



NEC3 Term Service Contract (TSC3)

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

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

for **Provision of Coal Handling Plant Daily Maintenance
Contract at Tutuka Power Station for a period of 3
years.**

Contents:	No of pages
Part C1 Agreements & Contract Data	[•]
Part C2 Pricing Data	[•]
Part C3 Scope of Work	[•]

CONTRACT No. [Insert at award stage]

PART C1: AGREEMENTS & CONTRACT DATA

Contents:	No of pages
C1.1 Form of Offer and Acceptance	[•]
[to be inserted from Returnable Documents at award stage]	
C1.2a Contract Data provided by the <i>Employer</i>	[•]
C1.2b Contract Data provided by the <i>Contractor</i>	[•]
[to be inserted from Returnable Documents at award stage]	
C1.3 Proforma Guarantees	[•]

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:

Provision of Coal Handling Plant Daily Maintenance Contract at Tutuka Power Station for a period of 3 years.

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

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

Options A	The offered total of the Prices exclusive of VAT is	R [•]
	Sub total	R [•]
	Value Added Tax @ 15% is	R [•]
	The offered total of the amount due inclusive of VAT is ¹	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:

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

Acceptance

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

The terms of the contract, are contained in:

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

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

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

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

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

Signature(s)

Name(s)

Capacity

**for the
*Employer***

(Insert name and address of organisation)

Name &
signature of
witness

Date

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

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

Note:

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

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

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

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

For the tenderer:**For the *Employer***

Signature

Name

Capacity

On behalf of

(Insert name and address of organisation)

(Insert name and address of organisation)

Name &
signature
of witness

Date

C1.2 TSC3 Contract Data

Part one - Data provided by the *Employer*

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

1. Please read the relevant clauses in the conditions of contract before you enter data. The number of the clause which requires the data is shown in the left hand column for each statement however other clauses may also use the same data.
2. Some TSC3 options are always selected by Eskom Holdings SOC Ltd. The remaining TSC3 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 this data in full, according to the Options chosen, is essential to create a complete contract.

Clause	Statement	Data
1	General	
	The <i>conditions of contract</i> are the core clauses and the clauses for main Option:	
	•	A: Priced contract with price list
	dispute resolution Option	W1: Dispute resolution procedure
	and secondary Options	
		X1: Price adjustment for inflation
		X2 Changes in the law
		X17: Low service damages
		X18: Limitation of liability
		X19: Task Order
		X20: Key performance indicators
		Z: Additional conditions of contract
	of the NEC3 Term Service Contract April 2013 ² (TSC3)	
10.1	The <i>Employer</i> is (name):	Eskom Holdings SOC Ltd (reg no: 2002/015527/30), a state owned company incorporated in terms of the company laws of the Republic of South Africa
	Address	Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg
	Tel No.	[•]
	Fax No.	[•]

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

10.1	The <i>Service Manager</i> is (name):	[•]
	Address	[•]
	Tel	[•]
	Fax	[•]
	e-mail	[•]
11.2(2)	The Affected Property is	Tutuka Power Station
11.2(13)	The <i>service</i> is	Provision of Coal Handling Plant Daily Maintenance Contract at Tutuka Power Station for a period of 3 years.
11.2(14)	The following matters will be included in the Risk Register	As per Annexure B of this document on 2 nd last page
11.2(15)	The Service Information is in	Part 3: Scope of Work and all documents and drawings to which it makes reference.
12.2	The <i>law of the contract</i> is the law of	the Republic of South Africa
13.1	The <i>language of this contract</i> is	English
13.3	The <i>period for reply</i> is	1 week
2	The Contractor's main responsibilities	Data required by this section of the core clauses is also provided by the <i>Contractor</i> in Part 2 and terms in italics used in this section are identified elsewhere in this Contract Data
21.1	The <i>Contractor</i> submits a first plan for acceptance within	1 week of the Contract Date.
3	Time	
30.1	The <i>starting date</i> is.	
30.1	The <i>service period</i> is	36 Months
4	Testing and defects	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
5	Payment	
50.1	The <i>assessment interval</i> is	25 th day of every 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	30 days
51.4	The <i>interest rate</i> is	the publicly quoted prime rate of interest (calculated on a 365 day year) charged by from time to time by the Standard Bank of South Africa 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.

6	Compensation events	
7	Use of Equipment Plant and Materials	
8	Risks and insurance	As per Z12 clause in this contract
80.1	These are additional <i>Employer's</i> risks	
9	Termination	<p>NEC3 core clause 9 shall be applied for termination including Z10.</p> <p>Exit clause: The <i>Employer</i> reserves the right to terminate the contract between the <i>Employer</i> and <i>Contractor</i> should Tutuka Power Station closes or permanently shuts down before time.</p>
10	Data for main Option clause	
A	Priced contract with price list	In C2.2
20.5	The <i>Contractor</i> prepares forecasts of the final total of the Prices for the whole of the <i>service</i> at intervals no longer than	N/A
11	Data for Option W1	
W1.1	The <i>Adjudicator</i>	the person selected from the ICE-SA Division (or its successor body) of the South African Institution of Civil Engineering Panel of Adjudicators by the Party intending to refer a dispute to him. (see www.ice-sa.org.za). If the Parties do not agree on an Adjudicator the Adjudicator will be appointed by the Arbitration Foundation of Southern Africa (AFSA).

Address [•]

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 Institution of Civil Engineers (London) (see www.ice-sa.org.za) or its successor body.
W1.4(2)	The <i>tribunal</i> is:	arbitration
W1.4(5)	The <i>arbitration procedure</i> is	the latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.
	The place where arbitration is to be held is	South Africa
	The person or organisation who will choose an arbitrator	
	– if the Parties cannot agree a choice or	the Chairman for the time being or his nominee
	– if the arbitration procedure does not state who selects an arbitrator, is	of the Association of Arbitrators (Southern Africa) or its successor body.

12 Data for secondary Option clauses

X1	Price adjustment for inflation																									
X1.1	The <i>base date</i> for indices is	The month prior to the enquiry closing date.																								
	The proportions used to calculate the Price Adjustment Factor are:	<table> <tr> <th>proportion</th><th>linked to index for</th><th>Index prepared by</th></tr> <tr> <td>0.</td><td>[•]</td><td>[•]</td></tr> <tr> <td>0.</td><td>[•]</td><td>[•]</td></tr> <tr> <td>0.</td><td>[•]</td><td>[•]</td></tr> <tr> <td>0.</td><td>[•]</td><td>[•]</td></tr> <tr> <td>0.</td><td>[•]</td><td>[•]</td></tr> <tr> <td>15%</td><td colspan="2">non-adjustable</td></tr> <tr> <td>100%</td><td></td><td></td></tr> </table>	proportion	linked to index for	Index prepared by	0.	[•]	[•]	0.	[•]	[•]	0.	[•]	[•]	0.	[•]	[•]	0.	[•]	[•]	15%	non-adjustable		100%		
proportion	linked to index for	Index prepared by																								
0.	[•]	[•]																								
0.	[•]	[•]																								
0.	[•]	[•]																								
0.	[•]	[•]																								
0.	[•]	[•]																								
15%	non-adjustable																									
100%																										
X2	Changes in the law of	Republic of South Africa is a compensation event if it occurs after the Contract Date																								
X17	Low service damages																									
X17.1	The <i>service level table</i> is in	Annexure A on the second last page of this contract document																								
X18	Limitation of liability																									

X18.1	The <i>Contractor's</i> liability to the <i>Employer</i> for indirect or consequential loss is limited to	R0.0 (zero Rand)
X18.2	For any one event, the <i>Contractor's</i> liability to the <i>Employer</i> for loss of or damage to the <i>Employer's</i> property is limited to	the amount of the deductibles relevant to the event
X18.3	The <i>Contractor's</i> liability for Defects due to his design of an item of Equipment is limited to	The greater of the total of the Prices at the Contract Date and the amounts excluded and unrecoverable from the <i>Employer's</i> insurance (other than the resulting physical damage to the <i>Employer's</i> property which is not excluded) plus the applicable deductibles
X18.4	The <i>Contractor's</i> total liability to the <i>Employer</i> , for all matters arising under or in connection with this contract, other than the excluded matters, is limited to	the total of the Prices other than for the additional excluded matters. The <i>Contractor's</i> total liability for the additional excluded matters is not limited. The additional excluded matters are amounts for which the <i>Contractor</i> is liable under this contract for Defects due to his design, plan and specification, Defects due to manufacture and fabrication outside the Affected Property, loss of or damage to property (other than the <i>Employer's</i> property, Plant and Materials), death of or injury to a person and infringement of an intellectual property right.
X18.5	The <i>end of liability date</i> is	1 month after the end of the <i>service period</i>.
X19	Task Order	
X19.5	The <i>Contractor</i> submits a Task Order programme to the <i>Service Manager</i> within	Before Tasks resume
X20	Key Performance Indicators (not used when Option X12 applies)	Annexure C On the last page of this document
X20.1	The <i>incentive schedule</i> for Key Performance Indicators is in	Annexure C on the last page of this Contract Document. No incentives will be paid out for Key performance indicators. KPI's are for to monitor performance of this contract
X20.2	A report of performance against each Key Performance Indicator is provided at intervals of	6 months interval
Z	The <i>additional conditions of contract</i> are	Z1 to Z14 always apply.

Z1 Cession delegation and assignment

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

Z2 Joint ventures

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

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

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

Z4 Confidentiality

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

disclosure, notifies the *Employer* so that an appropriate protection order and/or any other action can be taken if possible, prior to any disclosure. In the event that such protective order is not, or cannot, be obtained, then the *Contractor* may disclose that portion of the information which it is required to be disclosed by law and uses reasonable efforts to obtain assurances that confidential treatment will be afforded to the information so disclosed.

Z4.4 The taking of images (whether photographs, video footage or otherwise) of the Affected Property or any portion thereof, in the course of Providing the Service and after the end of the *service period*, requires the prior written consent of the *Service Manager*. All rights in and to all such images vests exclusively in the *Employer*.

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 *Service Manager* or the *Adjudicator* does not constitute a waiver of rights, and does not give rise to an estoppel unless the Parties agree otherwise and confirm such agreement in writing.

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

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

Z6.2 The *Contractor*, in and about the execution of the *service*, 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 *Service Manager* in terms of core clause 51.1, the *Contractor* provides the *Employer* with a tax invoice in accordance with the *Employer's* procedures stated in the Service Information, showing the amount due for payment equal to that stated in the payment certificate.

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

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 the last paragraph of core clause 61.3 and replace with:

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

Z9 Employer's limitation of liability

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

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

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

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

Z11 Ethics

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

Affected Party means, as the context requires, any party, irrespective of whether it is the *Contractor* or a third party, such party's employees, agents, or Subcontractors or Subcontractor's employees, or any one or more of all of these parties' relatives or friends,

Coercive Action means to harm or threaten to harm, directly or indirectly, an Affected Party or the property of an Affected Party, or to otherwise influence or attempt to influence an Affected Party to act unlawfully or illegally,

Collusive Action means where two or more parties co-operate to achieve an unlawful or illegal purpose, including to influence an Affected Party to act unlawfully or illegally,

Committing Party means, as the context requires, the *Contractor*, or any member thereof in the case of a joint venture, or its employees, agents, or Subcontractors or the Subcontractor's employees,

Corrupt Action means the offering, giving, taking, or soliciting, directly or indirectly, of a good or service to unlawfully or illegally influence the actions of an Affected Party,

Fraudulent Action means any unlawfully or illegally intentional act or omission that misleads, or attempts to mislead, an Affected Party, in order to obtain a financial or other benefit or to avoid an obligation or incurring an obligation,

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

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

Z11.1 A Committing Party may not take any Prohibited Action during the course of the procurement

of this contract or in execution thereof.

- Z11.2 The *Employer* may terminate the *Contractor's* obligation to Provide the Services if a Committing Party has taken such Prohibited Action and the *Contractor* did not take timely and appropriate action to prevent or remedy the situation, without limiting any other rights or remedies the *Employer* has. It is not required that the Committing Party had to have been found guilty, in court or in any other similar process, of such Prohibited Action before the *Employer* can terminate the *Contractor's* obligation to Provide the Services for this reason.
- Z11.3 If the *Employer* terminates the *Contractor's* obligation to Provide the Services for this reason, the amounts due on termination are those intended in core clauses 92.1 and 92.2.
- Z11.4 A Committing Party co-operates fully with any investigation pursuant to alleged Prohibited Action. Where the *Employer* does not have a contractual bond with the Committing Party, the *Contractor* ensures that the Committing Party co-operates fully with an investigation.

