually.
- b) Fog occurs mostly in the winter months with an average of 19 days annually.
- c) Snow rarely occurs
- d) Cloud coverage is highest in the summer months with annual average as follows:
  - 08:00 = 2.8/8
  - 14:00 = 3.8/8
  - 20:00 = 3.1/8

Evaporation for the area is in range of 75mm to 190mm per month. The highest evaporation occurs in December, and the lowest in June.

## **Topography**

The surface topography of the Matla area is typical of the Mpumalanga Highveld consisting in the main of a gently undulating plateau. The flood plains of the local streams are at an average elevation of  $\pm 1540$  meters above mean sea level and drainage generally is a northerly direction.

## **Air Quality**

The existing and potential sources of air pollution in Matla area are the following:

- Matla Power Station stack emissions
- Matla Power Station dry dust (fly ash) handling plant
- Dust blow from the Eskom coal stock yard
- Dust blow from the roads in the area
- Seasonal dust blow caused by ploughing of farmlands, and dust blow off denuded fields
- Dust blow from dried out exposed surfaces of the wet ash dam.

However, Eskom utilises the majority of the top surface of the ash dam as an evaporation pan for polluted water, which means that the exposed surface is constantly wet. The sides of the ash dam have largely been rehabilitated, with the result that dust blow from the ash dam.

## 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)<sup>2</sup> 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:	

<sup>2</sup> Available from Engineering Contract Strategies Tel 011 803 3008, Fax 011 803 3009 or see [www.ecs.co.za](http://www.ecs.co.za)

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	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 <i>works</i> is		
11.2(14)	The following matters will be included in the Risk Register		
11.2(19)	The Works Information for the <i>Contractor's</i> design is in:		
31.1	The programme identified in the Contract Data is		
<b>A</b>	<b>Priced contract with activity schedule</b>		
11.2(20)	The <i>activity schedule</i> is in		
11.2(30)	The tendered total of the Prices is	(in figures) (in words), excluding VAT	
<b>B</b>	<b>Priced contract with bill of quantities</b>		
11.2(21)	The <i>bill of quantities</i> is in		
11.2(31)	The tendered total of the Prices is	(in figures) (in words), excluding VAT	
<b>C</b>	<b>Target contract with activity schedule</b>		
11.2(20)	The <i>activity schedule</i> is in		
11.2(30)	The tendered total of the Prices is	(in figures) (in words), excluding VAT	
<b>D</b>	<b>Target contract with bill of quantities</b>		
11.2(21)	The <i>bill of quantities</i> is in		
11.2(31)	The tendered total of the Prices is	(in figures) (in words), excluding VAT	
<b>F</b>	<b>Management contract</b>		
20.2	Work which the <i>Contractor's</i> will do himself is	Activity	price (lump sum or rate)
	<b>Data for Schedules of Cost Components</b>	Note "SCC" means Schedule of Cost Components starting on page 60, and "SSCC" means Shorter Schedule of Cost Components starting on page 63 of ECC3 (April 2013).	

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A	Priced contract with activity schedule	Data for the Shorter Schedule of Cost Components		
B	Priced contract with bill of quantities	Data for the Shorter Schedule of Cost Components		
41 in SSCC	The percentage for people overheads is:	%		
21 in SSCC	The published list of Equipment is the last edition of the list published by  The percentage for adjustment for Equipment in the published list is	Minus %		
22 in SSCC	The rates of other Equipment are:	Equipment	Size or capacity	Rate
61 in SSCC	The hourly rates for Defined Cost of design outside the Working Areas are  <b>Note: Hourly rates are estimated 'cost to company of the employee' and not selling rates.</b>  <b>Please insert another schedule if foreign resources may also be used</b>	Category of employee		Hourly rate
62 in SSCC	The percentage for design overheads is			
63 in SSCC	The categories of design employees whose travelling expenses to and from the Working Areas are included in Defined Cost are:			
	If Option C, D or E is used	Data for Schedule of Cost Components		
23 in SCC	The listed items of Equipment purchased for work on this contract, with an on cost charge, are:	Equipment	Time related charge	Per (time period)



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24 in SCC	The rates of special Equipment are:	Equipment	Size or capacity	Rate
44 in SCC	The percentage for Working Areas overheads is:	: %		
51 in SCC	The hourly rates for Defined Cost of manufacture or fabrication outside the Working Areas are  Note: Hourly rates are estimated 'cost to company of the employee' and not selling rates  Please insert another schedule if foreign resources may also be used	Category of employee	Hourly rate	
52 in SCC	The percentage for manufacture and fabrication overheads is			
	If Option C, D, or E is used	Data for both schedules of cost components		
61 in SCC & SSCC	The hourly rates for Defined Cost of design outside the Working Areas are  Note: Hourly rates are estimated 'cost to company of the employee' and not selling rates.  Please insert another schedule if foreign resources may also be used	Category of employee	Hourly rate	
62 in SCC & SSCC	The percentage for design overheads is			
63 in SCC & SSCC	The categories of design employees whose travelling expenses to and from the Working Areas are included as a cost of design of the <i>works</i> and Equipment done outside the Working Areas are:			
	If Option C, D or E is used	Data for the Shorter Schedule of Cost Components		
41 in SSCC	The percentage for people overheads is:	%		

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21 in SSCC	The published list of Equipment is the last edition of the list published by  The percentage for adjustment for Equipment in the published list is	%		
22 in SSCC	The rates of other Equipment are:	<b>Equipment</b>	<b>Size or capacity</b>	<b>Rate</b>

## PART 2: PRICING DATA

### ECC3 Option A

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

## 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 *activity schedule* unless later changed in accordance with this contract.

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

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

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

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

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

### Function of the Activity Schedule

Clause 54.1 in Option A states: "Information in the Activity Schedule is not Works Information or Site Information". This confirms that 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

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- 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.

An activity schedule could have the following format:

Item No.	Programme Reference	Activity description	Price

## C2.2 the *activity schedule*

### PRICE LIST

#### **Part 1 - Introduction**

The purpose of this report is to provide a budget price estimate for the refurbishment of coal plant chutes, tripper cars and rotary feeders works at Matla Power Station for ERA purposes.

