NEC3 Term Service Contract (TSC3)

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

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

for Supply, Delivery and Maintenance of Milling Plant Tiling Components and Hendrina Power Station on an as and when required basis for period of 5 years

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PART C1: AGREEMENTS & CONTRACT DATA

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C1.1 Form of Offer & Acceptance

Offer

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

Ceramic Tiling on Milling Plant Components at Hendrina Power Station for a period of 5 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.

Option A	The offered total of the Prices exclusive of VAT is	**R**
	Value Added Tax @ 15% is	**R**
	The offered total of the amount due inclusive of VAT is[1]	**R**
In words		

[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*.

Ceramic Tiling on Milling Plant Components

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

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

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	**Eskom Holdings SOC Ltd, Megawatt Park, Maxwell Drive, Sandton, Johannesburg, 2199**			
Name & signature of witness	*(Insert name and address of organisation)*		Date	

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

1.1 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)*		**Eskom Holdings SOC Ltd, Megawatt Park, Maxwell Drive, Sandton, Johannesburg, 2199**
Name & signature of witness			
Date			

C1.2 TSC3 Contract Data

2 Part one - Data provided by the *Employer*

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

Clause	2.1 Statement	2.2 Data
1	**2.3 General**	**2.4**
	The *conditions of contract* are the core clauses and the clauses for main Option:	
		A: Priced contract with price list
	dispute resolution Option	**W1: Dispute resolution procedure**
	and secondary Options	
		X1: Price adjustment for inflation
		X2 Changes in the law
		X17: Low service damages
		X18: Limitation of liability
		X19: Task Order
		Z: *Additional conditions of contract*
	of the NEC3 Term Service Contract April 2013[2] (TSC3)	
10.1	The *Employer* 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**

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

	Address	**Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg**
	Tel No.	
	Fax No.	
10.1	The *Service Manager* is (name):	**Mrs Bongi Ngoloti**
	Address	**Hendrina Power station** **Private Bag X1003** **Pullenshope** **1096**
	Tel	**+27 13 296 3420**
	e-mail	**NgolotB@eskom.co.za**
11.2(2)	The Affected Property is	**Hendrina Power Station**
11.2(13)	The *service* is	**Ceramic Tiling on Milling Plant Components**
11.2(14)	The following matters will be included in the Risk Register	**1.** Delays due to access to site **2.** Quality of deliverables **3.** Unprotected strike **4.** Non-compliance to contract terms and conditions **5.** Any other matter posing a risk to the contract will be discussed among the Parties and agreed upon before inserted on the Risk Register
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 *law of the contract* is the law of	**the Republic of South Africa**
13.1	The *language of this contract* is	**English**
13.3	The *period for reply* is	**5 working days**
2	**The *Contractor*'s main responsibilities**	**Data required by this section of the core clauses is also provided by the *Contractor* in Part 2 and terms in italics used in this section are identified elsewhere in this Contract Data**
21.1	The *Contractor* submits a first plan for acceptance within	**2 weeks of the contract date**
2.5 3	**Time**	
30.1	The *starting date* is.	
30.1	The *service period* is	**5 years**
4	**Testing and defects**	**The testing will be done according to the scop of work on Employer's Service Information**

5	**Payment**	
50.1	The *assessment interval* is	**On completion of the activities, payment will be processed within 30 days of assessment approval**
51.1	The *currency of this contract* is the	**South African Rand**
51.2	The period within which payments are made is	**30 of activity completion**
51.4	The *interest rate* 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**	**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**
7	**Use of Equipment Plant and Materials**	**There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data.**
8	**Risks and insurance**	
80.1	These are additional *Employer*'s risks	**1. Required emergency service due to operational needs** **2. Changes in Eskom procedures** **3. Delayed of access due to interference of work with others** **4. Weather Conditions**

		5.Condition of the plant **6. Industrial Actions**
9	**Termination**	**The contractor may terminate only for a reason identified in the termination table. The employer may terminate for any reason. The procedures followed and the amounts due on termination are in accordance with the termination table.**
10	**Data for main Option clause**	
A	**Priced contract with price list**	
20.5	The *Contractor* prepares forecasts of the final total of the Prices for the whole of the *service* at intervals no longer than	**5 days after being notified**
11	**Data for Option W1**	
W1.1	The *Adjudicator*	**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 *Adjudicator nominating body* 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 *tribunal* is:	**arbitration**
W1.4(5)	The *arbitration procedure* is	**the latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.**
	The place where arbitration is to be held is	**South Africa**
	The person or organisation who will choose an arbitrator - if the Parties cannot agree a choice or	