Z12 Insurance

Z 12 .1 Replace core clause 83 with the following:

Insurance cover 83

- 83.1 When requested by a Party, the other Party provides certificates from his insurer or broker stating that the insurances required by this contract are in force.
- 83.2 The *Contractor* provides the insurances stated in the Insurance Table A from the *starting date* until the earlier of Completion and the date of the termination certificate.

INSURANCE TABLE A

Insurance against	Minimum amount of cover or minimum limit of indemnity
Loss of or damage caused by the <i>Contractor</i> to the <i>Employer's</i> property	The replacement cost where not covered by the <i>Employer's</i> insurance. The <i>Employer's</i> policy deductible as at Contract Date, where covered by the <i>Employer's</i> insurance.
Loss of or damage to Plant and Materials	The replacement cost where not covered by the <i>Employer's</i> insurance. The <i>Employer's</i> policy deductible as at Contract Date, where covered by the <i>Employer's</i> insurance.
Loss of or damage to Equipment	The replacement cost where not covered by the <i>Employer's</i> insurance. The <i>Employer's</i> policy deductible as at Contract Date, where covered by the <i>Employer's</i> insurance.
The <i>Contractor's</i> liability for loss of or damage to property (except the <i>Employer's</i>)	<u>Loss of or damage to property</u> The replacement cost

property, Plant and Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the <i>Contractor</i>) arising from or in connection with the <i>Contractor's</i> Providing the Service	<u>Bodily injury to or death of a person</u> The amount required by the applicable law.
Liability for death of or bodily injury to employees of the <i>Contractor</i> arising out of and in the course of their employment in connection with this contract	The amount required by the applicable law

Z 12.2 Replace core clause 86 with the following:**Insurance
by the
Employer**

86

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

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

Z13 Nuclear Liability – Not Applicable

Z14 Asbestos

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

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

Z14.1 The *Employer* ensures that the Ambient Air in the area where the *Contractor* will Provide the Services conforms to the acceptable prescribed South African standard for asbestos, as per the regulations published in GNR 155 of 10 February 2002, under the Occupational Health and Safety Act, 1993 (Act 85 of 1993) ("Asbestos Regulations"). The OEL for asbestos is 0.2 regulated asbestos fibres per millilitre of air as a 4-hour TWA, averaged over any continuous period of four hours, and the short term exposure limit of 0.6 regulated asbestos fibres per millilitre of air as a 10-minute TWA, averaged over any 10 minutes, measured in accordance with HSG248 and monitored according to HSG173 and OESSM.

Z14.2 Upon written request by the *Contractor*, the *Employer* certifies that these conditions prevail. All measurements and reporting are effected by an independent, competent, and certified occupational hygiene inspection body, i.e. a SANAS accredited and Department of Employment and Labour approved AAIA. The *Contractor* may perform Parallel Measurements and related

control measures at the *Contractor's* expense. For the purposes of compliance the results generated from Parallel Measurements are evaluated only against South African statutory limits as detailed in clause Z14.1. Control measures conform to the requirements stipulated in the AAIA-approved asbestos work plan.

- Z14.3 The *Employer* manages asbestos and ACM according to the Standard.
- Z14.4 In the event that any asbestos is identified while Providing the Services, a risk assessment is conducted and if so required, with reference to possible exposure to an airborne concentration of above the AL for asbestos, immediate control measures are implemented and relevant air monitoring conducted in order to declare the area safe.
- Z14.5 The *Contractor's* personnel are entitled to stop working and leave the contaminated area forthwith until such time that the area of concern is declared safe by either Compliance Monitoring or an AAIA approved control measure intervention, for example, per the emergency asbestos work plan, if applicable.
- Z14.6 The *Contractor* continues to Provide the Services, without additional control measures presented, on presentation of Safe Levels. The contractually agreed dates to Provide the Services, including the Completion Date, are adjusted accordingly. The contractually agreed dates are extended by the notification periods required by regulations 3 and 21 of the Asbestos Regulations, 2001.
- Z14.7 Any removal and disposal of asbestos, asbestos containing materials and waste, is done by a registered asbestos contractor, instructed by the *Employer* at the *Employer's* expense, and conducted in line with South African legislation.

C1.2 Contract Data

Part two - Data provided by the *Contractor*

[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 and would be required in relation to the option selected. In the event that the option is not required select and delete the whole row.]

Notes to a tendering contractor:

1. Please read both the both the NEC3 Term Service Contract April 2013 and the relevant parts of its Guidance Notes (TSC3-GN)³ in order to understand the implications of this Data which the tenderer is required to complete.
2. The number of the clause which requires the data is shown in the left hand column for each statement however other clauses may also use the same data.
3. Where a form field like this [] appears, data is required to be inserted relevant to the option selected. Click on the form field **once** and type in the data. Otherwise complete by hand and in ink.

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

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

³ Available from Engineering Contract Strategies Tel 011 803 3008 Fax 086 5391902 or www.ecs.co.za

2

Name:

Job

Responsibilities:

Qualifications:

Experience:

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

A	Priced contract with price list	
11.2(12)	The <i>price list</i> is in	C2.2
11.2(19)	The tendered total of the Prices is	R

PART 2: PRICING DATA

TSC3 Option A

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

C2.1 Pricing assumptions: Option A

How work is priced and assessed for payment

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

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

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

Function of the Price List

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

Link to the *Contractor's* plan

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

Preparing the *price list*

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

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

- Has taken account of the guidance given in the TSC3 Guidance Notes relevant to Option A;
- Understands the function of the Price List and how work is priced and paid for;

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

Format of the *price list*

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

Entries in the first four columns in the *price list* in section C2.2 are made either by the *Employer* or the tendering contractor.

If the *Contractor* is to be paid an amount for the item which is not adjusted if the quantity of work in the item changes, the tendering contractor enters the amount in the Price column only, the Unit, Expected Quantity and Rate columns being left blank.

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

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

C2.2 the *price list*

	Unit of measure	Rates/Hour
RESOURCES		
MONTHLY FIXED COST		
Management		
Site Manager	Hr	
Safety Officer	Hr	
Technical Resources		
Supervisor	Hr	
Technician (Control & Instrument)	Hr	
Technician (Electrical)	Hr	
Artisans (Fitters)	Hr	
Electricians	Hr	
Mechanicians	Hr	
Riggers	Hr	
Boiler Maker	Hr	
Welders	Hr	
Semi-Skilled	Hr	
Artisans Assistants	Hr	
Planner	Hr	
Overtime (Normal / Saturday Overtime) @1.5		
Site Manager	Hr	
Supervisor	Hr	
Technician (Elec/ C&I)	Hr	
Artisans (Fitters)	Hr	
Mechanician	Hr	
Electrician	Hr	
Riggers	Hr	
Boiler Maker	Hr	
Welders	Hr	
Semi-Skilled	Hr	
Artisans Assistants	Hr	
Planner	Hr	
Overtime (Sunday/ Public Holidays) @ 2		
Site Manager	Hr	
Supervisor	Hr	
Technician (Elec/ C&I)	Hr	
Artisans (Fitters)	Hr	
Mechanician	Hr	
Electrician	Hr	

Riggers	Hr	
Boiler Maker	Hr	
Welders	Hr	
Semi-Skilled	Hr	
Artisans Assistants	Hr	
Planner	Hr	
Once Off Costs		
Site – Establishment (once off)	ea	
Site - de Establishment (once off)	ea	
Monthly cost		
Travelling for Call Out (60km)	km	
Travelling (HMW)	km	
LDV	km	
1 x 14-Seater	km	
Standby allowance per team (2 x Fitters, 1 x welder, 1 x boilermaker, 1 x assistant 1 x semiskilled, 1 x Electrician or Technician, 1 x Mechanician or Technician)	Per day	
Yearly costs		
PPE (include torch, safety harness, 2 x overalls per year, safety shoes, gumboots, earphones, hard hats, goggles, arch flash suits) (each person per year)	per year	
Safety File, Medicals	per year	
Special Tools and Equipment		
Tools and equipment as per list in section 1.1.3 of this document (sum per year)	Per year	
Special Services		
HDPE class 16 pipe welding machines from OD 63 to OD355 (48 times a year)	per year	
Cable Jointing (72 times a year)	per year	
Laser alignment (130 times a year)	per year	

Note: Normal fixed hours is at 173 per month. Contractor to supply rates only.

- Prices will be fixed and firm for the first year, CPA will be applicable from 2nd year onwards until end of the contract, CPA proportions to be submitted with tender returnables
- All Artisans must have a Red Seal qualification (section 28 will not be allowed)
- The Welders should comply with ISO 3834 requirements
- Drive alignment will be done 130 times a year
- Cable Jointing is done 72 times a year

Security / Criminal Clearance Check

- Acceptance of this tender is subject to the condition that both the contracting company's management and its employees will provide Eskom with a clear criminal record not older than thirty (30) days from a reputable screening company. If the principal contractor appoints a subcontractor, the same provisions and measures will apply to the subcontractor.
- Acceptance of the tender is also subject to the condition that the contractor will implement all such security measures for the safe performance of the work as required in the scope of the contract.
- Contractors are to submit proof of verification record(s) (Security clearance) from SAPS or accredited supplier linked to SAPS AFIS system not older than thirty (30) days, as part of Risk Management process in order to curb any threats against the Installation. It is compulsory for these documents to be submitted to Security for verification before access to site is granted. Only individuals with clear criminal records will be considered.
- Contractors are required to submit the SAPS Clearance Certificate obtained by the employee along with a copy of his/her Identity Document or Passport to the site Security Manager. The Security Manager is required to verify the authenticity of the CRC Certificate with SAPS and to cross reference the employee seeking access against known HR databases and site databases to determine if the employee in question has in the past participated in disruptive labor actions and if the individual was dismissed from Eskom and the reason for such dismissal.

PART 3: SCOPE OF WORK

Document reference	Title
	This cover page
C3.1	<i>Employer's Service Information</i>
C3.2	<i>Contractor's Service Information</i>

C3.1: *EMPLOYER'S SERVICE INFORMATION*

Contents

2		
1	Description of the <i>service</i>	28
1.1	Executive overview	28
1.1.1	SCOPE	29
1.2	<i>Employer's</i> requirements for the <i>service</i>	45
General		46
1.3	Interpretation and terminology	48
2	Management strategy and start up.	49
2.1	The <i>Contractor's</i> plan for the <i>service</i>	49
2.2	Management meetings	49
2.3	<i>Contractor's</i> management, supervision and key people	49
2.4	Provision of bonds and guarantees	50
2.5	Documentation control	50
2.6	Invoicing and payment	50
2.7	Contract change management	50
2.8	Records of Defined Cost to be kept by the <i>Contractor</i>	51
2.9	Insurance provided by the <i>Employer</i>	51
2.10	Training workshops and technology transfer	51
2.11	Design and supply of Equipment	51
2.12	Things provided at the end of the <i>service period</i> for the <i>Employer's</i> use	51
2.12.1	Equipment	51
2.12.2	Information and other things	52
2.13	Management of work done by Task Order	52
3	Health and safety, the environment and quality assurance	52
3.12	Health and safety risk management	52
3.13	Environmental constraints and management	55
3.14	Quality assurance requirements	56
4	Procurement	57
4.1	People	57
4.1.1	Minimum requirements of people employed	57
4.1.2	BBBEE and preferencing scheme	57
4.1.3	Procurement Requirements:	57
5	Working on the Affected Property	59
6	List of drawings	67
7	X17 – Low Service Damage Table	65
8	Annexure C: Key Performance Indicators	68
8.1	X20 - Key	68

1 Description of the service

1.1 Executive overview

The Tutuka Coal Stockyard conveyor systems delivers between 500 000 tons/month and 1 300 000 tons/month to the *Employer* six power generating units depending on the required burn plan. The conveyor belt running times and coaling intervals are controlled by the Coal Stockyard Control Room operating methodology

The control system is based in the Coal Stockyard Control Room situated near the centre of the Coal Stockyard and from which the panel operators have control of the overland belts from the Mine, Crushing Plant, Coal Stockyard itself and the overland belts to Tutuka Power Station.

The Coal Stockyard Control Room operators will be in radio contact with the Mine, Tutuka Power Station and with their own plant operators. Sufficient information will be available to the operators in the Coal Stockyard Control Room to enable them, under normal condition, to operate the Coal Stockyard conveyor systems without reference to Tutuka Power Station's outside plant operators.

The control system shall be maintained safe and shall provide sufficient indication of faulty condition to the operator to enable them to respond correctly.