#### **Part 2 – Price**

2.1. Below is the Quantity Surveyor's price breakdown for the works which is based on market rates.

Item	Description	Unit	Quantity	Rate	Amount
1	<b><u>SECTION 1 - PRELIMINARIES AND GENERAL</u></b>				
1.1	Site Establishment	Sum	1	R	R
1.2	Site De-Establishment	Sum	1	R	R
1.3	Complying with all SHEQ Specifications and Requirements (PPE, Safety file, Medicals, Police Clearance, Safety Officer etc.)	Sum	1	R	R
1.4	Management of the works	Sum	1	R	R
1.5	Transportation of workers	Sum	1	R	R
1.6	Supply, erection, modification and dismantling of	Sum	1	R	R

	scaffolding (Internal Cost)				
1.7	Plant and Equipment	Sum	1	R	R
	<b>Sub-Total (Section 1 - Preliminaries and General)</b>				<b>R</b>
<b>2</b>	<b><u>SECTION 2 - COAL STAITHE 1 TRIPPER CARS x 16 NO (SUPPLY AND INSTALL)</u></b>				
2.1	Remove or untighten the bolts and nuts holding the tripper assembly	Sum	1	R	R
2.2	Remove the ceramic liners on each segment	Sum	1	R	R
2.3	Sandblast all the steel segments	Sum	1	R	R
2.4	Cut out all the pitting sections and weld a new section	Sum	1	R	R
2.5	Replace all segments where pitting or patches cover more than 50% of the surface area	Sum	1	R	R
2.6	Replace liners (25mm ceramic)	Sum	1	R	R
2.7	Adhesive/ epoxy to with stand high impact coal with a volumetric flow of 600tons/hr	Sum	1	R	R
2.8	Assemble tripper cars and tighten all bolts and nuts (Newly supplied bolts)	Sum	1	R	R
2.9	Replace the drivers to open the clam shell doors	Sum	1	R	R
	<b>Sub-Total (Section 2 - Coal Staith 1 tripper cars)</b>				<b>R</b>
<b>3</b>	<b><u>SECTION 3 - COAL STAITHE 2 ROTARY FEEDERS X 6 NO (SUPPLY AND INSTALL)</u></b>				
3.1	Remove or untighten the bolts and nuts holding the rotary feeders assembly	Sum	1	R	R
3.2	Remove the ceramic liners on each segment	Sum	1	R	R
3.3	Sandblast all the steel segments	Sum	1	R	R
3.4	Cut out all the pitting sections and weld a new section	Sum	1	R	R
3.5	Replace all segments where pitting or patches cover more than 50% of the surface area	Sum	1	R	R
3.6	Replace liners (25mm ceramic)	Sum	1	R	R
3.7	Adhesive/ epoxy to with stand high impact coal with	Sum	1	R	R

	a volumetric flow of 600tons/hr				
3.8	Assemble tripper cars and tighten all bolts and nuts (Newly supplied bolts)	Sum	1	R	R
3.9	Replace the drivers to open the clam shell doors	Sum	1	R	R
	<b>Sub-Total (Section 3 - Coal Staith 2 Rotary Feeders)</b>				<b>R</b>
<b>4</b>	<b><u>SECTION 4 - COAL BUNKER TRIPPER CARS X 12 NO (SUPPLY AND INSTALL)</u></b>				
4.1	Remove or untighten the bolts and nuts holding the rotary feeders assembly	Sum	1	R	R
4.2	Remove the ceramic liners on each segment	Sum	1	R	R
4.3	Sandblast all the steel segments	Sum	1	R	R
4.4	Cut out all the pitting sections and weld a new section	Sum	1	R	R
4.5	Replace all segments where pitting or patches cover more than 50% of the surface area	Sum	1	R	R
4.6	Replace liners (25mm ceramic)	Sum	1	R	R
4.7	Adhesive/ epoxy to with stand high impact coal with a volumetric flow of 600tons/hr	Sum	1	R	R
4.8	Assemble tripper cars and tighten all bolts and nuts (Newly supplied bolts)	Sum	1	R	R
4.9	Replace the drivers to open the clam shell doors	Sum	1	R	R
	<b>Sub-Total (Section 4 - Coal Bunker Tripper Cars)</b>				<b>R</b>
<b>5</b>	<b><u>SECTION 5 - 7/8 TRANSFER CHUTES (SUPPLY AND INSTALL)</u></b>				
5.1	Remove or untighten the bolts and nuts holding the rotary feeders assembly	Sum	1	R	R
5.2	Remove the ceramic liners on each segment	Sum	1	R	R
5.3	Sandblast all the steel segments	Sum	1	R	R
5.4	Cut out all the pitting sections and weld a new section	Sum	1	R	R
5.5	Replace all segments where pitting or patches cover more than 50% of the surface area	Sum	1	R	R

5.6	Replace liners (25mm ceramic)	Sum	1	R	R
5.7	Adhesive/ epoxy to with stand high impact coal with a volumetric flow of 600tons/hr	Sum	1	R	R
5.8	Assemble tripper cars and tighten all bolts and nuts (Newly supplied bolts)	Sum	1	R	R
5.9	Replace the drivers to open the clam shell doors	Sum	1	R	R
	<b>Sub-Total (Section 5 - 7/8 Transfer Chutes)</b>				<b>R</b>
<b>6</b>	<b><u>SECTION 6 - 8/9 CROSS-OVER CHUTES X 6 NO (SUPPLY AND INSTALL)</u></b>				
6.1	Remove or untighten the bolts and nuts holding the rotary feeders assembly	Sum	1	R	R
6.2	Remove the ceramic liners on each segment	Sum	1	R	R
6.3	Sandblast all the steel segments	Sum	1	R	R
6.4	Cut out all the pitting sections and weld a new section	Sum	1	R	R
6.5	Replace all segments where pitting or patches cover more than 50% of the surface area	Sum	1	R	R
6.6	Replace liners (25mm ceramic)	Sum	1	R	R
6.7	Adhesive/ epoxy to with stand high impact coal with a volumetric flow of 600tons/hr	Sum	1	R	R
6.8	Assemble tripper cars and tighten all bolts and nuts (Newly supplied bolts)	Sum	1	R	R
6.9	Replace the drivers to open the clam shell doors	Sum	1	R	R
	<b>Sub-Total (Section 6 - 8/9 Cross-Over Chutes)</b>				<b>R</b>
<b>7</b>	<b><u>SECTION 7 - 9/10 TRANSFER CHUTES X 6 NO (SUPPLY AND INSTALL)</u></b>				
7.1	Remove or untighten the bolts and nuts holding the rotary feeders assembly	Sum	1	R	R
7.2	Remove the ceramic liners on each segment	Sum	1	R	R
7.3	Sandblast all the steel segments	Sum	1	R	R
7.4	Cut out all the pitting sections and weld a new	Sum	1	R	R