	- if the arbitration procedure does not state who selects an arbitrator, is	**the Chairman for the time being or his nominee of the Association of Arbitrators (Southern Africa) or its successor body.**		
12	**Data for secondary Option clauses**			
X1	**Price adjustment for inflation**			
X1.1	The *base date* for indices is	**September 2026**		
	The proportions used to calculate the Price Adjustment Factor are:	**proportion**	**linked to index for**	**Index prepared by**
		35%	C3-All hourly paid	Seifsa
		40%	G1-(Mechanical Spares)	Seifsa
		10%	L2(B)-Transport	Seifsa
		15%	non-adjustable	Seifsa
		100%		
X2	**Changes in the law**	**The law of the Republic of South Africa**		
X17	**Low service damages**			
X17.1	The *service level table* is in	**See Annexure A**		
X18	**Limitation of liability**			
X18.1	The *Contractor*'s liability to the *Employer* for indirect or consequential loss is limited to	**R0.00 zero rand**		
X18.2	For any one event, the *Contractor*'s liability to the *Employer* for loss of or damage to the *Employer*'s property is limited to	**The amount of the deductibles relevant to the event**		
X18.3	The *Contractor*'s liability for Defects due to his design of an item of Equipment is limited to	**The greater of** • **the total of the Prices at the Contract Date and** • **the amounts excluded and unrecoverable from the *Employer*'s insurance (other than the resulting physical damage to the *Employer*'s property which is not excluded) plus the applicable deductibles**		
X18.4	The *Contractor*'s total liability to the *Employer*, for all matters arising under or in connection with this contract, other than the excluded matters, is limited to	**the total of the Prices other than for the additional excluded matters.** **The *Contractor's* total liability for the additional excluded matters is not limited.**		

		The additional excluded matters are amounts for which the *Contractor* is liable under this contract for • **Defects due to his design, plan and specification,** • **Defects due to manufacture and fabrication outside the Affected Property,** • **loss of or damage to property (other than the *Employer*'s property, Plant and Materials),** • **death of or injury to a person and** • **infringement of an intellectual property right.**
X18.5	The *end of liability date* is	**A day after the end of the task order end of the service period.**
X19	**Task Order**	
X19.5	The *Contractor* submits a Task Order programme to the *Service Manager* within	**2 working days of receiving the Task Order**
Z	**The *additional conditions of contract* 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 *Contractor* to the *Employer*'s property	The replacement cost where not covered by the *Employer*'s insurance. The *Employer*'s policy deductible as at Contract Date, where covered by the *Employer*'s insurance.
Loss of or damage to Plant and Materials	The replacement cost where not covered by the *Employer*'s insurance. The *Employer*'s policy deductible as at Contract Date, where covered by the *Employer*'s insurance.
Loss of or damage to Equipment	The replacement cost where not covered by the *Employer*'s insurance. The *Employer*'s policy deductible as at Contract Date, where covered by the *Employer*'s insurance.
The *Contractor*'s liability for loss of or damage to property (except the *Employer*'s property, Plant and Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the *Contractor*) arising from or in connection with the *Contractor*'s Providing the Service	Loss of or damage to property The replacement cost Bodily injury to or death of a person The amount required by the applicable law.
Liability for death of or bodily injury to employees of the *Contractor* arising out of and in the course of their employment in connection with this contract	The amount required by the applicable law

Z 12.2 Replace core clause 86 with the following:

Insurance by the *Employer*

86

86.1 The *Employer* provides the insurance 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

Z13.1 The *Employer* is the operator of the Koeberg Nuclear Power Station (KNPS), a nuclear installation, as designated by the National Nuclear Regulator of the Republic of South Africa, and is the holder of a nuclear licence in respect of the KNPS.

Z13.2 The *Employer* is solely responsible for and indemnifies the *Contractor* or any other person against any and all liabilities which the *Contractor* or any person may incur arising out of or resulting from nuclear damage, as defined in Act 47 of 1999, save to the extent that any liabilities are incurred due to the unlawful intent of the *Contractor* or any other person or the presence of the *Contractor* or that person or any property of the *Contractor* or such person at or in the KNPS or on the KNPS site, without the permission of the *Employer* or of a person acting on behalf of the *Employer*.

Z13.3 Subject to clause Z13.4 below, the *Employer* waives all rights of recourse, arising from the aforesaid, save to the extent that any claims arise or liability is incurred due or attributable to the unlawful intent of the *Contractor* or any other person, or the presence of the *Contractor* or that person or any property of the *Contractor* or such person at or in the KNPS or on the KNPS site, without the permission of the *Employer* or of a person acting on behalf of the *Employer*.

Z13.4 The *Employer* does not waive its rights provided for in section 30 (7) of Act 47 of 1999, or any replacement section dealing with the same subject matter.

Z13.5 The protection afforded by the provisions hereof shall be in effect until the KNPS is decommissioned.

Z14 Asbestos

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 *Employer*'s 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.

Z15 Employer's Termination Rights - Power Station Shutdown

Z15.1	The Employer is the operator of the Hendrina Power Station, a coal fired plant installation, as designated by the National Electricity Regulator of South Africa (NERSA) and is the holder of the electricity generation licence in respect of the Hendrina PS which is one of the stations selected for repurposing. Therefore, the contract usage may from time to time reduce during the ramping down of the units and the usage of services will be on an “as and when required” basis.
Z15.2	Subject to the provisions of sub-clause Z15.1 above, the Employer may after giving the Contractor a written notice of not less than 60 days (Sixty days) Terminate the Contractor’s obligations to Provide the Services if the Employer’s business cease to operate at Hendrina Power Station prior to the end of the service period in this contract.
Z15.3	If the Contractor’s obligation to Provide the Services is terminated for this reason sated in sub-clause Z15.1 above, this shall constitute a reason for termination by the Employer as contemplated under NEC3, and the procedures shall be those on termination table P1 and P4 as stated in clause 92 and the amount due on termination shall be A1 and A2 and stated in clause 93.