- The purpose of this scope is to stipulate an overview of work to be performed during the maintenance execution on plant equipment as instructed and directed by the existing PMs and by the Senior Supervisor or any other personnel authorized to do so. The execution of plant maintenance in the Terrace Coal Handling Plant includes the following:
- Cleaning of all facilities and plant components.
- Maintenance (Mechanical / Electrical / Instrumentation / Civil etc) of all the coal conveyors and associated equipment idlers, Idler frames, pulley plummer blocks, pulleys, pulley lagging, silos, transfer chutes, flopper gates, flopper actuators, electric motors, Silo hoppers, gearboxes, fluid couplings, power pack, conveyor belt tension stations, dust extractors, grizzly bars, gantry house cladding, electromagnet separators, MTH sump and sump pump and tramp bin.
- Maintenance of Shuttle Conveyors and associated rail (pinion and rack).
- Maintenance of conveyor belts, unreeling new belt, installation, reeling of redundant belt.
- Maintenance on lagging of pulleys and greasing of associated Plummer blocks.
- Maintenance on replacement of worn-out idler rollers and idler brackets.
- Maintenance on patching, lining and cleaning of chutes and flopper gates inside the chutes and maintenance on actuators.
- Execute all Plant Maintenance (PM) orders (Conveyor Platform Maintenance).
- Maintenance of all emergencies arising belt misalignment, ripping, loose skirting, backplates.
- Maintenance of all civil associated components, silo sumps and drains leading to and including South Settling Ponds, MTH sump and pump, all drainage around MTH and from MTH to Steinmuller Dam, East Settling Ponds and the electrical pumps in South Settling Ponds.
- Maintenance of hydraulic power pack and all its associated equipment.
- Maintenance of air extractors and all its associated components.
- Maintenance on Silo hopper and Silo discharge profile plate.
- Maintenance on all the control & instrumentation protections associated with the Terrace CHP components.
- Maintenance of all components (mechanical, civil, electrical and instrumentation) on coal stacker reclaimer machine

1.1.1 SCOPE

The scope of work entails the terrace CHP inspections and subsequent recording of all defects on a daily basis. The contractor shall maintain the defect record list for the period of the contract and track the similar failure defects. The contract shall provide Eskom Contract / Services Manager with the weekly report of all reported defects and inspection conducted. The contractor will be provided with the template of the report upon the commencement of the contract to which the Eskom Contracts / Services Manager shall influence in agreement with the contractor for it to be validated and authenticated.

All plant at the plants under CSY and Terrace CHP are available for operation at all times (24/7), except for maintenance when one line at a time will be standing as scheduled to carry out either scheduled or emergency maintenance.

The scope of work is for the plant inspection and to record all defects on a daily basis. The contractor shall maintain the defect record list for the period of the contract and track the similar failure defects. The contract shall provide Eskom Contract Supervisor with the weekly report of all reported defects and inspection conducted. The contractor will be provided with the template of the report upon the commencement of the contract.

The following are typical, but not limit to, the inspections required per the inspection check sheet, maintenance strategy and philosophy provided by the *Employer*:

Facilities

This section covers the buildings and structures utilised by the *Employer* and the *Contractor* at the Coal Stockyard:

The following buildings and structures form part of the scope of the *works*, to be maintained by the *Contractor*:

Buildings

- Sub- stations
- Drive and transfer houses
- Conveyor structures and cladding
- Stacker/Reclaim structure.
- Control Room
- Workshop (Including the offices and all the outside buildings)
- All Movable Cabins
- Security Buildings (At the stockyard area)
- The stacker/reclaim operator's bathroom
- Potable water pump house

The *Contractor* ensures that:-

- Inspects on a monthly basis, all structures under his control to determine the condition and corrective action to be taken and performs all wear and tear related maintenance.
- Reports major structural faults to the *Service Manager* who determines further action.
- All crawl beams on the plant to inspect and load test once a year by the *Employer's* sub-contractor.
- All cat walks and cat ladders to be inspect and repaired
- All roofs and gutters are cleared of debris, annually.
- All walls and ceilings are repaired and painted, when necessary.
- Structures are cleaned, repaired and painted to the color coding of the *Employer*.

- All the statutory tests are carried out.
- Movable cabins are inspected weekly.

Structure and infra-structure maintenance

The *Contractor*

- Sub- stations
- Drive and transfer houses
- Conveyor structures and cladding (Cladding done by Thermal)
- Stacker/Reclaim structure.
- Control Room
- Workshop (Including the offices and all the outside buildings)
- All Movable Cabins
- Security Buildings (At the stockyard area)
- All drain systems.
- All fences.
- All sewage and dirty water settling tanks.

Electrical and Instrumentation Maintenance

The *Contractor* provides the electrical maintenance, repairs and inspections in accordance with the details and inspection frequencies indicated below, including that which the *Contractor* stipulates in its Works Information.

All safety circuits e.g. hooters, trip wires, under-speed switches, detrain switches, block chute detectors, emergency stops, local stops, take-up car limits and hydraulic coupling limit switches are operated and inspected for correct operation by the *Contractor*, at least once a month.

Motors

The *Contractor* inspects and ensures that motors:

- Are kept clean and free from any coal spillage and dust, at all times;
- Are not to run if wet, and
- Are not submerged in mud or coal slurry.

In the event of any of the above happening, the motor is thoroughly cleaned, dried out and serviced, before being made operational.

The *Contractor* inspects and records motor parameters during weekly inspections.

1. In addition, the *Contractor* ensures that:

- Monthly tests are carried out to monitor electrical current and vibration levels; and
- The findings of the tests are documented to determine when the motor must be serviced, or overhauled.
- Motors are not to run with abnormal vibrations; and
- In the event of abnormal vibrations being detected, the motor is rectified immediately.
- Motors are not to run when the cooling system is not in operation, or defective; and
- An abnormal rise in temperature is attended to;
- The thermal rating of the motor is not exceeded.
- Bearing temperatures to be monitored.

Motors are not started more than that specified by the Manufacturer of the motor, within a given time frame

Switchgear

The *Contractor*

Inspects and maintains all switchgear in accordance with OEM specifications.

Monthly inspect the following:

- Inspect the general condition of the switch room to see that it is clean, dry and adequately heated and ventilated.
- Look for compound leaks, if compound filled cable boxes are fitted.
- Listen for any audible discharge.
- Note any unusual smell.
- Should anything be amiss, investigate the cause and correct it.
- Clean down the outside with cloth having no loose fibres or metallic thread
- Lubricate the visible mechanism parts with a light mineral oil.
- Remove and check all fuses
- Clean and examine the relays and protective equipment in accordance with the marks instruction.

Two yearly overhaul all switchgears according with OEM specification.

Power Supply

- The *Contractor* is responsible for the total Stockyard/ash conveyor electrical reticulation, excluding the 11kV incoming feeders from.
- For 11kV conveyor board 1A, 1B, 2A, 2B and all sub stations on ash disposal maintenance, the *Contractor* is responsible for arranging the high voltage permits.
- All the UPS on the plant to be service on a three monthly bases
- The transformers are fed by an 11kV line from the New Denmark Mine and Tutuka Power Station grid, and reduced to 3,3kV, 400 & 380V from the transformers.

Power supplies to all connections as above are:

- Kept free of dust; and cleaned.
- Cleaned

Junction boxes

The *Contractor* inspects and ensures that:

- All junction boxes are kept closed at all times.
- Junction boxes are cleaned weekly.

- The hinges and locking devices are maintained and if found defective, repaired immediately.

Lighting

The *Contractor*:

- Replaces defective lights on a daily basis.
- Keeps continuity when replacing lights using the same type throughout the plant.
- Verifies and maintains the OHSA required light intensity (lux) per area every 6 months.
- Cleans all lighting boards;
- Cleans all light fittings and lenses.

Pull key and trip wire system

The *Contractor* inspects and ensures weekly that:

- lids on switches remain on tightly;
- switches are sealed to prevent dust or water from entering the electronic circuits;
- pull key switches are mechanically and electrically in working condition; and
- Pull wires are well maintained and can move freely.

Rotating speed sensors/switches

The *Contractor* inspects and ensures weekly that:

- The friction slots on the pickup wheels are clear of dust build up and debris, to ensure wheel traction on the belt at all times.

Belt alignment switches and Belt rip switches

The *Contractor* inspects and ensures weekly the functionality of:

- Mechanical rollers
- Activating arms
- Spots on belts that can damage this equipment are immediately repaired.

Block chute detectors

The *Contractor* inspects and ensures that:

- The sensors; and pickups are cleaned on a weekly basis to prevent trips of the belt; and that
- The functionality of the pick-ups and sensors are maintained at all times.

Belt tension detector

The *Contractor* inspects and ensures that:

- The belt tension detector is functional at all times and inspected weekly.
- The connector between the cell and the transmitter is dry and dust-free at all times; and
- An approved calibrating laboratory (for example, SA Scale) calibrates the load cell used to measure the tension of the belt;
- The test is conducted every 12 months;

Protections

The following are examples of protections:

Alarm/hooters, trip wires, under-speed switches, detrain switches, block chute detectors, emergency stops, local stops, take-up car limits , hydraulic coupling limit switches and belt rip switches

In addition to the monthly test for correct operation, the *Contractor* inspects and ensures that:

- All above plant are operational at all times;
- Repaired immediately when defective;
- Cleaned;
- The status is recorded on a weekly basis.

All high voltage protection will be done by PTM.

Floppable Chutes (2-ways, 3-ways and Shuttle) / Moveable Chutes

The *Contractor* inspects and ensures that:

- Actuators are in good operational condition; and
- Actuator limits are operational and functional.

Conveyor belt scale

The *Contractor* inspects and ensures that:

- Scales are in good operational condition; and
- Scale readings are operational and functional.
- Weigh flask test on scales to be done two weekly.
- Yearly Weigh flask calibration on conveyor 11A&B.

Magnet conveyor system

The *Contractor* inspects and ensures that:

- Magnet conveyor systems are in good operational condition at all times.

- Repair immediately when defective.

High mast lights

The *Contractor* inspects and ensures that:

- All lights on the high masts are working and repaired when defective.

DB Boards

The *Contractor* inspects and ensures that:

- All DB Boards are on list, operational and functional at all times.
- Repair immediately when defective.
- Carry out earth leakage test monthly on board and the status is recorded.
- All DB Boards must have COC certificates and copies display in the DB Board.

LV Equipment

The *Contractor* inspects and ensures that:

- All LV Equipment is on list, operational and functional at all times.
- Repair immediately when defective.
- Do monthly inspection on all LV Equipment and the status is recorded.

Sub stations

The *Contractor* inspects and ensures weekly that:

- The areas are cleaned;
- Lights are maintained.

The *Contractor*, every 3 months, inspects and cleans vacuum breakers (11kV and 3,3kV breakers) and when doing so, **obtains a permit to work and ensures that the vacuum breaker is racked out when the front panel is removed.**

The *Contractor*:

- cleans the breaker motor;
- visually inspects for the appearance of moisture in the vacuum tubes; glossy silver colour for normal conditions and milky white or transparent colour indicating deterioration; and replaces it if defective;
- inspects all insulated parts for cracks;
- inspects current carrying components for corrosion and cleans if corroded;
- tightens all connections and bolts;

- inspects mechanism for free moving parts;
- inspects and cleans auxiliary contacts;
- inspects electrode for wear;
- inspects cable connections at back of panels for security;
- cleans panel, (excluding PLC panel);
- Visually inspects all contactors and relays for free movement.

Instrumentation

The *Contractor* maintains all instrumentation, indicators, pressure switches, and flow switches on the plant.

Truck Weight bridge

The *Contractor* inspects and ensures weekly that:

- Clean all panels
- Inspect cable connection at back of panels for security.
- inspects current carrying components for corrosion and cleans if corroded;
- Inspect and make sure all signal indications are working.
- Inspect UPS system

Batteries and UPS systems

The *Contractor* inspects and ensures Monthly that:

- Batteries are correct.
- Chargers are correct.
- The indications on the UPS are correct and working.

Air conditioners

The *Contractor* inspects and ensures Monthly that:

- Filters are clean.
- Gas pressure check.
- All repair on air conditioners

Transformers

The *Contractor* inspects and ensures Monthly that:

- Silica Gel
- Temperature

The *Contractor* inspects and ensures two yearly that:

- Condition of the insulation
- HV bushings
- Balance line connections
- Oil fill
- Valves
- Transformer venting
- Bucholz relay tests
- Temperature gauges
- Transformer earthing

The Contractor provides the routine maintenance and repairs

Mechanical maintenance – Conveyor belts

The *Contractor* provides the routine mechanical maintenance, repairs and inspections in accordance with the details and inspection frequencies indicated below.

Gearboxes

The *Contractor* inspects all gearboxes weekly for;

- Oil leaks
- Excessive operating temperature
- Loose bolts
- Vibrations
- Excessive noise
- Worn seals;
- Defective bearings; and
- Defective gears.
- Oil levels
- Breather condition

The *Contractor* performs condition monitoring of all gearboxes, performs fault diagnosis when Faults are detected; and tops-up oil, whenever necessary and do alignment.