	section				
7.5	Replace all segmant where pitting or patches cover more than 50% of the surface area	Sum	1	R	R
7.6	Replace liners (25mm ceramic)	Sum	1	R	R
7.7	Adhesive/ epoxy to with stand high impact coal with a volumetric flow of 600tons/hr	Sum	1	R	R
7.8	Assemble tripper cars and tighten all bolts and nuts (Newly supplied bolts)	Sum	1	R	R
7.9	Replace the drivers to open the clam shell doors	Sum	1	R	R
	<b>Sub-Total (Section 7 - 9/10 Transfer Chutes)</b>				<b>R</b>
<b>8</b>	<b><u>SECTION 8 - 9/11 TRANSFER CHUTES and 16 BELT CROSS-OVER X 10 NO (SUPPLY AND INSTALL)</u></b>				
8.1	Remove or untighten the bolts and nuts holding the rotary feeders assembly	Sum	1	R	R
8.2	Remove the ceramic liners on each segmant	Sum	1	R	R
8.3	Sandblast all the steel segmant	Sum	1	R	R
8.4	Cut out all the pitting sections and weld a new section	Sum	1	R	R
8.5	Replace all segmant where pitting or patches cover more than 50% of the surface area	Sum	1	R	R
8.6	Replace liners (25mm ceramic)	Sum	1	R	R
8.7	Adhesive/ epoxy to with stand high impact coal with a volumetric flow of 600tons/hr	Sum	1	R	R
8.8	Assemble tripper cars and tighten all bolts and nuts (Newly supplied bolts)	Sum	1	R	R
8.9	Replace the drivers to open the clam shell doors	Sum	1	R	R
	<b>Sub-Total (Section 8 - 9/11 Transfer Chutes and 16 Belt Cross-Over)</b>				<b>R</b>
<b>9</b>	<b><u>SECTION 9 - NDT TEST</u></b>				
9.1	Perform NDT Test on all welds (Manetic Particle Inspection). Tests must conform with SANS Standard and reports to be submitted to project	Sum	1	R	R

	engineer as per the scope requirements)				
	<b>Sub-Total (Section 9 - NDT Tests)</b>				<b>R</b>
<b>10</b>	<b><u>SECTION 10 - ELECTRICAL WORKS (SUPPLY AND INSTALL)</u></b>				
10.1	U30/75 C-6 Insulated Conductor Rail	m	212	R	R
10.2	U30/75 C-6 PE Insulated Conductor Rail	m	53	R	R
10.3	UDV 30/75 C K4 Expansion Section	No	16	R	R
10.4	UDV 30/75 C K4 PE Expansion Section	No	4	R	R
10.5	USK 30 K4 Locating Clamp	No	50	R	R
10.6	UK 30-L End Cap	No	10	R	R
10.7	UK 30/75 C Rigid joint	No	260	R	R
10.8	UEG 30/75 C Feed Terminal	No	10	R	R
10.9	UAM Insulated Hanger	m	1085	R	R
10.10	KDST 200/30 DBL Current Collector	No	20	R	R
10.11	Conductive grease-100ml tube	No	2	R	R
10.12	UM 24 Collector bracket	No	4	R	R
	<b>Sub-Total (Section10 - Electrical Works)</b>				<b>R</b>
<b>TOTAL EXCLUDING VAT</b>					<b>R</b>

## C3.1: EMPLOYER'S WORKS INFORMATION

### Description of the works

#### GENERAL

- Data books, reviews, reports, and diagrams/drawings shall be submitted to Engineering after the completion of the work. Engineering to forward the data books to Quality Department (Document Control)
- All QCP's to be submitted to Engineering and Quality for approval prior to outage/project or maintenance work commencement.

	SCOPE OF WORK DESCRIPTION / ACTIVITY	PROCEDURE, SPECIFICATION, ENG. REQUIREMENTS / DOCUMENTATION	HOLD POINTS, WITNESS, REPORTS	RESPONSIBLE PARTY
1.1	Occupational Health and Safety	<ul style="list-style-type: none"> <li>Health and safety file should be approved by Safety risk management department prior to any work commences on site</li> <li>All work is to be done in accordance with OHS Act 85 of 1993, Matla plant procedures and Plant Safety Regulations. (240-150642762).</li> <li>Matla power station SHEQ induction must be done before access to site can be granted</li> <li>The contractor should ensure that all employees have acquired the required competency for the task they are performing.</li> <li>The contractor to ensure compliance to updated legal requirements and other requirements</li> </ul>	Eskom to witness.	Contractor
1.2	Environmental Management.	<ul style="list-style-type: none"> <li>All activities listed in the National Environmental Act 107 of 1998, EIA Regulations as amended, must have environmental <b>AUTHORISATION</b> before commencement of work.</li> <li>The contractor shall comply with all applicable legal and other requirements.</li> <li>The polluter pays principle will be applied.</li> <li>The contractor manager shall ensure compliance with Eskom Matla Environmental procedures to ensure the prevention of pollution (refer: OMOP 4090 and 4402).</li> <li>The last payment will be processed based on the status of the last housekeeping check sheet (Annexure C: OMOP 4402) of designated area.</li> <li>EMS file based on ISO14001 will be required.</li> </ul>	Eskom to witness.	Contractor
1.3	Quality Management	<ul style="list-style-type: none"> <li>The contractor/executioner of work will be responsible for drawing up all QCP documentation and this must be approved by engineering and authorised by the Quality Department before commencing with the work.</li> <li>Contractors/executioner to adhere to QM 58 and OMOP4497 requirements</li> <li>Number of NCR issued can affect your next tendering process.</li> </ul>	Hold point	Contractor

		<ul style="list-style-type: none"> <li>The QCP shall be signed progressively by the Engineer/Supervisor, Eskom QC Inspector, Contractor QC Inspector and/or AIA.</li> <li>No procuring of outage items without the approval of scopes by quality</li> <li>All outage scopes creep and scopes addition should be approved by quality</li> <li>No contractor should be in the possession of scopes for execution without the scopes approved by quality</li> <li>The contractor is subjected to quality auditing at any point in time during execution of scope</li> </ul>		
1.4	Inputs from other departments			
1.5	Commissioning reference			