Annexure A: Table of low service damages (X17)

X17.1 SERVICE LEVEL TABLE			
No	**DESRICPTION OF TASK**	**QUALITY OF PERFORMANCE REASON FOR DAMAGES**	**DAMAGES TO BE IMPLEMENTED**
1	On time arrival	The works to commence on time all the time	5 % of order value for one day late and 7% for more than one day
2	Duration for each service	The service must be completed within agreed time frames	5 % of order value for a day delay and 7 % for more than one day

C1.2 Contract Data

3 Part two - Data provided by the *Contractor*

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.

3.1Clause	Statement	Data
10.1	The *Contractor* is (Name):	
	Address	
	Tel No.	
	Fax No.	
11.2(8)	The *direct fee percentage* is	
	The *subcontracted fee percentage* is	
11.2(14)	The following matters will be included in the Risk Register	
11.2(15)	The Service Information for the *Contractor*'s plan is in:	
21.1	The plan identified in the Contract Data is contained in:	

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

24.1	The key people are:	
	1 Name:	
	Job:	
	Responsibilities:	
	Qualifications:	
	Experience:	
	2 Name:	
	Job	
	Responsibilities:	
	Qualifications:	
	Experience:	
		CV's (and further key person's data including CVs) are in
A	**Priced contract with price list**	
11.2(12)	The *price list* is in	
11.2(19)	The tendered total of the Prices is	
C	**Target contract with price list**	
11.2(12)	The *price list* is in	
11.2(20)	The tendered total of the Prices is	
E	**Cost reimbursable contract**	
11.2(12)	The *price list* is in	

PART 2: PRICING DATA

TSC3 Option A

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

C2.1 Pricing assumptions: Option A

4 How work is priced and assessed for payment

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

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

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

5 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.

6 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).

7 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.

7.1 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*

Supply and delivery and installation of milling plant tiles

	Tile specifications	Area component	Area per component	Total square meters for contract period	Unit Rate	Cost
1	12x50x150mm	Production Outlet Pipe - (Inclusive of surface preparation)	3m²	675		
2	12x100x150mm	Production Outlet Casing	5m²	1125		
3	25x50x150mm	PF pipe bend	0.7m²	157.5		
4	12x50x150mm	Raw coal pipe above production outlet	3m²	675		
5	12x100x150mm	Square to round flat area	4m²	900		
6	12x100x150mm	Square chute below riffle boxes	6m²	1350		
7	12x100X150mm	Classifier cone	8m²	1800		
8	12x100x150mm	Mill casing	12m²	2700		
9	25x50x150mm	Y-Piece	0.7m²	157.5		
10	12x100x150mm	Intermediate Bunker	8m²	1800		
11	12X100X150MM	PF Chute	8m²	1800		
12	6X100X150MM	PF Distribution Box (New)	12m²	2700		
13	20x50x150mm	PF pipe	6.325m²	2835		
14	12X50X150MM	PF Distribution box pipe	8m²	1800		
15	6X100X150mm	Riffle Box (New)	1.5m²	337.5		

	Supply and delivery of milling plant tiles with adhesives						
Item No	**Tiles Size and Specifications**	**Description**	**Estimated Per Component**	**QTY for contract duration**	**Unit**	**Rate**	**Cost**
1	6x100x150mm Tiles and adhesive	Mill classifier cone	14m²	3150	m2		
2	12x100x150mm Tiles and adhesive	Mill casing	10m²	2250	m2		
3	12x50x150mm Tiles and adhesive	Centre raw coal pipe	1.8m²	405	m2		
4	12x50x150mm Tiles and adhesive	Inner raw coal pipe	0.8m²	180	m2		
5	20/25x50x150mm Tiles and adhesive	PF pipe bend & pipes	0.8m²	180	m2		
6	12X50X150MM Tiles and adhesive	Vortex Finder (Pipe)	1.6m²	360	m2		
7	12x50x150MM Tiles and adhesive	Turret Plate	3m²	675	m2		
8	12X100X150mm Tiles and adhesive	Classifier small Cone	4m²	900	m2		
9	12X100X150mm Tiles and adhesive	Classifier main Cone	10m²	2250	m2		
10	25x100x150mm Tiles and adhesive	classifier upper and lower cone	10m²	2250	m2		
11	6x100x150mm Tiles and adhesive	Feeder coal gates	4m²	900	m2		

Ceramic Tiling on Milling Plant Components

			Qty	Unit	Unit Rate	Cost
Item	**P&Gs**					
1		Site Establishment	1	Once-off		
2		Transport	33750	Km		
3		Site De-Establishment	1	Once-off		
		SHEQ requirements				
4		Safety file	1	Once-off		
5		Medicals	5	Annually		
6		PPE	5	Annually		
7		Police Clearance	5	Annually		