Fluid Drive (Constant-Fill) / Pin and fluid drive couplings

The *Contractor* inspects weekly for:

- Uneven running due to damaged components
- Uneven running, due to alignment and bearings
- Oil levels of tank
- Tank breathers
- Inspect cooling system for any signs of oil leaks or coal build-up
- Oil leaks
- Inspect for coal build-up under the guard

The *Contractor* inspects monthly for:

- Removes covers and inspect for faulty couplings

- For non-functional fusible plugs, due to low oil level or overload.

The *Contractor*:

- Realigns where necessary; and
- Replaces bearings, where necessary.

Holdback Units

The *Contractor* daily: Performs visual inspections

- Inspects for oil leaks; and
- Visually inspects backstops and labyrinth seals for damages and or faults;

The *Contractor*, once a monthly:

- Replaces seals, where necessary;
- Does oil changes to the unit;
- Greasing of bearings

The *Contractor* monthly cleans internals with degreasing agent and inspects stop lugs for wear/damage. If lugs are damaged/worn, replace with new. (Never use grease for internal lubrication of backstops.)

Conveyor Idlers

The *Contractor* daily inspects for:

- Bearing noise
- Worn shells
- Worn end caps and spindles
- Broken bases
- Material build-up
- Clean dirty areas
- Replaces worn or defective idlers

Idler frames are stencil marked by the *Contractor* for unique identification for idler replacement purposes.

Wire Ropes

The *Contractor*, every two weeks:

- Inspects monthly for fibre damage and corrosion.
- Cleans and grease.
- Replaces elongated or worn rope, when the diameter of the rope is reduced by 6%.

Pulleys

The *Contractor*, twice a month, inspects for:

- Noisy bearings or bearings running at high temperature.

- Coal build-up on pulley

The *Contractor*:

- Replaces worn bearings, faulty seals and replaces pulley if necessary.
- If the lagging is damaged it needs to be replaced. Lagging is done by a separate *Contractor* appointed by the *Service Manager*. The *Contractor* prepares the pulley for lagging replacement.
- The *Contractor* lubricates all bearings in accordance with the accepted planned maintenance schedule.

Routine Belt Maintenance

NOTE: The *Contractor* visually inspects all conveyor belts weekly.

The following faults need special attention:-

- Belt misalignment: In such event the *Contractor* immediately trains the belt.
- Splice separation: In such event the *Contractor* immediately adjusts the scraper or repairs the splice. If splices start to pull apart, the complete splice must be replaced.
- Other belt damage. The root cause needs to be determined before additional belt damage occurs.
- Belt Scanning - Non-destructive testing needs to be done yearly on all the steel cord belts. The *Contractor* requests the tests that will be done by a separate contractor appointed by the *Service Manager*. The *Contractor* will request the recommended repairs to be done after the report was received and evaluated.

Belt Splicing

- All conveyor belt splices are done by a separate contractor appointed by the *Service Manager*.
- All conveyor belt splicing is subject to accepted industry standards, the standard and procedure employed being subject to acceptance by the *Service Manager*.
- The *Contractor* will carry out all the preparation work until the correct position and length is available for splicing. The *Contractor* will carry out quality control on the agreed format. Each splice will be marked with a unique number which will be used for reference in the Splicing Register kept and maintained by the *Contractor*. The *Contractor* provides the format of the register for acceptance by the *Service Manager*.
- Damaged splices need to be cut out and kept for analysis purposes. Damaged or cut out conveyor belt pieces must be removed by the *Contractor* and taken to the *Employer's* facility for scrap conveyor belt.

Scrapers

- The *Contractor* inspects weekly for improper belt cleaning by scrapers.
In such an event the *Contractor*:-
 - Immediately replaces the blade when worn/damaged;
 - Adjusts blade tension.
 - Ensures when tensioning the scraper that damage to conveyor belt is avoided.

Rubber skirting

- The *Contractor* inspects weekly for material build up and gaps.

In such an event the *Contractor*:

- Adjusts skirting to prevent spillages or replace damaged skirting rubbers.

Chutes

The *Contractor* inspects on a weekly basis:

- For coal build-ups.
- Inspects chute liners/tiles for wear and erosion and repairs if necessary.
- Inspects for missing liner/tiles fastener caps and replaces if necessary.
- Unblocks chutes and clears all blockages and coal/ash build-ups.
- Inspect the sump at the MTH.

Counter weight (Tension Station)

The *Contractor* inspects on a daily basis for failures;

- Cleaning around the take-up area

The *Contractor* inspects on a weekly basis for failures;

- Coal build up along the take-up cart
- Cables for any damage
- Take-up cart movement. Inspect wheels
- Inspect brake drum system

In such an event the *Contractor*:

- The *Contractor* repairs any failures.
- The sheave wheels are greased fortnightly.

The *Contractor* inspects on a monthly basis for failures;

- Grease all the bearings on the take up trolley

Pulley nip guards

The *Contractor* inspects on a weekly basis:

- That all nip guards are in position and clearly marked.
- The guard condition - repaired when loose or broken.
- That all guards are properly secured and that guards comply with legal requirements.

Coal feeders within CSY and CHP

The *Contractor* inspects on a weekly basis:

- All components on coal feeders including grey feeders, buffalo feeders and any other additional feeders that may be installed in the plant for coal supply
- Conducts routine greasing and belt or chain tensioning on the feeder equipment and/or alert the Employer of critical condition that may require appointed third party contractor and/or OEM for the affected plant

- Performs condition monitoring on feeder equipment such as chain measurements and belt conditions unless otherwise instructed by the Employer
- Ensures plant cleaning activities are raised accordingly to ensure optimum plant operation by raising notifications for relevant appointed parties to attend

Coal sampling plant

The Contractor inspects on a weekly basis:

- Conduct routine inspections and required PMs on coal sampling plant ensuring its availability and operability
- Conduct necessary repairs to ensure compliance with the sampling standard

The Contractor inspects on an annual basis:

- Prepare the plant for the required annual Bias Test as and when required by the Employer
- Avail required resources for the sample collection, labeling and packaging as directed by the senior Metallurgist Engineer provided and/or appointed by the Employer
- Transport and deliver the collected samples to an appointed authorized coal lab for analysis appointed on request for the Employer or by the Employer

Terrace CHP /Stockyard conveyor belt and drive house cladding

The *Contractor* inspects on a weekly basis:

- All the cladding and see-through plates. The *Contractor* arrange for repairs by a separate contractor appointed by the *Service Manager*.
- All maintenance activities on the above mentioned equipment available in the CHP i.e gearboxes, pulleys, tension weight or take ups e.t.c

Cladding is removed to do maintenance work on plant areas, which are difficult to access, and is replaced immediately after completion of the work. This is done by the separate contractor appointed by the *Service Manager* (This excludes the dog sheeting).

Hydraulic Power Packs

The Contractor inspects on a weekly basis:

- Conduct weekly inspections on all hydraulic pipes and connections to ensure no leaks occur
- Perform all required PMs for the allocated plant for mechanical scope

Walkways

The *Contractor* inspects on a weekly basis:

- All walkways, platforms and handrails. Repairs must be done immediately.
- All drip trays to be inspected and repaired or replaced when necessary.

Safety signs

The *Contractor*:

- Ensures that all safety loading signs, and general safety signs are visible and clean at all times,
- Ensures that the “NO UNAUTHORISED ENTRY” signs at drive houses are displayed at all doors, and
- Repaints or refits signs whenever damaged or faded.

Cleaning

The contractor inspects daily the spillages on the plant and attends to them immediately:

- The cleanliness under the belts
- The cleanliness at the yard conveyor sump area
- The cleanliness at the MTH and the sump
- The cleanliness at the sample plant
- The cleanliness on all the V-ploughs at the tail end of the belts.

Access Control

The *Contractor*:

- Ensures that all the main doors at the bottom and the top levels of drive houses are always closed and kept locked when no work is in progress;
- Ensures that duplicate keys are available in the control room at all times.

Magnet Conveyor system

The *Contractor*:

Ensures that all magnet conveyor systems are operational and functional at all times.

The *Contractor* inspects all magnet conveyor systems weekly for;

- Belt alignment
- Gearbox oil leaks
- Plummer block and bearing
- Conveyor belt and clips and replaces:
- Retrain the belt.
- Replace worn seals
- Replace of damaged plumber blocks and bearings.
- Replace damaged belt or clips.

Any repairs, scarper cleaning and adjustments, idlers' replacements, skirtings' replacements, plumber blocks greasing, pulley laggings replacements, belt replacement etc should be planned with the relevant Production Manager.

Rigging Equipment

The Contractor:

- Ensure that all rigging equipment are operational and functional at all times.
- Do monthly inspection on all lifting equipment.
- Yearly load test on all lifting equipment will be done by a separate contractor appointed by Employer
- Repair all defective equipment.

Drainage systems:

The contractor will do the following 3 monthly inspections:

- Inspect and clean drains (open and underground drainage systems)
- Open drains from MTH to Steinmuller Dam to be dredged and cleaned once per year.
- Open drains from Silo Sumps to Ash and Coal Settling Ponds (South Settling Ponds) to be dredged and cleaned once per year.
- Drainage along the Silo Inclined 6A&B conveyor belts to be dredged and cleaned once per year, including dredging underneath the overland portion of these conveyor belts.
- Ensure drainage system around Buffalo feeders are open

Mechanical maintenance- Sample plant

The *Contractor* inspects the sample plant during every shift:

- Cleaning of all chutes, transfer points and scraper areas
- Confirm sample cutter movement on primary cutter, secondary cutter and moisture cutter
- Lubrications
- Pulley cleaning and re-lagging,
- Idler inspection and replacements,
- Skirting thickness measurement and replacements,
- Scraper adjustment and repairs.
- Cleaning of the 4-way splitter
- Ensure the sampling bins are in position
- Leaking chutes or spillages

Any repairs, scarper cleaning and adjustments, idlers' replacements, skirtings' replacements, plummer blocks greasing, pulley laggings replacements, belt replacement etc should be planned with the relevant Production Manager.

Mechanical Maintenance- Stacker/reclaim machine

The *Contractor* inspects the stacker/reclaim machine during every shift

- Chute cleaning,
- Plant repairs,
- Lubrications,
- Verify gearbox and fluid coupling oil levels and top up accordingly.
- Inspect belt for misalignment
- Check chute liner plates for wear and adjust baffle plates
- Inspect take-up system gearbox for oil level
- Conveyor belt replacements, extensions, splicing, inserts and belt repairs

- Pulley cleaning and re-lagging,
- Idler inspection and replacements,
- Skirting thickness measurement and replacements,

The contractor will do the following monthly inspection:

- Inspect bucket wheel for wear on the buckets
- Inspect the rails and ensure they are clean
- Fill and inspect the automatic greasing system
- Grease slewing gear and bearing
- Inspect chutes for wear and repair accordingly

Yearly major service required on the stacker reclaim machines.

The testing of structure welding, pin joints and bogie wheel system must be performed once per year.

Any repairs, scarper cleaning and adjustments, idlers' replacements, skirtings' replacements, plumber blocks greasing, pulley laggings replacements, belt replacement etc should be planned with the relevant Production Manager.

Mechanical maintenance- Mobile scraper chain feeders (Buffalo feeders):

The contractor will do the following inspections during every shift:

- Cleaning of chutes and surrounding area
- Inspect automatic greasing system and refill grease
- Inspect chain condition at head end
- Inspect drive for oil leaks and abnormal noises

The contractor will do the following inspections Weekly

- Inspect sprockets and shafts on head and tail end
- Inspect chain for any damage and excessive wear
- Verify chain tension

Mayor service required every 1 000 000 tons conveyed.

Any repairs, scarper cleaning and adjustments, idlers' replacements, skirtings' replacements, plumber blocks greasing, pulley laggings replacements, belt replacement etc should be planned with the relevant Production Manager.

Mechanical maintenance- Grey and Mamba feeders:

The contractor will do the following inspections Weekly

- Test run system
- Inspect for any damaged idlers
- Inspect drives for oil leaks
- Repair plant as required

Potable water system:

The contractor will do the following 3 monthly inspections:

- Inspect along area of pipe lines for any sign of water leaks
- Repair all leaks
- Inspect pumps

In terms of spares the contractor is responsible for ensuring that the spares are levelled up and all the spares available are readily available and in good working conditions whenever required. Eskom has a routable process where the contractor can be very aware that the spare is no longer repairable. If the spare is no longer repairable or the cost of repairing is 70% or more than one of the new spare, the new spare must be bought based on routable process.

The contractor shall review the current recommended spares and advise where there is a need to adjust the spares required to ensure that CSY Plant Facility is reliable, available and maintainable to suit operating and maintenance philosophy. The contractor shall have a capability of conducting reliability centre maintenance where the contractor will adhere to automated preventative maintenance stored in the system.