	SCOPE OF WORK DESCRIPTION / ACTIVITY	PROCEDURE, SPECIFICATION, ENG. REQUIREMENTS / DOCUMENTATION	HOLD POINTS, WITNESS, REPORTS	RESPONSIBLE PARTY
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	SCOPE OF WORK DESCRIPTION / ACTIVITY	PROCEDURE, SPECIFICATION, ENG. REQUIREMENTS / DOCUMENTATION	HOLD POINTS, WITNESS, REPORTS	RESPONSIBLE PARTY
	The Scope of work specifies the requirements for refurbishment of coal plant chutes, tripper cars and rotary feeders. The components are leaking due to wear and tear of the ceramic liner, which exposed the component shell to the abrasive nature of coal.			
2.1	<b>Scaffolding:</b> <ul style="list-style-type: none"> <li>Before any commencement of the work install/erect scaffolding to have platform to work on.</li> </ul>	SANS 10085-1:2004	Witness/verify	RSC
2.2	<b>Coal staithe 1 tripper cars:</b> <ul style="list-style-type: none"> <li>Remove or untighten the bolts and nuts holding the tripper assembly.</li> <li>Remove the ceramic liners on each segment.</li> <li>Sandblast all the steel segments.</li> <li>Cut out all the pitting sections and weld a new section.</li> <li>Replace all segments where pitting or patches cover more than 50% of the surface Area.</li> </ul>	<b>Specification:</b> <ul style="list-style-type: none"> <li>Wall thickness= 6mm</li> <li>Quantity= 16</li> <li>Sandblasting: Grade 3.</li> </ul> <b>Standards:</b> <ul style="list-style-type: none"> <li>standard for Non -destructive Testing (NDTs) on Eskom plants: 240-83539994.</li> <li>Standard for Welding Requirements on Eskom Plant</li> </ul>	Hold	Engineer

	<ul style="list-style-type: none"> <li>• Replace the liners, ceramic 25 mm thick.</li> <li>• Adhesive/epoxy to withstand high impact by coal with a volumetric flow of 600tons/hour.</li> <li>• Supply Bolts, nuts washers and spring washers.</li> <li>• Assemble the tripper cars and tighten all the bolts and nuts.</li> <li>• Replace the drives to Open the clamshell doors.</li> </ul> <p>NB: All welding activities to be adhered to as per Eskom welding Rule: 240-106628253.</p> <p>NB: All the NDTs to adhere to <i>standard for Non -destructive Testing (NDTs) on Eskom plants</i>: 240-83539994.</p> <p>NB: Product material certificate to be submitted to the system engineer prior commencing with the work for approval.</p>			
2.3	<p><b>Coal staith 2 rotary feeders:</b></p> <ul style="list-style-type: none"> <li>• Remove or untighten the bolts and nuts holding the rotary feeder assembly.</li> <li>• Remove the ceramic liners on each segment.</li> <li>• Sandblast all the steel segments.</li> <li>• Cut out all the pitting sections and weld a new section.</li> <li>• Replace all segments where pitting or patches cover more than 50% of the surface Area.</li> <li>• Replace the liners, ceramic 25 mm thick.</li> <li>• Adhesive/epoxy to withstand high impact by coal with a volumetric flow of 600tons/hour.</li> <li>• Supply bolts, nuts, washers and spring washers for rotary feeders assembly.</li> <li>• Assemble the rotary feeder and tighten all the bolts and nuts.</li> </ul>	<p><b>Specification:</b></p> <ul style="list-style-type: none"> <li>• Wall thickness = 6 mm</li> <li>• Quantity: 2</li> </ul>	Witness	Contractor
2.3	<p><b>Coal bunker tripper cars:</b></p> <ul style="list-style-type: none"> <li>• Remove or untighten the bolts and nuts holding the tripper car assembly.</li> <li>• Remove the ceramic liners on each segment.</li> <li>• Sandblast all the steel segments.</li> <li>• Cut out all the pitting sections and weld a new section.</li> </ul>	<p><b>Specification:</b></p> <ul style="list-style-type: none"> <li>• Wall thickness = 6 mm</li> <li>• Quantity: 12</li> </ul>		

	<ul style="list-style-type: none"> <li>• Replace all segments where pitting or patched cover more than 50% of the surface Area.</li> <li>• Replace the liners, ceramic 25 mm thick.</li> <li>• Adhesive/epoxy to withstand high impact by coal with a volumetric flow of 600tons/hour.</li> <li>• Supply bolts, nuts washers and spring washers for tripper cars assembly.</li> <li>• Assemble the tripper cars and tighten all the bolts and nuts.</li> <li>• Repair both the front and sides inspection doors.</li> </ul>			
2.4	<b>7/8 transfer chutes:</b> <ul style="list-style-type: none"> <li>• Remove or untighten the bolts and nuts holding the tripper assembly.</li> <li>• Rig out the chute assembly.</li> <li>• Remove the ceramic liners on each segment.</li> <li>• Sandblast all the steel segments.</li> <li>• Cut out all the pitting sections and weld a new section.</li> <li>• Replace all segments where pitting or patched cover more than 50% of the surface Area.</li> <li>• Replace the liners, ceramic 25 mm thick.</li> <li>• Adhesive/epoxy to withstand high impact by coal with a volumetric flow of 600tons/hour.</li> <li>• Supply bolts, nuts, washers, and spring washers for chute assembly.</li> <li>• Assemble the tripper car and tighten all the bolts and nuts.</li> <li>• Repair/ replace the inspection doors.</li> </ul>	<b>Specification:</b> <ul style="list-style-type: none"> <li>• Wall thickness = 6 mm</li> <li>• Mass = 435 kg</li> <li>• Quantity = 6</li> </ul>	Witness	Contractor
2.5	<b>8/9 Cross-over chutes:</b> <ul style="list-style-type: none"> <li>• Remove or untighten the bolts and nuts holding the chute assembly.</li> <li>• Rig out the flopper gate.</li> <li>• Rig out the chute assembly.</li> <li>• Measure the requirements for isolation plate and fabricate, thickness = 12mm.</li> <li>• Install the isolation plate after removing the flopper gate and the entire assembly.</li> <li>• Remove the ceramic liners on each segment.</li> </ul>	<b>Specification:</b> <ul style="list-style-type: none"> <li>• Wall thickness = 6 mm</li> <li>• Mass = 720 kg</li> <li>• Quantity = 6</li> </ul>	Witness	Contractor