The total of the Prices

PART 3: SCOPE OF WORK

Document reference	Title	No of pages
	This cover page	1
C3.1	*Employer*'s Service Information	
C3.2	*Contractor*'s Service Information	
	Total number of pages	

C3.1: EMPLOYER'S SERVICE INFORMATION

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8 Description of the *service*

8.1 Executive overview

The scope comprises of, but is not limited to, tilling of Milling plant components, Casing, Riffle box, Burner Nests and PF pipes

8.2 *Employer*'s requirements for the *service*

SAFE WORKING PROCEDURE:

- Ensure that all work is done in compliance with Occupational Health and Safety Act of 1993
- Ensure that all dangers/hazards have been identified and explained.
- Wear necessary protective clothing such as hard hat with chin strap, overalls, toe capped safety shoes, leather gloves, eye protection and hearing protections
- Do not work under crane loads or suspended loads.
- Always use legal tools or equipment or approved and registered hand-made tools.
- Beware of fellow workers and other employees' safety.
- Beware of ultraviolet rays and hot surfaces when welding or grinding work is in progress.
- Beware of sharp edges and falling or rolling objects as per the accepted employer's risk assessment.
- Safety barriers and notices must be erected to prevent unauthorised entry to work area.
- All workers shall stand clear when equipment and parts being lifted or lowered, and rigging shall be done by certified and authorised riggers only.
- Work area must be kept clean at all times. Work area shall be adequately lit and only 32-volt lighting to be used in confine spaces.

RISK/ PRECAUTIONS:

- The mill is a confined space, gas test certificate must be issued
- There must be sufficient light and ventilation
- A person cleaning around the mill must wear a dust musk to prevent dust inhalation, which will affect a person's health, and dispose the pulverized fuel at the correct area.
- The area is noisy and dusty; earmuffs and dust musk must be used at all times.
- Beware of hot plant and working at heights.
- Do not use compressed air for external cleaning.
- Adhere to the accepted employer's risk assessment controls.

SHEQR REQUIREMENT:

A Quality Inspection Plan should be followed to ensure quality work.

WORKS

In this document, protective lining shall mean engineered refractory tiles made from high resistant wear ceramic material for lining or protecting wear surfaces of the Combustion plant or its subsystem or components, where raw coal and/or pulverized fuel (PF) coal pass during plant operation in such components.

These include locations such as PF Burners, PF pipe work and the Milling plant. Ceramic tile(s) which have wear and erosion resistant properties and that can withstand high temperatures above 1000 degrees are preferred while the word "engineered" shall mean pre-fabricated and profiled or customized to fit properly without the need for cutting or breaking the tile during installation on the specific plant component referred.

This is to say, such tiles are tailor made to fit the profile of geometries found in the components herein described.

During installation, such tiles shall be bonded to the steel components with adhesive(s) or epoxy of high wear resistance to abrasive coal that has properties that tolerate high temperature operation but also complying with Eskom standard (240-56239143: Ceramic Lined Pulverised Fuel Pipework Standard), in relation to health, safety and operation.

The assumption therefore, is that the coal is inherently abrasive in nature or has a high abrasive index and that the adhesive to be used will NOT compromise the plant by allowing the detaching of ceramic tiles prematurely or cause or render the tiles to fall off while the plant is in operation. This alone cannot be acceptable to Eskom at any level of consideration or circumstance and as such has the potential to negatively impact contractual obligations and thus should be readily born in mind henceforth.

The SOW covers the installation of ceramic tiles on pulverised fuel (PF) pipework between the Mill classifier outlet, including the PF Burners. It also includes among other components but not limited to, the coal chutes and cones, burner boxes, transition pieces and pipe bends.

Lining Method for PF Pipework

- Linings shall be in the form of ceramic key pieces built up to form a ring such that a complete ring is self-supporting when fitted inside the steel casing.
- The ceramic tiles shall be chamfered where necessary so that each tile is in intimate contact with adjacent tiles.
- Gaps between tiles, caused by tolerances on the casing or tiles, shall be a maximum of one 1 mm, provided that such tiles are in intimate contact at at least one point and such adjacent tiles parallel to each other along the contacting faces.
- Joints in the direction of pulverised fuel flow shall be staggered.
- Tile edges, including weld-on tile plugs, shall not protrude into the pulverised fuel flow, and shall be a maximum of 1 mm below adjacent tiles downstream of the pulverised fuel flow.
- The use of “weld-on” ceramic tiles shall not be permitted in pulverised fuel pipe bends of round section.

Lining Method for Coal Chutes

- Lining of all internal surfaces of the coal tripper car chutes with 92% alumina ceramic tiles. Al2O3 content: ≥ 92%

- Hardness: ≥ 9 Mohs scale
- Specific gravity ≥3.60 g/cm3
- Compressive strength ≥ 1050 MPa
- Wear rate: ≤ 0.25 cm^3

- Tiles shall be arranged to minimize gaps and staggered to avoid continuous joints, shall be a maximum of 1 mm.
- Bonding of tiles using high-strength epoxy adhesive, ensuring full contact coverage.