If there is any steel work repairs and steel sections, replacement need on the conveyors and stacker reclaim system, mobile feeders then the contractor need to do these steel work repairs.

The contractor is also responsible for any lifting which may be required during heavy equipment removal, handling and installation.

1.1.2 Quality Control

The contractor shall prepare a method statement for each and every to be executed and quality control document which are required to be sent for approval before any work can be executed. The Eskom Contract / Services Manager of the area shall give a good ahead for any repair and installation that will be required.

All conveyor belt splicing shall have quality control plan and be inspected by Eskom Contract Supervisor to ensure the quality work of the splice. The bolts and nuts shall always meet the design specification. If the contractor is not sure about the specification, he/she should consult with the Eskom Engineer of the area. All splicing of the belt shall require the splicing procedure and quality control plan to be sent for Eskom review and approval.

All welding repairs and structural repairs must be done in accordance to Eskom latest version of welding rule book and shall be signed of by the Welding Coordinator or the Structural Engineer. All design standards must be adhered to and Welding Procedure Specification (WPS) must be approved. Welding Procedure Specification (WPS) must be supported by welding qualification records and welder's qualifications.

The Maintenance shall include as a minimum the following activities and interventions:

Approval of Method Statement and quality control plan – hold point for relevant plant Engineer (s).

Procedures, Guidelines & Other Documents

- Quality Control Plan.
- Method Statement.
- Splicing procedure submitted by the contractor.

1.1.3 Equipment and Tools

The Contractor to provide the following tools and equipment:-

- Torque wrenches
- Hydraulic pullers , 50 tons and 100 tons
- Hydraulic power pack with four 100 ton jacks
- Jacks, 25 mm, 50 mm, 100 mm,200mm and 300 mm

- x Mobile Welders on trailers set.
- Generator 220/380V , 60 A
- 4 x 200 Watts Spot lights on stands
- 15 ton crane to handle heavy equipment.
- 4 – ton truck to transport any equipment on site.
- x trailers for idler handling
- x belt stands, two 10 tons and two 4 tons
- Angle grinders.
- Laser Alignment equipment and clock gauges for conveyor drives alignments. (Pruftechnik)
- Two way radios with batteries and chargers.
- 2 x Long feeler gauges, 729865 B for pulley bearings
- 2 x HN 4-16 Hook spanner adjustable for pulley bearings
- 2 x TMFN 23-30 Impact spanner for pulley bearings
- 2 x TMFN 30-40 Impact spanner for pulley bearings
- 2 x TMFN 40-52 Impact spanner for pulley bearings
- 2 x TMJL 100- Hydraulic pump 100 MPa for pulley bearings
- 2 x 7298619 E – Hydraulic pump 150 MPa for pulley bearings
- 2 x Copper hammer, THO527 – 0160 – 25 mm for pulley bearings
- 2 x Copper hammers, THO527 – 0161 – 32 mm for pulley bearings
- 2 x Lock spanner set, TMHN 7 for pulley bearings
- 2 x Hydraulic nut, HVM 34E for pulley bearings
- 2 x Hydraulic nut, HVM 36E for pulley bearings
- 2 x Hydraulic nut, HVM 38E for pulley bearings
- 2 x Hydraulic nut, HVM 44E for pulley bearings
- 2 x Hydraulic nut, HVM 48E for pulley bearings
- 2 x Hydraulic nut, HVM 52E for pulley bearings
- 2 x Axial lock nut socket, TMFS 11 for pulley bearings
- 2 x Axial lock nut socket, TMFS 16 for pulley bearings
- 2 x Axial lock nut socket, TMFS 17 for pulley bearings
- 2 x Axial lock nut socket, TMFS 20 for pulley bearings
- 750 kg chain blocks per artisan.
- 2 x Mobile cutting torch trailers with spare wheels and fire extinguishers.
- Belt clamps. 4 x 750 mm, 4 x 1200, 4 x 1800.
- HDPE class 16 pipe welding machines, from OD 63 to OD 355.

1.2 Employer's requirements for the service

The coal stock yard requires maintenance as per maintenance strategy and philosophy. The existing CSY is over 34 years old and requires more attention and care to ensure that reliability and availability are kept intact. The maintenance of the plant must consider, but not be limited to, the following:

- Three stacker reclaim machines: Currently in a very poor condition and only one of the three is operational.
- Three Buffalo feeders (Mobile scraper chain feeders). Currently one is out of service
- Two Grey feeders
- One Mamba feeder
- Three-yard conveyors (18-1; 18-2; 18-3)
- **Overland conveyors;**
- A- line consisting of conveyor 15A, 16A and 17A
- B- Line consisting of conveyor 15B, 16B and 17B

- Conveyor 12A&B, 13A&B and 14A&B
- Mine conveyors 11A&B
- Sample plant
- Scales on conveyor 11,15 and 17
- Conveyor 22 and 23 leading to the weigh bin
- All transfer point chutes
- Mine transfer house sump system
- Drainage system

General

- The *contractor* must have enough artisans and labours to maintain the inside and outside running plant.
- The Contractor to ensure each Artisan to have Complete toolbox set per artisan as per Eskom standard . This will be at Contractor's own cost. Refer to artisan toolbox list.
- The *contractor* is also responsible for the general site cleaning and workshop cleaning.
- The *contractor* must have at least eight responsible persons who can take out plant isolation permits and he/she must supply sufficient manpower for standby purposes. The working hours during plant breakdowns must not exceed the hours as specified by law. The *contractor* must be able to replace tired workers.
- There should be sufficient personal that the *Contractor* can work at four places at the same time. Each team needs to work independently from other teams by have its own responsible person and artisans. The artisan of each team will communicate among the different teams and with operating and to his/her supervisors with two-way radios. The *contractor* should have two supervisors.
- The *contractor* is responsible to dispose scrap metal in the correct bins and the spares and tools have to be safe keeping in the stores in a neatly manner.
- The contractor personal has to be transported in buses with safety belts and the *contractor* may not transport his personal behind bakkies (LDV).
- The *contractor* must perform tool box meeting every morning before any work can start and the contractor must also inspect the tools for safe usage.
- The *contractor* is to perform a risk assessment before any task is performed and he/she is to refer to the attached "Safety and health & environmental requirements for contractors" to insure safe working environment.
- The *contractor* is responsible for lifting slings and chain blocks inspection. All lifting equipment must be inspected by Eskom and the contractor is responsible to take it to the riggers' work shop for testing and inspection.
- In case for replacements of any gearbox, pulley and fluid drive, the *contractor* must take the defected gearbox, pulley or fluid drive to Eskom's Main Stores for repairs. All spares, including belts must be handled by the *contractor*. The contractor may use the crane with the operator and the tractor and trailer from Eskom. He/she has to make all the arrangements.
- Contractor to provide rigging equipment up to 15 Tons
- *Contractor* to provide Hydraulic bearing puller on an "as and when required" basis to perform work
- Alignment Technicians must be able to perform laser alignment and provide certificates after every alignment activity
- All work will be issued via SAP Maintenance system.
- The *Employer's* Lifesaving rules, Safety rules / procedures to be adhered to.
- Standby crew to attend to breakdowns on an "as and when required" basis.

- All Artisans to be authorized in terms of Plant Safety Regulations (PSR) within 6 months after the contract has been awarded.
- The *Contractor* must provide Quality Control Plan documents for approval by *Service Manager* prior to performing any activity.
- The *Contractor* to provide proof of experience (CVs) and qualifications for all personnel.
- The Artisan must have a Red Seal qualification (section 28 will not be allowed)
- In the case of absence for more than two days (Sick or Annual Leave) a substitute must available to maintain the plant.
- In the case where one or more employees of the *Contractor* are requested to leave site for other reasons than Annual leave or negotiated leave with the *Service Manager*, The personnel must be replaced immediately with the same skill level, qualifications and experience
- Rigging tools and electrical equipment to be inspected regularly and filed as per the OHSACT requirement.
- All PPE to be provided by *Contractor*.
- Good housekeeping at all times. The *Contractor* must clean and remove all debris after completing a task.
- All communications must be printed and filed on *Service Manager's* file.
- Timesheets to be logged and signed by Contract / Services *Manager* and *Contractor*.
- Daily attendance register must be submitted on a daily basis to the Contract Supervisor
- *Contractor's Site Manager* to provide weekly plant status report
- Provide SANS approved Safety harnesses as per the Safety Requirements of the *Employer*.
- Yearly induction must be attended all personnel.
- Workshop portable tools to be provided by the *Contractor*.
- *Contractor* to provide QCP's and programme
- Safety Officer to provide monthly safety report

PERMITS

- All *Contractors* will ensure that they are informed of all the requirements of Eskom's Plant Safety Regulations and ORHVS and that they are at all times comply to the requirements of these Regulations.
- All Supervisors of contracting companies, who are directly involved with Eskom's Permit to Work System, shall be trained and successful completion of Tutuka's authorization / evaluation process, and must be authorized as Responsible Persons.

The Responsible Person shall ensure that:

- The conditions of permits and cautionary notices are strictly adhered to.
- The lockout procedures, mechanical as well as electrical, are strictly adhered to and any deviations shall be corrected immediately.
- The safe work procedures as laid down by Tutuka Power Station and as determined by the Risk Assessment, shall be followed.
- The workers register and cautionary notices are discussed daily with workers

1.3 Interpretation and terminology

The following abbreviations are used in this Service Information:

Abbreviation	Meaning given to the abbreviation
AP	Accounts Payable
BBBEE	Broad Based Black Economic Empowerment
CC	Cost Centre
CHP	Coal Handling Plant
COC	Certificate of Compliance
CPA	Cost Price Adjustment
CSY	Coal Stock Yard
HDPE	High Density Polyethylene
HV	High Voltage
ISO	International Organization for Standardization
LAR	Local Access Register
LDV	Light Delivery Vehicle
OBL	Outside battery limits
ORHVS	High Voltage Regulations
OSHACT	Occupational Health and Safety Act
PIR	Performance Improvement Report
PPE	Personal Protection Equipment
PPFA	Preferential Procurement Policy Framework Act
PPPFA	Preferential Procurement Policy Framework Act
PSR	Plant Safety Regulations
QCP	Quality Control Plan
QMS	Quality Management Systems
SANS	South African National Standard
SAP	System Application Products
SDL&I	Supplier Development Localization and Industrialization
SHEQ	Safety, Health Environmental and Quality
SOW	Scope Of Work
TBA	To Be Announced
TBC	To Be Confirmed
WWM	Work Week Management

2 Management strategy and start up.

2.1 The *Contractor's* plan for the service

- To be discussed before each task can be carried out between the *Contractor* and *Employer*.
- Programme to be supplied on request on a signed hard copy as well as a soft copy, see Scope of Work.

2.2 Management meetings

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

Title and purpose	Approximate time & interval	Location	Attendance by:
Risk register and compensation events	TBC	TBA	TBC
Overall contract progress and feedback	TBA	TBA	<i>Employer and Contractor</i>

Meetings of a specialist nature may be convened as specified elsewhere in this Service Information or if not so specified by persons and at times and locations to suit the Parties, the nature and the progress of the service. Records of these meetings shall be submitted to the *Service Manager* by the person convening the meeting within five days of the meeting.

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

- Attendance of meetings as required by *Service Manager* such as:
 - Tutuka Power Station *Contractors* Safety Meeting (monthly)
 - Departmental Safety Meetings (monthly)
 - The *Employer's Contractor's* Monthly Safety Meeting
 - Section daily meetings
 - All Assessment meetings
 - Outage meeting as required
 - Any meeting requested by the *Employer* or *Contractor*

2.3 *Contractor's* management, supervision and key people

1 x Site Manager
 2 x Supervisors,
 2 X Technicians (1 x Electrical 1 x Control and Instrumentation)
 1 x Safety Officer,
 15 x Artisans qualified Fitters, Each artisan with PSR. (belt training, bearings, hydraulics, 5 ton rigging, belt scrapers, gearboxes, couplings, fluid couplings, idlers, stacker/spreader
 2 x Mechanics
 2 x Electricians
 2 x Riggers with a red seal,
 1 x Boiler Makers
 1 x Welders

15 x Semi-skilled,
12 x Artisan Assistants,
1 x Planner

2.4 Provision of bonds and guarantees

- N/A

2.5 Documentation control

- Each instruction, certificates, submission, proposal, record, acceptance, notification, reply and other communication which this contract requires is communicated in a form which can be read, copied and recorded.
- Writing is in the *language of this contract*.
- Monthly and weekly reports to be discussed compiled and handed in to the *Employer's* Supervisor and *Service Manager* (to be announced by the *Employer*).
- All communications must be printed and filed in the *Service Managers* file.