	<ul style="list-style-type: none"> <li>• Sandblast all the steel segments.</li> <li>• Cut out all the pitting sections and weld a new section.</li> <li>• Replace all segments where pitting or patches cover more than 50% of the surface Area.</li> <li>• Replace the liners, ceramic 25 mm thick.</li> <li>• Adhesive/epoxy to withstand high impact by coal with a volumetric flow of 600tons/hour.</li> <li>• Supply bolt, nuts, and washers for chute assembly.</li> <li>• Assemble the chute and tighten all the bolts and nuts.</li> <li>• Repair/ replace the inspection doors.</li> </ul>			
2.6	<b>9/10 transfer chutes:</b> <ul style="list-style-type: none"> <li>• Remove or untighten the bolts and nuts holding the tripper assembly.</li> <li>• Rig out the chute assembly.</li> <li>• Remove the ceramic liners on each segment.</li> <li>• Sandblast all the steel segments.</li> <li>• Cut out all the pitting sections and weld a new section.</li> <li>• Replace all segments where pitting or patched cover more than 50% of the surface Area.</li> <li>• Replace the liners, ceramic 25 mm thick.</li> <li>• Adhesive/epoxy to withstand high impact by coal with a volumetric flow of 600tons/hour.</li> <li>• Supply bolts, nuts and washers for chute assembly.</li> <li>• Assemble the tripper car and tighten all the bolts and nuts.</li> <li>• Repair/ replace the inspection doors.</li> </ul>	<b>Specification:</b> <ul style="list-style-type: none"> <li>• Length =+- 4200 mm</li> <li>• Wall thickness = 6 mm</li> <li>• Mass = 720 kg</li> <li>• Quantity = 6</li> </ul>	Witness	Contractor
	<b>9/11 transfer chutes and 16 belts crossover chutes.</b> <ul style="list-style-type: none"> <li>• Remove or untighten the bolts and nuts holding the tripper assembly.</li> <li>• Rig out the chute assembly.</li> <li>• Remove the ceramic liners on each segment.</li> <li>• Sandblast all the steel segments.</li> <li>• Cut out all the pitting sections and weld a new section.</li> </ul>	<b>Specification:</b> <ul style="list-style-type: none"> <li>• Length =+- 4200 mm</li> <li>• Wall thickness = 6 mm</li> <li>• Mass = +-720 kg</li> <li>• Quantity = 6 (9/11) transfer chutes</li> <li>• Quantity = 2 (16 belts) cross over chutes.</li> <li>• Quantity = 2 (16 belts) flopper gates.</li> </ul>	Witness	Contractor

	<ul style="list-style-type: none"> <li>• Replace all segments where pitting or patched cover more than 50% of the surface Area.</li> <li>• Replace the liners, ceramic 25 mm thick.</li> <li>• Adhesive/epoxy to withstand high impact by coal with a volumetric flow of 600tons/hour.</li> <li>• Supply bolts, nuts, and washers for chute assembly.</li> <li>• Assemble the tripper car/cross over chutes and tighten all the bolts and nuts.</li> <li>• Repair/ replace the inspection doors.</li> </ul>			
2.3	<b>Perform NDT:</b> Perform a Non-Destructive Test (NDT) on the welds.	<b>NDT specifications:</b> <ul style="list-style-type: none"> <li>• Standard-SANS 3059:2021</li> <li>• Type –Magnetic particle inspection (MPI)</li> </ul> Submit tests report to system engineer.	Report	Contractor
2.4	<b>Electrical Work:</b> <b>Rotary Feeder Control Circuit</b> <ul style="list-style-type: none"> <li>• The contractor to assess, test the existing electrical control circuit panel for 7F and 7E rotary feeder.</li> <li>• The contractor to design, manufacture, install, test and commission a new control circuit panel.</li> <li>• The circuit must be able to control the rotary feeder to Start, Stop, Traverse backwards and Traverse forward.</li> <li>• The contractor must provide drawings for the new circuit, the operation and design philosophy must not be changed.</li> <li>• The control circuit panel must be IP65 rated.</li> <li>• The control circuit must show the state at which the rotary feeder is currently operated with (Traverse forward, Traverse backwards, Stop, plough trip, plough run, stop plough, start plough, on and off).</li> <li>• All the controls must have buttons that the controller will press and there must be an LED that will give indication of the selection.</li> </ul> <b>7E and 7F Vahle Rail System:</b> The contractor shall Supply, deliver, install and commission the Vahle Rail System: <ul style="list-style-type: none"> <li>• U30/75 C-6 Insulated conductor rail</li> <li>• U30/75 C-6 PE Insulated Conductor</li> </ul>	240-109607332 Abbreviation Standard for Labelling of Plant at Power Stations 240-86973501 - Drawing Standard 240-56176097 Electrical Cable Schedule Template 240-77301384 Electrical LV Load Schedule Template	Witness	Contractor



	<ul style="list-style-type: none"> <li>UDV 30/75 C k4 Expansion section.</li> <li>UDV 30/75 C k4 PE Expansion section.</li> <li>USK 30 k4 Locating clamp.</li> <li>UK 30-L End caps.</li> <li>UK 30/75 C Rigid joints.</li> <li>UEG 30/75 C Feed terminal.</li> <li>UAM Insulated hangers.</li> <li>KDST 200/300 DBL Current collectors.</li> <li>UM 24 Collector brackets</li> <li>Conductive grease -100ml tube.</li> </ul> <p><b>NB: The contractor shall install as per the OEM guidelines and/or work instructions.</b></p>			
2.6	<p><b>Housekeeping:</b> Clear all unused, rubble and unwanted material offsite and dump it at Eskom dumping side.</p>		Witness /Verify	Contractor
2.7	<ul style="list-style-type: none"> <li>The quantities given shall be used for tendering purposes only. The successful contractor will be required to visit the site and verify all dimensions and locations, and notify the Employer or project manager of any changes to the estimated quantities before any work is done, prior to or on return of tender documents.</li> </ul> <p>The contractor takes full responsibility to verify all quantities. Measurements and bill of quantities are to be used as a guideline. The contractor takes full responsibility for all final measurements.</p>		Witness/Verify	Contractor

**BILL OF MATERIAL**

	Full description of Material/Spares/Equipment	Specifications of Material/Spares/Equipment	Stock No	Part Number	Required Quantity
1	6 mm steel plate	Grade S355JR	N/A	N/A	
2	M12 bolts and nuts	Grade 8.8	N/A	N/A	
3	M12 washers and spring washers	Grade 8.8	N/A	N/A	
4	Ceramic wear liners	Ceramic	N/A	N/a	
5	Control circuit for 7E and 7F	IP 65 rated	N/A	N/A	2
6	U30/75 C-6 Insulated conductor rail	U30/75 C-6	N/A		212

7	U30/75 C-6 PE Insulated Conductor	U30/75 C-6 PE	N/A	N/A	53
8	UDV 30/75 C k4 Expansion section.	UDV 30/75 C k4	N/A	N/A	16
9	UDV 30/75 C k4 PE Expansion section.	UDV 30/75 C k4	N/A	N/A	4
10	USK 30 k4 Locating clamp.	USK 30 k4	N/A	N/A	50
11	UK 30-L End caps.	UK 30-L	N/A	N/A	10
12	UK 30/75 C Rigid joints.	UK 30/75	N/A	N/A	260
13	UEG 30/75 C Feed terminal.	UEG 30/75 C	N/A	N/A	10
14	UAM Insulated hangers.	132690-UAM	N/A	N/A	1085
15	KDST 200/300 DBL Current collectors.	KDST 200/300 DBL	N/A	N/A	20
16	UM 24 Collector brackets	175076-UM 24	N/A	N/A	4
17	Conductive grease -100ml tube.		N/A	N/A	4