- Use of mechanical anchoring (studs, bolts, or weld mesh) in high-impact areas.
- Cutting and shaping of tiles to fit curved and complex profiles of the chute.
- Joint filling with wear-resistant grout/sealant to prevent material ingress

Fixing Method

- All adhesives and grouts employed in the construction of any ceramic lined assembly shall be non-flammable and capable of withstanding sustained operating temperatures of 120°C or greater.
- In addition, the fixing method employed in all ceramic lined assemblies shall ensure that the lining remains secure even in the event of a mill fire, or similar occurrence resulting in temperature excursions above 120 °C up to +- 160 °C.
- Preparation of the component surfaces shall be such that the grout or adhesive is adequate and fulfil the specified requirements of the employer.

Inspections

- Inspect the old protective lining on the following components for any possible damage: Mill centre pipe, Cones, PF pipework, Primary air tubes, Transition pieces, Burner boxes, Mill outlet pipes and chutes etc.
- Assess the wear damage that may have changed the geometric profile of the plant component i.e. erosion pattern, material thinning, missing tiles or loss of adhesion of the tiles and/or brick detachment.
- In some cases there may be additional foreign material buildup such as clinker like bodies or hard formation which may obscure free flow.

Repairs

- The damaged lining should be carefully removed and replaced whenever the erosion or mechanical damage or irremovable clinkers bonding will potentially compromise the flow.
- The damaged lining to be removed over the full length of the tile and over the breadth of the affected area only. It must be removed in such a manner so as to maintain the stability and shape of the geometry the lining and inherently parallel to the attachment interface. This principle generally applies to all components that are exposed to wear erosion.

- Incorrect removal of the lining can result in the collapse of the lining geometry or the loss of shape resulting in poor combustion problems associated with lose tiles falling off during plant operation resulting blockages which pose serious risk to normal operation.
- The lining is to be replaced in such a manner that ensures high compaction without the use of any vibratory techniques. Any vibration techniques compromising or deemed to have a potential to compromise the plant while in service will not be permitted.
- During compaction, no impact must occur on the tiles or the anchor system as this will cause unintended damage.

Replacement of Damaged Quarl Tiles

- The Quarl tiles to be removed must be removed from the 12-0-clock position working either clockwise or counter clockwise so as to remove or damage as few tiles as possible. All old refractory tiles are to be replaced with the new refractory tile.
- The tile “back fix anchor rod” system must be removed. The tiles are to be removed from the anchor stud and refractory between the tile and the tile “back fix plate” must be removed. The anchor stud is to be cut from the saddle without damaging or cutting any pressure parts. A new anchor stud is to be fixed to the saddle.
- Removal of old wear lining shall not constitute damaging or deformation of the metal surfaces or body geometry of components to be lined or weld attachments thereof and that applies as well during installation of new lining.
- The damaged lining should be removed and replaced whenever erosion or mechanical damage is evident or irremovable clinker build-up is evident and potentially compromising the desired flow.
- The damaged lining is to be removed over the full length of the lining and the breadth of the affected area. It must be removed in such a manner as to maintain the stability and shape the lining and inherently parallel to the attachment interface. This principle generally applies to all components that are exposed to wear erosion.

Ceramic Tiling on Milling Plant Components

The spares are as per the list below:

Table 1: Spares list

Supply and delivery and installation of milling plant tiles			
	Tile specifications	**Area component**	**Total square meters for contract period**
1	12x50x150mm	Production Outlet Pipe - (Inclusive of surface preparation)	675
2	12x100x150mm	Production Outlet Casing	1125
3	25x50x150mm	PF pipe bend	157.5
4	12x50x150mm	Raw coal pipe above production outlet	675
5	12x100x150mm	Square to round flat area	900
6	12x100x150mm	Square chute below riffle boxes	1350
7	12x100X150mm	Classifier cone	1800
8	12x100x150mm	Mill casing	2700
9	25x50x150mm	Y-Piece	157.5
10	12x100x150mm	Intermediate Bunker	1800
11	12X100X150MM	PF Chute	1800
12	6X100X150MM	PF Distribution Box (New)	2700
13	20x50x150mm	PF pipe	2835
14	12X50X150MM	PF Distribution box pipe	1800
15	6X100X150mm	Riffle Box (New)	337.5

Supply and delivery of milling plant tiles with adhesives			
Item No	**Tiles Size and Specifications**	**Description**	**Total square meters for contract duration**
1	6x100x150mm Tiles and adhesive	Mill classifier cone	3150
2	12x100x150mm Tiles and adhesive	Mill casing	2250
3	12x50x150mm Tiles and adhesive	Centre raw coal pipe	405
4	12x50x150mm Tiles and adhesive	Inner raw coal pipe	180
5	20/25x50x150mm Tiles and adhesive	PF pipe bend & pipes	180
6	12X50X150MM Tiles and adhesive	Vortex Finder (Pipe)	360
7	12x50x150MM Tiles and adhesive	Turret Plate	675
8	12X100X150mm Tiles and adhesive	Classifier small Cone	900
9	12X100X150mm Tiles and adhesive	Classifier main Cone	2250
10	25x100x150mm Tiles and adhesive	classifier upper and lower cone	2250
11	6x100x150mm Tiles and adhesive	Feeder coal gates	900

All tiles listed above must be conform to below:

- GGSS 0667 Revision 4 – Specification for ceramic lined pulverised fuel pipework.
- Ceramic linings shall be alumina based and shall be of the sintered type, containing not less than 89 % alumina.