2.6 Invoicing and payment

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

The *Contractor* shall address the tax invoice to

- Name and address of the *Contractor* and the *Service Manager*;
- The contract number and title;
- *Contractor's* VAT registration number;
- The *Employer's* VAT registration number 4740101508;
- Description of service provided for each item invoiced based on the Price List;
- Total amount invoiced excluding VAT, the VAT and the invoiced amount including VAT;
- Purchase order number
- CPA calculation sheet
- CPA calculation sheet and the Invoice for CPA (with the GL Account Number and the Cost Center on the Invoice) to be send to the financial department as per the *Employer* Invoicing procedure / instruction
- Invoices and a Copy of the Assessment with a Service Entry number to be send to the financial department as per the *Employer's* Invoicing procedure / instruction

2.7 Contract change management

- Where the *Contractor* does Name Changes, Mergers, Acquisitions, and Cessions the *Employer's* procedure must be followed. (**Eskom Procurement and Supply Management Procedure**)
- In a case where one *Contractor* takes over from another *Contractor*, the Site *Service Manager* must be notified in writing immediately.
- The *Contractor* does not cede, delegate or assign any of its rights or obligations to any person without the written consent of the *Employer*.
- Changing the Service Information
- Access
- Provision by the *Employer*
- Stopping work
- Work of the *Employer* or others
- Reply to communication
- Changing a decision

- Withholding acceptance
- Delayed tests or inspections
- Change of Affected property
- Materials, facilities, etc. for tests
- *Employer's* risks
- Assumption about Compensation Events
- *Employer's* breach of contract

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

- N/A

2.9 Insurance provided by the *Employer*

As per Z 12 of this contract

2.10 Training workshops and technology transfer

- PSR and ORHVS (access authorisation) training and Authorisation required for the artisans as per this contract. All necessary Safety training needed or required for PSR
- All training required by the *Employer* will be on the *Employer's* account. Training will be at the *Employer's* cost for the first set of *Contractor* employees (relevant training as per *Employer* discretion). Thereafter training of any new employees or repeat training for current employees who failed to pass first attempt will be at the cost of the *Contractor*.
- *Contractor* staff to be Authorised and found competent in writing to work at Heights
- *Contractor* to provide plan on how his personnel will be divided to attend training and go on leave
- *Contractor* must be trained on cranes and have crane licence
- *Contractor* to be trained and licensed to operate aerial platforms.

2.11 Design and supply of Equipment

- *Contractor* to provide all tools and equipment necessary to perform the required *service*.
- All test Equipment must be calibrated as per the *Employer's* requirements; copies of calibration certificates must be handed in to *Service Manager*.
- *Contractor* to provide its own power tools. Minimal power tool requirements are 2 x drilling machine (Industrial type) and 4 x electrical blowers and 1 x small angle grinder.
- *Contractor* to supply own 220 VAC extension leads
- *Contractor* to provide its own Test equipment such as meggers (Insulation testers), Multi meter, Earth Leakage Tester, Amp probe (ammeter / clamp-on meter).
- *Contractor* to provide its own Tools; must include Insulated tools, rubber mats and minimal of 4 (four) A –Frame aluminium ladders.
- All equipment and tools needs to be marked and a list off all tools with the identification number to be provided to the *Service Manager* when entering site.
- All lost equipment and tools to be declared to the *Service Manager* and full details of incident.

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

2.12.1 Equipment

- N/A

2.12.2 Information and other things

All reports / documents to be compiled, filed, discussed and handed over to the *Employer* on a weekly basis (the day in the week to be announced by *Employer*) and at the end of the service.

The *Contractors* safety file will be handed over to the *Service Manager* and will be saved for 40 Years after completion / termination of the contract

2.13 Management of work done by Task Order

- A Task Order or Formal Letter is the instruction to commence work.
- All work will be issued on a Task Order system. The Work Order, Purchase Requisition and Purchase Order will be created via the SAP PM system.
- No work shall commence until a Task order is issued, accepted and signed by both the *Employer* and *Contractor*
- Completion certificate to be issued after task order is completed and Assessment certificate to be completed

3 Health and safety, the environment and quality assurance

3.12 Health and safety risk management

SHEQ Policy

Eskom SHEQ Policy

The *Employer* has made a commitment to conduct business with respect and care for people, the environment and assets and that no operating condition or urgency of service justifies exposing anyone to negative risks arising from the *Employer's* business.

Compliance with the *Employer's* SHEQ Policy and applicable regulations is the responsibility of every employee and *Contractor*.

Contractor SHEQ Policy

All *Contractors* shall have an OHS policy signed by the CEO of the *Contractor* and prominently displayed where employees normally report for duty.

Signed copy of the OHS policy shall form part of the SHEQ file.

SHE PLAN REQUIREMENTS:-

- Principal *Contractors* shall develop a suitable and sufficiently documented site specific SHE plans, based on the scope of work and client SHEQ specification.
- The SHE plan must be pre-approved by the client for implementation. The principal *Contractor/Contractor* has a responsibility to send the SHE plan to the client for approval prior to commencement of work.
- The SHE plan must be applied from the commencement of and for the duration the construction work, which must be updated/reviewed as the work progresses/changes.

When a principal *Contractor* intends appointing *Contractor*, the principal *Contractor* shall ensure that the *Contractor* provides and demonstrate a suitable, sufficiently documented and coherent site specific health and safety plan, based on the client's SHEQ specifications and scope of work

3.1.1 Health and Safety Arrangements

The *Contractor* ensures that all his personnel attend a Health and Safety Induction Course prior to contract starting date, and annual re- induction. The Induction Course is presented by the *Employer's* Safety Risk Department at Tutuka Power Station. Arrangements are made with Safety Risk Management, by the *Contractor*.

The *Employer's* Safety Risk Manager visits and inspects the *Contractor's* workplace or site yard and the working areas to ensure that tools; machinery and Equipment comply with the minimum safety requirements.

The *Service Manager* may instruct the *Contractor* to stop work, where the *Contractor's* personnel fail to conform to safety standards or contravene health and safety regulations. Such stop-work order is not a compensation event. The *Service Manager* may instruct the *Contractor* to discipline his employees and to submit a disciplinary action report to the *Service Manager*. The *Contractor* implements additional health and safety precautions where necessary.

Health and safety

The *Contractor* complies with the Occupational Health and Safety Act 85 of 1993, as well as per the *Employer's* procedure as stipulated below:

- SHEQ Policy 32-727
- The *Employer's* Procurement and Supply Chain Management Procedure 32-1034
- SHE Requirements for the *Employer's* Commercial Process 32-726
- *Contractor* Health and Safety Requirements 32-136
- Integrated SHE Organization; Roles and Responsibilities and Statutory Appointments 32- 296
- Live-saving Rules 240-62196227
- Working at Heights 32-418
- The *Employer's* Vehicle Safety Specifications 32-345
- Tutuka *Contractor* SHEQ Specifications 14RISK SRM - 084

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 *Employers* 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 OHSACT;

Issue the *Contractor* with a work stop order or a compliance order should *Employer* become aware of any unsafe working procedures or conditions or any non-compliance with the Act, Regulations and Procedures by the *Contractor* or any of its employees, sub-Contractors or agents.

The *Contractors* Health and safety file is to be submitted for approval to the *Employers* Safety Officer before contract commencement.

All work stoppages called by the *Employer* to be adhered to

Contractor is Responsible to ensure that his Letter of Good standing is valid at all times as stipulated in the construction regulations point 7 (C) (iv) and the specifications 2.5.2 (iv) and 3.10.. *Contractor* will not be allowed on site if his letter of good standing is not valid

3.1.2 First aid and fire fighting

Adequate first aid and fire fighting equipment to be provided by the *Employer*
All *Contractor* personnel must have First aid and fire fighting training

3.1.3 Fire Precautions

Any tampering with the *Employer's* fire equipment is strictly forbidden.

All exit doors, fire escape routes, walkways, stairways, stair landings and access to electrical distribution boards is kept free of obstruction, and are not used for work or storage at any time. Fire fighting equipment must remain accessible at all times.

The *Contractor* takes the necessary action to safeguard the area to prevent injury and the spreading of the fire.

3.1.4 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.

3.1.5. Fire protection

The provision of the *Employer's* standard NWS 1494 "Fire Prevention and Protection of *Contractor's* premises at New Works sites" shall be applicable.

3.1.6 Safety and incident prevention

The *Contractor* shall implement and maintain an active Site Safety and Accident Prevention Programme in accordance with the Tutuka SHEQ Specifications. The overriding regulations will however be the Occupational Health and Safety Act.

- Incident Management, Corrective & Prevention Action Procedure to be adhered to – 14Risk IM PC-019

3.1.7 Reporting of accidents

The *Employer* follows an accident prevention policy that includes the investigation of all accidents involving personnel and property. This is done with the intention of introducing control measures to prevent a recurrence of the same incidents. The *Contractor* is expected to fully co-operate to achieve this objective. The *Service Manager* must be informed immediately of any incidents. A written report to be submitted to the *Employer* within 24 Hours of incidents and any damage to property or equipment

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

3.1.8 Occupational Health and Safety Act 85 Of 1993 – SECTION 37

In accordance with Section 37 (2) of the Act, the *Contractor* is appointed by the *Employer* as mandatory to assume Health and Safety duties and responsibilities. The *Contractor* ensures compliance with all requirements of the Act and any instruction or notification that enhances those requirements.

The *Contractor* acknowledges that he is fully aware of all the requirements of the Occupational Health and Safety Act and undertakes to employ only staff who have been duly authorised in terms thereof and who receive sufficient safety training to ensure that they can comply therewith.

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

3.1.9 The *Contractor* appoints a person who liaises with the *Employer's* Safety Officer, responsible for the premises relevant to the Contract. The person appointed shall on request:

- Supply the *Employer's* Safety Officer with copies of minutes of all Health and Safety Committee meetings, whenever required.
- Supply the *Employer's* Safety Officer with copies of all appointments in respect of employees employed on this contract, in terms of the Act and Regulations and shall notify the *Employer's* Safety Officer of any changes thereto.

The *Employer* may, at any stage during the duration of this contract:

- perform safety audits at the *Contractor's* premises, its work place and its employees;
- refuse any employee, *Subcontractor* or agent of the *Contractor* access to its premises if such person is found to commit any unsafe act or any unsafe working practice or is found not to be duly authorised nor qualified in terms of the Act;
- Issue the *Contractor* with an instruction to stop work should the *Employer* become aware of any unsafe working procedure or condition or any non - compliance with the Act, Regulations and Procedures referred to in the Occupational Health and Safety Act - 85 of 1993 and all Regulations made hereunder as well as all the *Employer's* Safety and Operating Procedures. Any such instruction is not a compensation event. Furthermore, no amendments to the act or the Regulations or reasonable amendment to the *Employer's* Safety and Operating Procedures will entitle the *Contractor* to claim any additional costs or time incurred in complying therewith, from the *Employer*

3.1.10 Safety Regulations of the *Employer*

The *Contractor* conforms to the *Employer's* Plant Safety Regulations

The *Employer* makes available to the *Contractor*, on request, a copy of the latest revision of the Plant Safety Regulations.

3.2 Environmental constraints and management

The *Contractor* shall comply with the environmental criteria and constraints stated in the following:-

All waste from the project must be disposed in a sound environmental manner in accordance with Tutuka Power Station Waste Management Procedure 14 Risk ENV-013. Oil spillages must be contained and cleaned as per Oil Spill Management procedure 15 ENPRENV-001. The project must conform to the *Employer's* Environmental Legal and other Requirements procedure 14 Risk ENV-012 and the project must conform to Tutuka Power Station ISO14001 Standard with reference to Tutuka Power Station's Environmental Management System Manual 14 Risk ENV-010. All environmental incidents must be dealt with as per the Station's Incident Management, Corrective and Preventative Procedure 14 Risk PC-001 and all environmental incidents must be reported to the Environmental Department on site with Telephone Number 017-7495536/9231.

3.3 Quality assurance 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 QM 58. The Quality Control document is to be submitted for approval to Tutuka 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 Service Manager*. *The Contractor*, in conjunction with Tutuka 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 Service Manager* within 1 week after Completion of each activity or task

- QCP and contract quality plan standards as per QM 58 to be adhered to
- The *Contractor* must provide Quality Control Plan documents for approval by Eskom *Service Manager* performing any activity.