SCOPE COMPILATION REFERENCES				
SOURCE & Ref No.	Yes	No	N/A	Comments
Previous outage service reports		X		
Return to service data packages		X		
Maintenance Strategy with Rev number		X		
SAP defects (attach list as appendix)		X		
GHRMS (STEP) reports (Generation Heat Rate Management System)		X		
Online Condition Monitoring		X		
Pre-outage performance test results		X		
Post outage performance test results		X		
GPSS/ Plant Performance data on UCLF incurred		X		
OMS / IIRMS recommendations (Audits Reports)		X		
Risk controls (IRM system)	X			
Previous audits and reviews (e.g. ERAP)		X		

<b>Engineering Change Requests (Projects)</b>		X		
<b>LOPP strategy reports</b>		X		
<b>URS</b>		X		
<b>Philosophy (Outage)</b>		X		
<b>Condition Monitoring Report</b>		X		
<b>VA/PHD Viewer trends</b>		X		
<b>Corrective Actions</b>	X			
<b>CARAB reports</b>		X		
<b>Statutory Requirements</b>		X		
<b>Grid code requirements</b>		X		
<b>Waivers and Exemptions</b>		X		
<b>Calibration requirements</b>		X		
<b>Previous Outage SOW variations</b>		X		
<b>Post Mortems Actions from previous outages</b>		X		
<b>Pre-Outage plant walks</b>		X		
<b>Risk based inspection (RBI) report</b>		X		
<b>Simulation, TOIs, OON, SI</b>		X		

## COMMENTS

<b>ATTACHMENTS: DRAWINGS, SKETCHES, DIAGRAMS, INSTRUCTIONS, etc</b>	
1	Figure 1: 9 tail end chutes.
2	Figure 2: 10/11 intermediate transfer chutes.
3	Figure 3: Coal plant tripper cars.
4	Figure 4: Coal plant rotary feeder.
5	
6	
7	

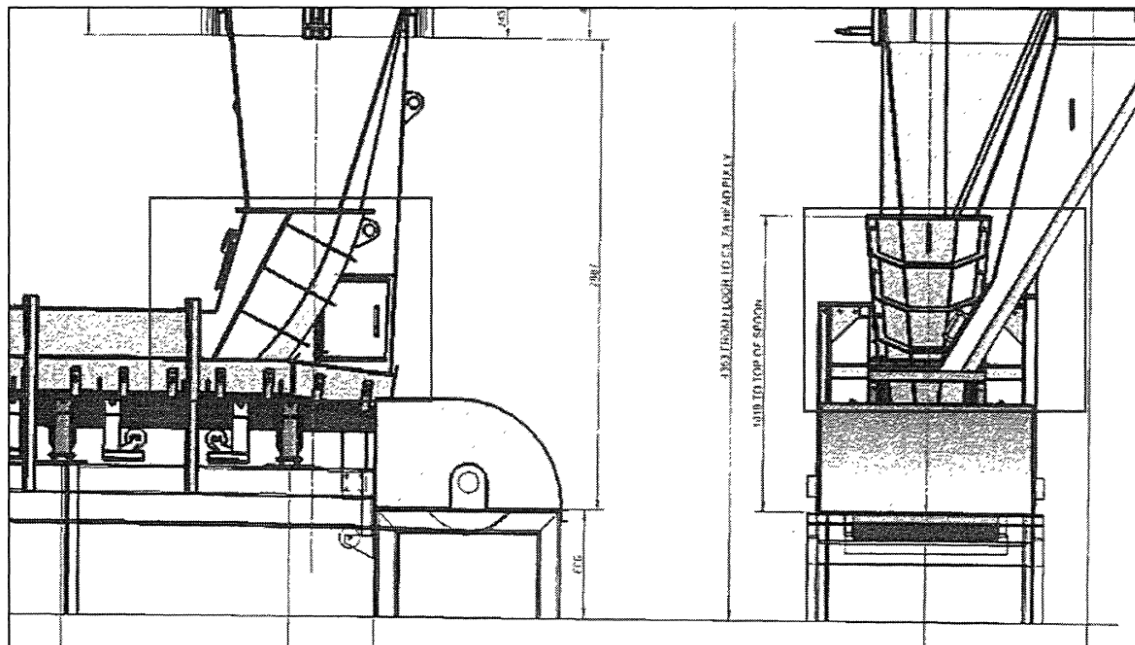


Figure 1: 9 tail end chutes (7/8 chutes)

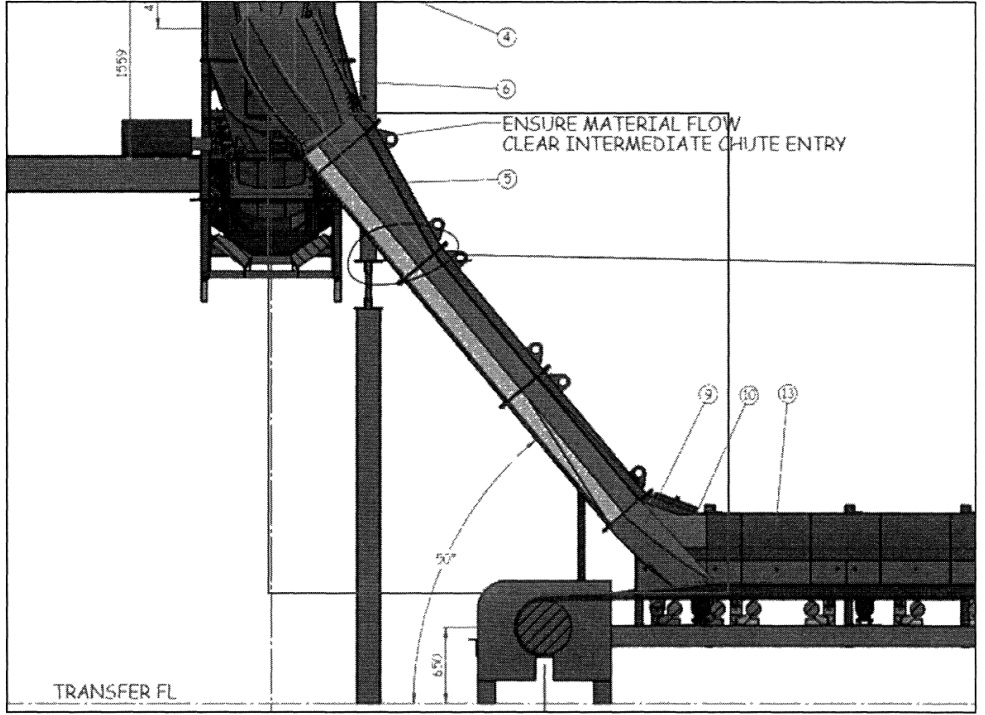


Figure 2: 10/11 intermediate transfer chute.