Ceramic Tiling on Milling Plant Components

ALUMINA – AL92EC TYPICAL VALUES

Composition	Al_2O_3	92.00%
	SiO_2	4.20%
	CaO	0.50%
	MgO	0.30%
	Na_2O	0.50%
	K_2O	0.05%
Density	Density	3.58 g/cm3
Specification / physical properties	Water absorption	0.00%
	Compression strength	N/mm2 ≈1900
	Bending strength	N/mm2 ≈280
	Modulus elasticity	N/mm2≈280000
	Thermal conductivity	W/m°K ≈16

Interpretation and terminology

The following abbreviations are used in this Service Information:

Abbreviation	Description
µ	Micro
BS	British Standard
kPa	Kilopascal
M	Metre
mm	Millimetre
OD	Outer Diameter
OEM	Original Equipment Manufacturer
ID	Inner Diameter
ISO	International Organisation of Standardisation
QCP/QIP	Quality Control Plan / Quality Inspection Plan
PS	Power Station
SABS	South African Bureau of Standards
SOW	Scope of Work
TET	Technical Evaluation Team

9 Management strategy and start up.

9.1 The *Contractor*'s plan for the *service*

The *Service Provider* submits a program for acceptance by Service Manager
The *Service Provider* to provide contingency plan in case each resource get deceased, resigns or get Sick
The *Service Provider* takes five days to replace the resources

The responsibilities of the contractor include the following:

Comply with the employer's environmental, health, and safety standards, policies, and procedures.
Make all repair/refurbishment information available to the employer on request.
Inform the employer's representative at least 48 hours prior to any hold points that may require the employer.

PRE-JOB PLAN

- Compile risk assessment and request the permit to work from the relevant Employer's Agent or his delegate as per PSR (Plant Safety Regulation). Quality Controller (QC) must be notified prior to any inspection or work to be carried out.
- Inform workers about all the risk hazards, precaution in case of emergency or an accident, required PPE (Personal Protective Equipment) and scope of work
- Confirm the scope of work and completion date and time day before works starts.
- If required, ensure hot work approval documents/permit has been obtained and a trained fire watcher is available.

CONSTRAINTS ON HOW THE CONTRACTOR PROVIDES THE SERVICE

- *Contractor* ensures gate permit access requirements are met before entry to site.
- The *contractor* submits a safety file before an entrance certificate is granted.
- Work is carried out on the mill component in the plant mostly at 40 feet level, above 40 feet level and basement i.e. ground floor.
- *Contractor* ensures plant availability (Permit to Work where Applicable) before proceeding to work in the plant.
- Contractor ensures adherence to hot work procedure and availability of hot work permit and fire watcher before proceeding to do any hot work in the plant.
- *Contractor* works with others in the plant to facilitate the success of the contractor's task order.
- All services offered by the *Employer* to be booked 24hrs in advance.
- All technicians/artisans are authorised and accredited by relevant education authorities and proof is submitted to *Employer's agent* at the start of contract.
- ▪ Risk Assessments, scope of work (SOW) and quality inspection plans (QIPs) are submitted to the *Employer's agent* prior to activity of task orders.
- ▪ Detailed report of material used to be submitted before assessments and invoicing period.

9.2 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	Weekly on _____ at ___	Hendrina Power Station	Service Manager and Contractor rep
Overall contract progress and feedback	Monthly on _____ at ___	Hendrina Power Station	*Employer*, *Contractor* and ___

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.

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

Contractor to provide an organogram showing his people and their lines of authority/communication.

The *Contractor* attaches the personnel CV's for evaluation to the *Employer*. The *Employer* reserves the right to not accept the personnel not meeting the required expertise or competency level

9.4 Provision of bonds and guarantees

Not applicable to this contract.

9.5 Documentation control

All contractual communications will be in the form of properly compiled letters or forms attached to e mails and not as a message in the e mail itself.

The routing of all written communications will be between the *Employer* and the Contractor only, any agreements between the Contractor and any other person representing the employer which has not been routed via the Service Manager is null and void.

Any written instruction(s) resulting in any changes to the duration, quality, cost of the service will only be received from the Service Manager. Any verbal Instruction will also be considered null and void.

9.6 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

_____

and include on each invoice the following information:

- Name and address of the *Contractor* and the *Service Manager;*
- The contract number and title;
- *Contractor*'s VAT registration number;
- The *Employer*'s VAT registration number 4740101508;
- Description of service provided for each item invoiced based on the Price List;
- Total amount invoiced excluding VAT, the VAT and the invoiced amount including VAT;
- (add other as required)

Add procedures for invoice submission and payment (e. g. electronic payment instructions)

9.7 Contract change management

For any changes on the contract standard, NEC forms must be used which includes but not limited to:

- Task order forms before the Service commencement.
- Assessment forms on completion of a task order.
- Early warning forms when either party warns the other about the foreseen situation.
- Compensation event notification when there is a possibility of additional Service.