4 Procurement

4.1 People

4.1.1 Minimum requirements of people employed

- *Employers Contract Supervisor* will be delegated by the *Service Manager*
- 3 x Artisans to be PSR authorized during contract signing
- All 3 disciplines to be authorized
- All personnel names on this contract and titles must be specified to the *Service Manager*.
- All *Contractors* personnel specified in this contract as per 2.3 to be on site at all times, unless on leave for max 14 days, otherwise replacement of same skill required.
- *Contractor's* leave to be planned and discussed with *Service Manager* before such permission will be allowed by *Service Manager*
- All *Contractor* personnel to apply for Tutuka access via access work system.
- All new staff to be appointed in writing by the *Employer*.
- Contract Staff are not allowed to work on any other contract while employed on this contract.
- All new staff to do induction training, and re-induction annually.
- All replacements of staff will be in the same discipline with relevant experience (eg. A Fitter artisan with proof of qualifications)
- All new staff to be approved by *Service Manager* before entering the site or commencing work
- All new staff must hand in all qualifications and relevant documentation to the *Service Manager*
- When changing personnel a new access to work application to be completed by the *Contractor*
- Only required specified approved amount of personnel to be allowed on site, pre-arrange changes with *Service Manager*.
- *Contractor* must be trained on cranes and have crane licence

4.1.2 BBBEE and preferencing scheme

- As per clause Z3 within contract data

4.1.3 Procurement Requirements:

PPPFA STRATEGY

Indicate the percentage (%) that is allocated to:

Price
BBBEE Status
Designated commodity (Yes/No)

90%
10%
No

4.1.4 Subcontracting

4.1.5 Preferred subcontractors

- Sub-Contractors will only be allowed with a written permission from the *Service Manager*.

4.1.6 Subcontract documentation, and assessment of subcontract tenders

- N/A

4.1.7 Limitations on subcontracting

- Only 25% of scope can be sub contracted OR as per SDL&I requirements

4.1.8 Attendance on subcontractors

- N/A

4.2 Plant and Materials

4.2.1 Specifications

- Where applicable, all plant spares and materials to be inspected (Quality Checked) before installing at plant.
- Hold and witness points and all intervention points as per approved QCP must be attended
- *Contractor* must be “able, trained and be prepared” with the necessary PPE, equipment, tools, skills and authorisation to handle any equipment, spares, tools and materials related to the scope of work
- Hold points must be attended and witness all intervention points as per approved QCP as per activity.
- The *Employer* will supply all spares and materials.
- The *Contractor* is not allowed to use any materials or spares for private usage or on other Sites.
- The *Contractor* must transport material as requested.
- Requests to be in writing the day before the material will be needed.
- The *Contractor* to transport tools and materials from and to the work site.
- Work and QC do be done according to *Employer's* regulations and procedures
- The *Contractor* will be responsible for Inspection and Maintenance on equipment
- The *Contractor* will be responsible for the safeguarding, care and security of all items whilst in the *Contractors* custody and control, until Completion of the whole of the works.
- *Contractor* must be “trained and be authorised” with the necessary PPE, equipment, tools, skills and skilled to handle any equipment, spares, tools and materials related to the scope
- In case of loss or damage to *Employer's* tools and equipment by the *Contractor*, the *Contractor* must in their own expense replace the item/s.

4.2.2 Correction of defects

- All Correction within 90 days on the same plant will be seen as re-work
- Rework of work will be seen as rework within a time from 0 to 90 days. Rework will be on the *Contractor* account.
- All work to be done must be done under a permit to work to work or lock out procedure as required by PSR. Some plants are trip risks and can only be worked on during outages or units shut downs.
- All defected spares to be replaced with the permission of the *Service Manager* / Supervisor.
- As per inspection check list provided by the *Employer* (GGP 1045 pg. 33-35; GGP 1046 pg. 33-35)

4.2.3 Contractor's procurement of Plant and Materials

- Purchasing of spares or materials will go through the *Employer's* procurement process

4.2.4 Tests and inspections before delivery

- Where applicable, all plant spares and materials to be inspected (Quality Checked) before installing at plant.
- Hold and witness points and all intervention points as per approved QCP must be attended

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

- All spares removed and returned to Tutuka premises must be declared at the main entrance where the authorised gate release for the spares must be shown to the Protective Services personnel.
- The *Employer* will issue all plant related spares and materials as negotiated.
- All spares needed to be from stores must be collected by *Contractor* and taken to required plant.
- All faulty rotatable items to be taken to stores with necessary documents.

5 Working on the Affected Property

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

- Life- saving rules to be adhered at all times
- Plant access is limited and controlled by Plant Safety Regulations requirements.
- No employee will be allowed to access the plant or to work without access permit issued.
- All personnel to work on the plant must be registered on the Worker's Register by the Responsible Person.
- All personnel must attend induction before working on site and must obtain gate permits via the *Service Manager*.
- Each personnel to have an Identification card at all times
- Unauthorized access to site is prohibited. The personnel are expected to be at their working site area at all times.
- No recruitment on site or at the main access gates or any of the *Employer's* Premises' is allowed.
- All activities to comply with the OSHACT and Regulations
- All activities on plant must be preceded by a plant risk assessment – Risk assessment as per the *Employer's* standard, to be current at all times (Live Document)
- All work to be done according to the construction regulations at all times

5.2 People restrictions, hours of work, conduct and records

- Normal working hours is the *Employer's* working hours
Monday to Thursday 07:00-16:15
Friday 07:00-12:00
- Other hours will be determine as per critical path activities during outages / breakdowns
- Overtime on an as and when required basis, but must be approved by the *Service Manager*.
- Daily time sheets must be kept up to date of normal time and overtime worked at all times. The *Employer's* *Contractors* time sheets to be used.
- Overtime to be worked on an as and when required basis.
- All overtime worked must comply with the *Employer's* rest period requirements.

5.3 Health and safety facilities on the Affected Property

- Proto-team on each shift

- Medical Station and relevant staff on Site.
- Each workshop has a first aid box available.
- Yearly induction for all personnel.
- In an emergency the contract supervisor and *Service Manager* must notified immediately.

First aid centre

The *Contractor* provides a first aid service to his employees and *Subcontractors*. In the case where these prove to be inadequate, like in the event of a serious injury, the *Employer's* medical centre and facilities are available.

Outside the *Employer's* office hours, the *Employer's* first aid services are only available for serious injuries and life threatening situations.

The *Employer* is entitled, however, to recover the costs from the *Contractor* for the use of the above *Employer's* facilities

5.4 Environmental controls, fauna & flora

Environmental management

- Proper care of the natural environment is important to prevent nuisance and environmental degradation.
- All *Contractors* shall comply with the *Employer's* environmental management procedures and Environmental legislation
- Environmental incidents shall be reported to the *Employer's* Environmental Department as per incident management requirements.

Waste Management

- Waste segregation is important to facilitate recycling of waste. Ensure waste is disposed of in the correct colour bin.
- The *Employer's* periodically collects waste from the bins for disposal in the correct manner.
- No waste should be burned or buried on site.
- Where the *Employer* and the *Contractor* have agreed that the *Contractor* is responsible for the disposal of its waste, the *Contractor* shall safely dispose of such waste and keep disposal certificates on file.

Types and colours of bins used on site:

- Yellow bin for domestic waste
- Orange bin for hazardous waste
- Maroon bin for scrap
- Green box for cartridges
- Blue box for recyclable paper

Radiation protection

The *Contractor* conforms to the *Employer's* procedure OMOP 2049 and OMOP 2051 when performing any industrial radiography.

Hazardous Substances

It is required in terms of the General Administrative Regulation (Regulation 7) of the Act that any manufacturer, importer, seller or supplier of hazardous chemical substances shall supply the receiver, free of

charge with sufficient information for the user, to enable the user to introduce the necessary measures as regards the protection of the health and safety of persons. It is therefore the responsibility of the supplier (dealing directly with the *Employer*) to supply the information. If information is not available for whatever reason, the supplier must indicate and give reasons to the *Employer*.

Environmental management

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

Handling of waste produced by the Contractor

All waste introduced to and/or produced on the *Employer's* premises, by the *Contractor*, for this contract, must be handled in accordance with the minimum requirements for the Handling and Disposal of Hazardous Waste in terms of Government Legislation as proclaimed by the Department of Water Affairs and Forestry Act 1994 Ref.:BN0621-16296-5.

The *Contractor* is responsible to appoint a waste coordinator to ensure that all waste produced is handled according to the applicable legislation.

The *Contractor* is required to ensure that all goods, services or work supplied in terms of the contract conform to all applicable environmental legislation. Where work is done on the *Employer's* site, the goods, services or work supplied also conforms to the *Employer's* environmental specifications.

Waste from the cleaning and maintenance of equipment

The *Contractor* is responsible to contain all waste due to cleaning and maintenance of equipment and disposes of as described below.

Stockpiling of waste

Waste is removed promptly to the designated deposit areas. No stockpiling is permitted.

Hazardous waste

Waste declared as hazardous substances in terms of the Hazardous Substances Act no 15 of 1973 is the responsibility of the *Contractor* to ensure safe removal from the property to a registered Class 1 site

Pest Control

- Only approved herbicides with a low environmental risk shall be used for pest control.
- Only registered pest controllers may apply herbicides on a commercial basis.
- Application of herbicides shall be in accordance with the Fertilisers, Farm Feeds, and Agricultural Remedies and Stock Remedies Act 36 of 194.

Water Conservation

- Incidents related to water pollution must be reported to the *Employer's* environmental department within 24 hours.
- Report/fix leaking taps and pipes to save water.
- Use water sparingly.
- Chemical substances shall not be disposed of in waste water or storm water drains.

Air Pollution

- Dust suppression measures must be in place to reduce airborne dust.

- Noxious and offensive odours arising from work activities shall be adequately controlled.
Ground Pollution
- Measures to prevent or control ground contamination shall be put in place e.g. drip trays, bund walls.

Spill containment, clean-up and ground rehabilitation shall be done as per Tutuka procedures

5.5 Cooperating with and obtaining acceptance of others

Interface with Others

It is likely that other *Contractors* will be working in the same area. Others might however from time to time require limited access to the same area in order to execute maintenance activities and the *Contractor* is to be accommodating in such instances.

Monthly progress report

A monthly progress report will be submitted to the *Service Manager* by 15th of each month.

Requirements for Completion.

Completion is when the *Contractor* has done all the work, which the Works Information states he is to do by the Completion Date and has corrected notified Defects.

The Site is handed back to the *Employer* in a condition acceptable to the *Service Manager*.

5.6 Records of *Contractor's* Equipment

- *Contractor's* equipment (Cell phones with Camera's, Computers, Camera's etc.) to be declared and signed in at security.
- All test equipment must be calibrated and tested regularly and certificates must be handed in to the *Service Manager* for record keeping
- All equipment and tools needs to be marked and a list off all tools with the identification number to be provided to the *Service Manager* when entering site.
- *Contractor* is responsible to safe guard its own tools and equipment.
- All lost equipment and tools to be declared to the *Service Manager* and full details of Incident.

Electrical & Instrumentation equipment and appliances

Any electrical/Instrumentation equipment or appliances used by the *Contractor* conforms to the applicable South African Safety Standards and is maintained in safe and proper working condition. The *Service Manager* has the right to stop the *Contractor's* use of any electrical/instrumentation equipment or appliance that in the *Service Manager's* opinion does not conform to the foregoing.

5.7 Equipment provided by the *Employer*

- For the purpose of expediting the works, the *Employer* may make facilities and services available to the *Contractor* as provided at no cost to the *Contractor*. The *Contractor* will not receive any reimbursement or make any change to the beneficial use of the facilities or services.
- The *Employer* may allow the *Contractor*, for the execution of the works, the reasonable use of its workshop, cranes, tools and equipment, provided that the *Employer's* own work and business are not interfered with in any manner by such use. The *Contractor* shall leave all workshops, cranes, tools and equipment in as good a condition as he found them, fair wear

and tear excepted, and shall be liable for any damages as a result of any act of negligence by the *Contractor*, his employees or sub-contractor while using such workshop, cranes, tools and equipment.

- The *Contractor* is responsible for the repair, replacement or correction as necessary of all pieces of tools and equipment supplied by the *Employer* which are damaged and / or lost whilst in the *Contractor's* custody and control.
- The *Contractor* must ensure that any one of his employees or Sub-contractor, operating hoist equipment belonging to the *Employer*, is authorised by the *Employer*
- Aerial platform equipment (must be trained and be licensed to operate this equipment)
- Overhead Crane (must be trained and be licensed to operate the overhead crane)

5.8 Site services and facilities

5.8.1 Provided by the *Employer*

Supply of electricity

The *Employer* supplies 220 & 380 V AC power supply at existing points for the purpose of the works only. All installations or equipment complies with all relevant safety regulations and requirements. *Contractor* to supply own 220 or 380 VAC extensions.

Water

The *Employer* supplies potable water for the purpose of the works, at existing points and in reasonable quantities. Uninterrupted supply is not guaranteed and is not grounds for compensation events.

Accommodation of the *Contractor's* employees

The *Contractor* makes his own arrangements for accommodation and meals.