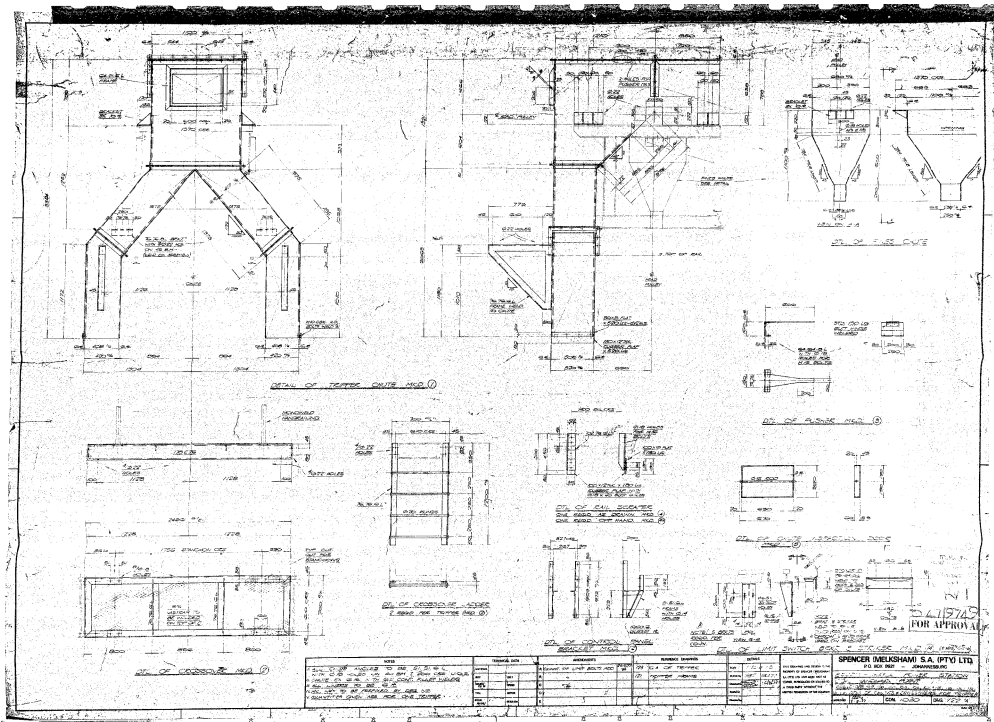


Figure 3: Coal plant tripper cars.

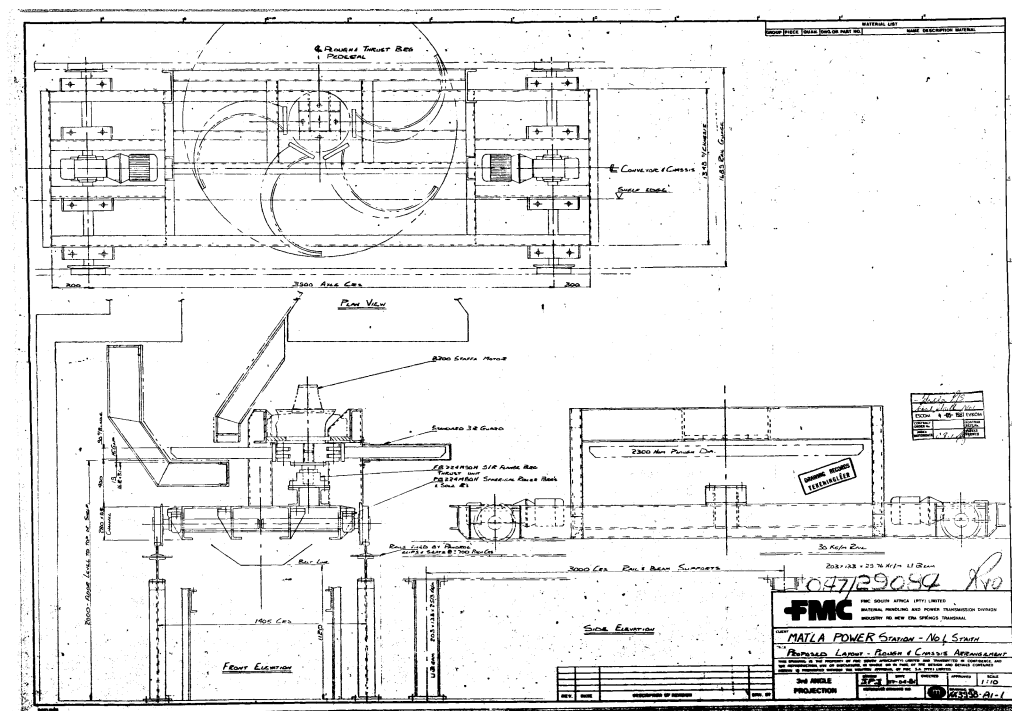


Figure 4: Coal plant rotary feeder.

This section could also be compiled as a separate file.

**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

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

#### 1. Access limitations

80% of the works is outside the security area of Matla Power Station and 10% is within Matla Power station and the other 10% is within Kriel Power Station. Access to the site will be governed by the terms and conditions laid down by the Station Security Officials from time to time. The Contractor shall satisfy himself as to these terms and conditions and shall price his works accordingly.

The Contractor shall liaise with Matla Power Station Security Staff in order to obtain temporary permits for his staff and vehicle, which will be working within the Station.

With the exception of Construction Plant the Contractor shall be restricted to having only one other vehicle on site for transporting his employees and materials. Any other need is to be granted by the Employers Representative.

Personnel and vehicles entering and leaving the site are subject to routine searches and substance abuse testing.

The Contractor will have to obtain a "gate permit" from the Employers Representative, before materials and equipment can be removed from the site. The "gate permit" gives an itemized list of materials and equipment to be removed from site.

The Contractor shall make his own assessment of, and shall allow in his rates for those access problems which may be encountered and no extra payment or claim of any kind will be allowed on account of difficulties of access to the Works.

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

The works are situated between Kriel Power Station and Matla Power Station Water Treatment Plants.