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

The Contractor keeps records of all equipment and people employed on site which the Employer has access to at any time in order to access compensation events for the period of this contract.

9.9 Insurance provided by the *Employer*

Refer to the TSC3 Data by Employer Core Clause 83.1

9.10 Training workshops and technology transfer

Not applicable to this contract.

9.11 Design and supply of Equipment

The Contractor provides all the necessary equipment for the execution of work.

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

9.12.1 Equipment

None

9.12.2 Information and other things

Certificate of completion will be submitted at the end of the contract or period of service and is to be signed by both the *Employer* and *Contractor.*

9.13 Management of work done by Task Order

The *Employer* will issue a Task Order as an instruction to commence with the execution the work. No work will be permitted to commence without an issued task order signed by both *Employer* and *Contractor.*

10 Health and safety, the environment and quality assurance

10.1 Health and safety risk management

The *Contractor* complies with all of the applicable procedures as required by the *Employer*, Procedures available from the *Employers* Documentation Centre on request.

The *Contractor* is to ensure that all his personnel attend a Health and Safety Induction Course presented by *Employer* from 09:00 to 10:00, Monday- Friday prior to commencement of any *works*. This is a one (1) hour course and is valid for the duration of one (1) year at Hendrina Power Station.

- The *Contractor* works strictly to risk assessment associated to his plant specific hazards.
- The *Contractor* ensures supervised and authorised entry into the plant.

- The *Contractor* ensures at all times compliance with the safety regulations imposed by any act of
- parliament, or any regulation or by law of any statutory authority.
- The *Contractor* complies with the Occupational Health and Safety Act and Regulations, 1993 and all regulations made there under as well as the *Employer's* safety and operating procedures.
- The *Contractor* acknowledges that he is fully aware of the requirements of all the above and undertakes to employ people who have received sufficient training to do the work required by the scope that they can comply therewith.
- The *Contractor* undertakes not to do, or not to allow anything to be done which will contravene any provisions of the act, regulations or operating procedures.
- All employees of the *Contractor* must attend a safety induction course before they are allowed to work on site. It is the responsibility of the *Contractor* to ensure that all employees have attended the safety induction.
- The *Contractor* holds a Toolbox Talk and inspects all PPE before any work commences and keep written proof of such actions.
- The *Contractor* complies with all of the applicable Quality, health, safety and plant procedures as stated on specifications point no 3.7.1
- The *Contractor* complies with all of the applicable procedures as required by the *Employer*,
- Procedures available from the *Employers* Documentation Centre on request.
- The *Contractor* complies with the health and safety requirements questionnaire.
- The *Contractor* familiarizes himself with all permit requirements for work to be done on all plant systems and ensures that permits are applied for accordingly. The *contractor* specifically addresses all risks related to work in any area by means of a written and approved risk assessment, which is compiled in liaison with the *Employer*
- 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 must be kept free of obstruction, and not be used for work or storage at any time.
- Firefighting equipment remains accessible at all times
- In case of a fire, report the location and extent of the fire to the Electrical Operating Desk at extension 5555
- Take the necessary action to safe guard the area to prevent injury and spreading of the fire

10.2 Environmental constraints and management

The *Contractor* adheres to the *Employer's* Environmental Management System that must meet the requirements for the Code of Practice for Environmental Management Systems (EMS), ISO 14001:2004 The EMS requirements are detailed in the latest revision of the following documents, which are available from the *Service Manager* on request, and include:

- The Hendrina Power Station Environmental Policy (HSPPPIN005)
- The Environmental Emergency Preparedness Procedure (HSPPIN032)
- The Prevention & Cleaning of Oil Spills Procedure (HSPPON003)
- The Waste Management Procedure (HSPPIN003)
- The Roles and Responsibilities Procedure (HSPPIN028)
- The EMS Non-Conformance, Corrective and Preventative Action (HSPPIN034)
- The relevant Environmental Management Programmes (EMP's) and Aspects on the
- Environmental Management System (EMS) database - this is continually changing and is available from the Employer's Representative
- Compliance to all relevant environmental legislation, as detailed in the latest version of the Hendrina Power Station Legal Register available from the Employers Representative
- All operational procedures that include environmental requirements, relevant to the Services Information or Scope of this contract

If there is uncertainty around any environmental issues, the Employer's Environmental Department may be contacted on (013) 296 3358 or (013) 296 3910 or (013) 296 3013

10.3 Quality assurance requirements

The following documentation must be supplied to the Employer's representative before any item is accepted on site:

All documentation, but not limited to, quality assurance tests, inspections and documentation of the scope of work above.

All the QIPs must be accepted by Eskom engineer and Eskom Quality department before work commences.