Telecommunications

The *Contractor* provides his own communication system and the cost thereof. Cell phones/radios to be used on the ash facility / ash dams / slurry plant where poor reception exists. All private telephone calls / Internet usage on the account of *Contractor*.

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 liaise with the Head of Security at the Station to ensure that there is no interference with existing channels or equipment

Facilities availability

Employer will provide facilities (such as toilets and workshop space)

Contractor work space will be allocated by the *Employer*

5.8.2 Provided by the *Contractor*

- *Contractor* to provide and ensure safe transportation services for all his *Contractors* and it must comply to 32-93 and 33-345 procedures. No transportation of personnel at the back of the bakkie.
- *Contractor* to provide own (Coffee, sugar, milk, tea etc.)
- All computers and printers accessories needed to be provided by the *Contractor*

- The *Contractor* will be responsible for the cost of all private phone calls, faxes and internet usage.
 - The *Contractor* to provide own accommodation and meals for his / her employees at own costs
 - All PPE to be provided by *Contractor* e.g. arc flash PPE(category – specific 8 cal/cm²) and acid retardant PPE, safety harnesses, Face shield Gum Boots, respirators .
 - Provide SABS approved Safety harnesses as per the *Employer's* Safety Requirements.
 - The *Contractor* will be responsible for the cost of all internet usage or Telephone calls made to any Cellular, Telkom or international number.
 - *Contractor* to provide own Cabin for office and work place, but the *Employer's* to provide space
 - COC's to be provided of all LV equipment and Cabins provided by the *Contractor*.
 - *Contractor* to provide own tools and equipment and test instruments such as Ladders, electric drills and bits, electric blower, insulated tools, rubber mat to enable to perform work according to the scope of work
 - *Contractor* to supply own 220V extension's at the *Contractor* own costs.
 - Certified copies of ID's, Qualifications and CV'S to be provided by the *Contractor* on contract reward.
 - *Contractor* to have additional test equipment in order to always be able to carry out work.
 - *Contractor* shall have at least one vehicle (LDV) that must be on site at all times. Vehicle to comply with the *Employer's* vehicle standards.
 - *Contractor* to provide own fire extinguishers for the *Contractor's* cabins.
 - *Contractor* will provide a detailed method statement on how the coal plant will be maintained and repaired.
- Supply a letter of undertaking that the Contractor does have the correct tools and equipment to perform the activity and that list of tools and equipment that is registered on the Company's register
 - QCP's and Certified Letters to be provided for prove of previous similar activities done with references of previous activities done

Personal Protective Equipment

The *Contractor* supplies, maintains and ensures that his personnel at all times wear personal protective equipment as required per site.

Housekeeping

The *Contractor's* Equipment does not impair the operation of the plant or access to the plant.

Access permits

All applicable *Contractor* personnel shall be issued with access and vehicle permits (*Contractor* Permit) which will contain the following information:

- Name
- ID Number
- Company
- Validity date

All *Contractor* permits must be submitted to Protective Services when the workers leave the Site after Completion of the works.

The *Contractor* applies with Tutuka Power Station Protective Services for the issuing of permits. The *Contractor* submits his application at least 24 hours prior to entering the Security area. This application form must be delivered to Protective Services, or can be faxed to (017) 749 9168. The form contains the following information:

- Employee Name.
- Employee ID Number.
- The *Employer's* Safety Co-ordinators signature.
- The *Employer's Service Manager's* signature.
- Copy of the first page of the ID book of every employee of the *Contractor*, photocopied to reduce the size to 65%.

The form is appended to the *Contractor's* Safety Manual, referred to in Section 2.3.2 (b).

The *Contractor's* visitors and personnel shall conform to the security arrangements in force at the Site at all times.

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

No unauthorized vehicles will be allowed on Site. Contract vehicle application should be directed to the *Service Manager*.

The *Contractor* will be limited to the working areas associated with the works. The *Contractor* is forbidden to enter any other areas and must ensure that his employees abide by these regulations.

Parking inside the Power Station is allowed. The parking application must be addressed to the protective services. All *Contractors* will supply protective services with their vehicles registration numbers.

No recruiting of casual labour may be done on the *Employer's* premises, including the area outside the power station security gate.

The *Contractor* obtains the access procedures, from *the Service Manager*, which may change depending on the prevailing security situation.

Temporary cabling

The *Contractor* will be provided with all temporary wiring and cabling to lead power from the point of supply to the various points where it is required. The *Contractor* maintains and removes it on Completion.

5.9 Control of noise, dust, water and waste

- All necessary and relevant PPE must be used at all times when entering or working on plant as specified by the *Employer*.
- Risk assessments must be completed before commencing with any task to be current at all times (Live Document)
- All relevant procedures to be used at all times

5.10 Hook ups to existing works

- The *Employer* reserves the right to have any of the *Contractor's* personnel removed off site without cancelling the contract if, in the *Employer's* opinion, it is warranted.
- The *Employer* reserves the right to request disciplinary / corrective action if, and when, required.
- The main *Contractor* is accountable for the management of their sub-contractors and suppliers and to ensure that the applicable legal and the *Employer's* requirements (applicable during contract execution) are complied with by the sub-contractors and suppliers (all tiers). If there are non-conformances / non-compliance to applicable legal and the *Employer's* requirements identified, then the Main Service Provider/Principle *Contractor* will be penalised.

- The *Contractor* shall operate under the direction and instructions of the *Service Manager's* or such person/people as may be appointed by him if not in conflict with the Occupational Health and Safety Act and the Generation Plant and Safety Regulations.
- The *Contractor* shall maintain a high standard of workmanship expected by the *Employer* and shall comply with any quality assurance and quality procedures implemented by the *Employer*.
- The *Employer* reserves the right to have any of the *Contractor's* personnel removed off site without any compensation to the *Contractor* in the event of the *Contractor's* personnel being in contravention with the OHS Act or any of the *Employers* rules, regulations and procedures
- The *Employer* reserves the right to terminate the contract, once 3 non-conformances / PIR are raised against the *Contractor*
- The *Employer* reserves the right to request disciplinary/corrective action if, and when, required.
- The *Contractor* must submit Curriculum Vitae's of its entire staff prior to work commencing on site.
- The *Contractor* must submit certified copies of qualifications and or certificates of its entire staff prior to work commencing on site.
- All *Contractor* supervisors must be authorised in Plant Safety Regulations as per legislative requirements and the period within which this requirement must be fully met, will be finalised and confirmed within six months on contract award.
- The *Contractor* will be responsible for the full payment of the legislative training costs for every employee at the *Contractor's* cost, in the event that the employee have to redo the training due to failing at the first attempt as well as the subsequent attempts that follows until the employee is authorised.
- All unknown / known services will be brought to the attention of the *Contractor* by *Service Manager*. Should the *Contractor* encounter any other services in the work area, he will immediately bring them to the attention of the *Service Manager* who will issue instructions as to what actions are to be taken.
- The *Employer* carries no responsibility for unforeseen delays unless such a delay is negotiated within 24 hours of the occurrence and written agreement is submitted by the *Employer*
- Care must be taken to prevent damage to any surroundings such as the plant, roads, environment and equipment in and around existing buildings.
- The *Contractor* and his employees will be required to conduct themselves at all times in proper and orderly manner while on the *Employer's* premises.
- The *Contractor* and his employees may only smoke in the allowed / designated areas.
- The *Employer* will take immediate steps to institute criminal investigations in the event of any suspected criminal acts e.g. theft etc.

5.10.2 Qualifications (Note – the below mentioned will change from time to time based on the skills required per contract)

Minimum qualifications requirements of people employed by the *Contractor* are as follows:

- a) Site Manager must have 5 to 9 years or above relevant experience on similar plant as stipulated in this contract plus a National S4 Diploma
- b) Supervisor must have 5 to 9 years or above relevant experience on similar plant as stipulated in this contract plus a National N Diploma
- c) Safety Officer must have 5 to 9 years or above practical experience, possess a National Diploma in Safety Management.
- d) Technician must have 5 to 9 years or above relevant experience on similar plant as stipulated in this contract plus a National Diploma / N Diploma in Electrical or Control and Instrumentation Engineering
- e) Artisans Fitters must have a Trade test, 5 to 9 years or above relevant experience on similar plant as stipulated in this contract, 1 x Artisans must have Laser alignment training and the other 4 within 6 months of contract award.
- f) Rigger must have 5 to 9 years or above Rigging experience on similar plant as stipulated in this contract plus Rigging trade test.

- g) Welders must have 5 to 9 years or above welding experience on similar plant as stipulated in this contract plus Welding trade test. The Welders should comply with ISO 3834 requirements
- h) Boilermakers must have 5 to 9 years or above relevant experience on similar plant as stipulated in this contract plus Boiler making trade test.
- i) Electrician must have 5 to 9 years or above relevant experience on similar plant as stipulated in this contract plus Electrician's trade test.
- j) Mechanician to have Control and Instrumentation Trade Test with 5 to 9 years or above relevant experience on similar plant as stipulated in this contract
- k) Semi-Skilled must have 2 years relevant experience on similar plant as stipulated in this contract plus a minimum of N3/ Matric qualification.
- l) Assistants must be able to speak, read, write and understand English and have a minimum Completed grade 12 and trained to execute the scope of work as per this contract.
- m) Alignment Technician must have a trade test or a National Diploma with laser alignment certificate plus 5 to 9 years or above post laser alignment experience
- n) The Planner to have N4 technical / engineering certificate plus trade test, Primavera or MS project or SAP Certificate and 5 to 9 years or above experience as a Planner
- o) The company to able to do Cable jointing repairs for at least 5 to 9 years or above relevant experience
- p) The company to able to do HDPE repairs for at least 5 to 9 years or above relevant experience

Appointments

The *Service Manager* needs to approve all new appointments / persons / interviews of fix term *Contractors* / temporary *Contractors* / permanent employees / site management appointed at Tutuka Power Station.

5.10.3 Training

- a) The *Employer* will provide Plant Safety Regulations (PSR) and ORHVS training necessary for the *Contractor* in order to carry out the works.
- b) All *Contractors* artisans to be trained and authorised as responsible persons according to *Employer's* PSR at Tutuka Power Station.
- c) The *Employer* will provide any training deemed necessary by the *Service Manager* for the *Contractor* to perform the service. The *Contractor* shall be obliged to carry out the service for which the training was provided.

5.11 Tests and inspections

5.11.1 Description of tests and inspections

- Quality Control check sheets to be done between *Contractor* and *Employer*
- Do inspections as per Scheduled Work Order and report all defects to the *Employer*.
- Hold and witness points

5.11.2 Materials facilities and samples for tests and inspections

- N/A

6 List of drawings

6.1 Drawings issued by the *Employer*

- All relevant Electrical drawings will be available in workshop or at the drawing office.
Contractor to immediately advise the *Employer* of suspected deviations and updates required on drawings.

7. X17 – Low Service Damages Table

ITEM	DESCRIPTION OF TASK	Measurement	DAMAGES TO BE IMPLEMENTED
Late arrival to work /reporting late for duty / (Start time is 7am)	When arriving after 7am, but before 8am without valid excuse.	Per Individual per Incident	1% of monthly fixed cost per relevant Individual rates
Late arrival to work / reporting late for duty / (Start time is 7am)	When arriving after 8am without valid excuse.	Per Individual per Incident	2% of monthly fixed cost per relevant Individual rates
Leave site before 16H15	Leaving site before 16H15 without permission from <i>Service Manager</i> in writing	Per Individual per Incident	1% of monthly fixed cost per relevant Individual rates
PSR and HV authorisations	Whenever Authorisations expires and not renewed in time	RP per Incident	1% of monthly fixed cost of RP rates
Work completed	Daily work incomplete as per instruction / plan, without reporting delays or concerns on this regard	Per Day – Maximum after 2 incidents per month	0,5% of monthly fixed price (For every two incidents per month)
SHEQ violation	Violation from the same individual	Violation from the same individual	First offence Disciplinary action; Second offence within same financial year (01 April – 31 March) to be dismissal (and replacement of skill by <i>Contractor</i>).

8 Annexure C: Key Performance Indicators

Key Performance indicator (Coal Conveyor Maintenance)

8.1 X20 - Key

	KPA	Objective	Weight	Base	Target	Ceiling	YTD		YE	
							A	S	A	S

1	Repair Times on Priority 1										
					24 hours						
	Priority 2										
					72 hours						
	Priority 3				Completed within 5 weeks						
2	Standby response time										
					1 hour						
3	Scheduled Compliance					98%					
4	PM Compliance					100%					
5	Statutory work					No violation					
6	Priority 1 work order not closed within 24 hrs					Less than 1 outstanding					
7	Priority 2 work order not closed within 24hours					Less than 2 outstanding					
8	Safety Defect					To be attended within 24hrs					

A= ACTUAL YTD = YEAR TO DATE S = SCORE YE = YEAR
END