### **3. Hidden and other services within the *site***

All known services will be brought to the attention of the Contractor by Employers Representative. Should the Contractor encounter any other services in the work area, he will immediately bring them to the attention of the Employers Representative who will issue instructions as to what actions are to be taken.

The protection of all pipes, gauges and plant is of extreme importance. Should any damage take place, which is due to the Contractors negligence, another Contractor will be brought onto site to affect repairs. All costs will be to the account of the Contractor who caused damage.

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

Not applicable. The Contractor to specify any information required if necessary.

### **5. Inspection on site**

The *Contractor* shall take note of, and allow in his price for any items which may not be clearly defined on the enquiry drawings and / or document / s submitted with this tender. He shall also ensure that surfaces to be protected are inspected in order to evaluate extent of surface preparation for which he will be responsible. All inspections with Matla Engineering are to be arranged 24 hours in advance.

### **6. Accommodation for employees**

The *Contractor* is required to make sure of his own arrangements for the accommodation of his employees. Accommodation is normally available at the single quarters near the Power Station for single men. The *Contractor* is advised to contact Eskom's Housing Manager at the Station concerning accommodation requirements, tariffs and conditions.

### **7. Telephone & telecommunications**

A telephone is not available on site. Should the *Contractor* require one, he is to make his own arrangements with the relevant authorities. Arrangements may be made with the *Employers Representative* to use telephones of the Station if they are available. Calls from these will be charged for at prevailing GPO rates. Should the *Contractor* wish to use radio communication equipment on site, he will make his own arrangements with the relevant authorities. In this case though, he is required to liase with the Head of Security at the Station to ensure that there is no interference with existing channels or equipment.

### **8. First aid and fire fighting**

Adequate first aid and fire fighting equipment to be provided by the *Contractor* who also may in cases of emergencies or accidents call upon the services of the first aid and fire fighting resources at the Power Station.

### **9. Welding on site**

No welding will be allowed on site unless permission is granted in writing by the *Employers Representative*.

### **10. Safe plant isolations**

It is the *Contractor's* responsibility to liase with the *Employers Representative* in respect of safe plant isolations and all Eskom plant to be considered as live unit, such liaison is confirmed in writing.

### **11. Security, fire protection and safety**

The *Contractor* shall be responsible for ensuring the security of the works, and of his plant, equipment and materials. To that end he shall make adequate provision for access control, lighting and watchman to the works where required.

## 12. Fire protection

The provision of Eskom's standard NWS 1494 " Fire Prevention and Protection of *Contractor's* premises at New Works sites" shall be applicable. The *Contractor* shall ensure that adequate fire fighting apparatus is provided at all his work sites, and that his staff is trained in the use of this apparatus.

## 13. Safety and incident prevention

The *Contractor* shall implement and maintain an active Site Safety and Accident Prevention Programme in accordance with the NOSA Standards Safety Regulations, NWS 1058 and the Safety Regulations as laid down in the Matla Safety Manual. The overriding regulations will however be the Occupation Health and Safety Act.

## 14. Safety

The *Contractor* shall comply with

- The Occupational Health and Safety Act, 1993, and all regulations made there under;
- All Eskom Safety and Operating Procedures.

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

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

The *Contractor* shall appoint a person who will liaise with the Eskom Safety Officer responsible for the premises relevant to this contract.

Do safety audits at the *Contractor's* premises, its work-places and on its employees;

Refuse any employee, sub-contractor or agent of the *Contractor* access to its premises if such person has been found to commit any unlawful act or any unsafe working practice or is found to be not authorised or qualifies in terms of the Act;

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 1 above by the Contractor or any of its employees, sub-contractors or agents.

The *Contractors* safety file is to be submitted for approval to Matla's Safety Officer within three (3) days after order placement.

## 15. General

*Contractor* shall make provision in his rates for all costs involved in compliance with Security Requirements, Fire Protection, Safety and Accident Prevention. Eskom in this regard will entertain no claims for additional compensation.

## 16. Quality requirements

The *Contractor* shall be required to demonstrate by means of a Quality Plan that this organisation is so structured that all the requirements of the specification will be properly monitored and controlled. The Quality Plan and Control procedures are to be carried out in accordance with the Quality Control document NWS 1841/C1 and the Matla Quality Manual for *Contractor*. The Quality Control document is to be submitted for approval to Matla Engineering within three (3) days after order placement by the *Contractor*.

No work may commence unless the Quality Control document has been approved in writing and a copy submitted to *the Employers Representative*. *The Contractor*, in conjunction with Matla Engineering must sign off all Quality Control documents after completing all work on site. *The Contractor* to submit a copy of the final signed off document to *the Employers Representative* within 1 week after Completion of a Unit.

## 17. Tender

Tender on the supplied Scope of Work shall be fixed and firm unless otherwise specified. The Tenderers shall include for compliance with all the provisions and requirements of site regulations and procedures in his pricing.

Any work not in the Scope of Work will be carried out only when the *Contractor* has received a signed variation order from Eskom.

Tenders must include for the official "Commissioning" and / or taking over hand handing over" of systems and / or the work executed by the *Contractor*.

### 17.1. Consumables

The *Contractor* shall allow in his tender price for any consumables that might be required for the execution of the work.

### 17.2. Transport

The *Contractor* shall make his own arrangements for transport of material and/or personnel on or to site in accordance with the site procedures and regulations.

The tenderer shall include in his tender price for any special tools and equipment to be used on site for the execution of the works.

Non-destructive examination will be deemed to be included in the tender price unless otherwise specified.

The *Contractor* shall allow in his tender price for tests as he considers or might be required by Eskom to satisfy himself that the work is sound.

The *Contractor* shall allow in his tender price for competent full time site supervision for the duration of the Contract.

Scaffold will be deemed to be included in the tender price unless otherwise specified.

Any design from Matla Engineering is only for information additional to the Scope of Work. Tenderers are to be based on the Scope of Work and the specifications. If any discrepancy arises between the design and the Scope of Work Matla is to be contacted for clarification.

Eskom carries no responsibility for unforeseen delays unless such a delay is negotiated within 24 hours of the occurrence and written agreement is submitted by Eskom.

## 19. Communication

The *Contractor* shall address all communications (after contract award) including telefaximilies to:

Project Manager  
Matla Power Station  
Private Bag X5012  
Kriel  
2271

Att :  
Tel :  
E-Mail :

All communications from the *Contractor* shall carry the Enquiry Number or Contract Number after Contract Award, as well as the Title of the Works. All communication by the *Contractors* shall go through the buyer.

They shall be headed with the subject of the communications and be numbered sequentially based on the filter communication.

No recruiting is allowed on Eskom property. (Eskom property includes the area outside the main security gate).