The *Contractor* complies with the *Employer's* Quality Requirements as specified in Eskom Generation

11 Procurement

11.1 People

11.1.1 Minimum requirements of people employed

Supervisor

- Engineering National Diploma in mechanical engineering or higher qualification.
- Supervisory experience of at least 3 years.
- CV with 3 Years Supervisory Experience and background in mechanical maintenance or tiling work.

Refractory Technician (number as per work execution plan)

- Refractory Technician or Bricklayer Trade Test Certificate
- Grade 12 Certificate
- CV with 3 Years Tiling Experience

11.1.2 BBBEE and preferencing scheme

11.1.3 Accelerated Shared Growth Initiative – South Africa (ASGI-SA)

The *Contractor* complies with and fulfils the *Contractor's* obligations in respect of the Accelerated and Shared Growth Initiative - South Africa in accordance with and as provided for in the *Contractor*'s ASGI-SA Compliance Schedule stated below
.
[Insert the agreed ASGI-SA Compliance Schedule here]

The *Contractor* shall keep accurate records and provide the *Service Manager* with reports on the *Contractor*'s actual delivery against the above stated ASGI-SA criteria. [Elaborate on access to and format of records and frequency of submission etc.]

The *Contractor*'s failure to comply with his ASGI-SA obligations constitutes substantial failure on the part of the *Contractor* to comply with his obligations under this contract.

11.2 Subcontracting

11.2.1 Preferred subcontractors

Contractor submits conditions of subcontracting contract to the *Service Manager* for approval.

11.2.2 Subcontract documentation, and assessment of subcontract tenders

The use of NEC document is compulsory. Specified constraints on how the *Contractor* prepares subcontract documentation and how subcontract tenders are to be issued, received, assessed (using joint report) and awarded.

11.2.3 Limitations on subcontracting

Contractor obtains approval from the *Service Manager. Employer* permits *Contractor* to subcontract other works, but not more than a specialised proportion of the whole contract. *Contractor* provides the majority of the works being 80% from own resources and all the necessary documentation for the works carried out by subcontracting is submitted to the *Service Manager* for approval

11.2.4 Attendance on subcontractors

The main *Contractor* is responsible for the management of the duties and performance of the Subcontractor.

11.3 Plant and Materials

11.3.1 Specifications

Not applicable to this contract.

11.3.2 Correction of defects

Defects to be corrected within seven working days upon detection

11.3.3 *Contractor*'s procurement of Plant and Materials

Not applicable to this contract.

11.3.4 Tests and inspections before delivery

- Final inspection must be conducted by the employer's representatives before return to service.

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

None

11.3.6 Cataloguing requirements by the *Contractor*

Not applicable to this contract.

12 Working on the Affected Property

The Employer will grant access to plant to the Contractor when required

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

Compulsory induction will be required before gaining access to Hendrina Power Station.

- Adherence to cardinal or lifesaving rules and other requirements will be explained during the induction process.
- *Contractor* ensures gate permit access requirements are met before entry to site.
- The *contractor* submits a safety file before an entrance certificate is granted.

12.2 People restrictions, hours of work, conduct and records

Contract maybe terminated due to the following conduct

- *Service Provider* my not divulge classified information about the Employer
- The *Service Provider* may not use any information about the Employer to the public
- Any conflict of interest will be prosecuted
- No documents can be reproduced or stolen for the Service Provider for self-establishment and enrichment
- Employer's Data and other Organisational process assets is treated as confidential
- The *Service Provider* resources may not lie or misrepresent themselves

- Frequent late arrival in meetings and at work may lead to termination of the contract or resource being replaced
- Poor work ethics may lead to resource being replaced e.g procrastination and delays in providing
- Service, negligence and elementary mistakes
- No standing time claims will be entertained without proof of presence and activity in the form of a time sheet.

12.3 Health and safety facilities on the Affected Property

The *Service Provider* is provided with an on-site Medical Centre for 1st aid and minor injuries. Major injuries are referred to the hospitals outside Hendrina power station using the ambulance on site. The contractor is responsible for the medical treatment fees of his employees

12.4 Environmental controls, fauna & flora

As per the *Employer's* procedure: The Hendrina Power Station Environmental Policy (HSPPPIN005)

12.5 Cooperating with and obtaining acceptance of Others

The *Contractor* cooperates with all other relevant stakeholders.

12.6 Records of *Contractor*'s Equipment

Not applicable to this contract.

12.7 Equipment provided by the *Employer*

Not applicable to this contract.

12.8 Site services and facilities

12.8.1 Provided by the *Employer*

Abluition facilities, water and electricity will be provided by the Employer.

12.8.2 Provided by the *Contractor*

The Contractor provides a storage facility for their equipment.

12.9 Control of noise, dust, water and waste

As per Employer's Environmental requirements specified under section 3.2 **Environmental Constraints and Management**

12.10 Hook ups to existing works

The Contractor shall adhere to cardinal rules which includes hook up at heights.

12.11 Tests and inspections

12.11.1 Description of tests and inspections

As per scope of work on Service Information.

12.11.2 Materials facilities and samples for tests and inspections

Not applicable to this contract.

13 List of drawings

13.1 Drawings issued by the *Employer*

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

Drawing number	Revision	Title