NEC3 Term Service Contract (TSC3)

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

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

for **MAINTENANCE AND REPAIRS OF ELECTROSTATIC PRECIPITATORS (ESP) DURING RUNNING AND OPPORTUNITY MAINTENANCE AT LETHABO POWER STATION FOR A PERIOD OF FIVE (5) 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:

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:

Maintenance and Repairs of Electrostatic Precipitators during running and opportunity maintenance at Lethabo 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.

Options A or C	The offered total of the Prices exclusive of VAT is	**Rates**
Option E	The first forecast of the total Defined Cost plus the Fee exclusive of VAT is	**Rates**
	Sub total	**Rates**
	Value Added Tax @ 15% is	**Rates**
	The offered total of the amount due inclusive of VAT is[1]	**Rates**
	(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.*

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

Clause	Statement	Data
1	**General**	
	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
		X7: Delay damages
		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**
	Address	**Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg**
	Tel No.	
	Fax No.	**086 661 7329**
10.1	The *Service Manager* is (name):	
	Address	**Lethabo Power Station**
	Tel	
	Fax	
	e-mail	

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

11.2(2)	The Affected Property is	**Lethabo Power Station**
11.2(13)	The *service* is	Maintenance and Repairs of Electrostatic Precipitators during running and opportunity maintenance at Lethabo Power Station for a Period of 5 Years.
11.2(14)	The following matters will be included in 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	**2 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	**1 week of the Contract Date**
3	**Time**	
30.1	The *starting date* is.	
30.1	The *service period* is	**Five years**
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 *assessment interval* is	**After completion of each task order.**
51.1	The *currency of this contract* is the	**South African Rand**
51.2	The period within which payments are made is	**4 weeks after the receipt of the invoice.**
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.** **2.** **3.**
9	**Termination**	**There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data.**
10	**Data for main Option clause**	
A	**Priced contract with 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	**1 week after work is complete.**
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	**The contract prices will be fixed and firm for the first year and thereafter prices will be increased as follows**
	The proportions used to calculate the Price Adjustment Factor are:	**proportion** / **linked to index for** / **Index prepared by** **Labour 70%** / **SEIFSA Table C3** **Transport 20%** / **SEIFSA Table L1** **Fixed 10%** / **non-adjustable** **100%**
X2	**Changes in the law**	**There is no reference to Contract Data in this Option and terms in italics are identified elsewhere in this Contract Data.**
X17	**Low service damages**	
X17.1	The *service level table* is in	**[●]**
X18	**Limitation of liability**	
X18.1	The *Contractor*'s liability to the *Employer* for indirect or consequential loss is limited to	**R0.0 (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	**1 month after the end of the *service period*.**
X19	**Task Order**	
X19.5	The *Contractor* submits a Task Order programme to the *Service Manager* within	**5 days of receiving the Task Order**
Z	**The *additional conditions of contract* are**	**Z1 to Z11 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.

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 insurances stated in the Insurance Table B

INSURANCE TABLE B

Insurance against or name of policy	**Minimum amount of cover or minimum lir 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

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.

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 *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:	
24.1	The key people are: 1 Name: Job: Responsibilities: Qualifications: Experience: 2 Name: Job Responsibilities:	

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

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	**R**
C	**Target contract with price list**	
11.2(12)	The *price list* is in	
11.2(20)	The tendered total of the Prices is	**R**
E	**Cost reimbursable contract**	
11.2(12)	The *price list* is in	

C1.3 Forms of Securities

Pro formas for Bonds & Guarantees

For use with the NEC3 Term Service Contract (TSC3)

[Note to contract compiler:
Once it has been decided which securities are required for this contract delete from this file the ones not required, revise the notes below accordingly and delete this note.]

The *conditions of contract* stated in the Contract Data Part 1 include the following Secondary Options:

Option X4: Parent company guarantee
Option X13: Performance Bond

Each of these secondary Options requires a bond or guarantee "in the form set out in the Service Information". Pro forma documents for these bonds and guarantees are provided here for convenience but are to be treated as part of the Service Information.

The *Contractor* shall guarantee his ASGI-SA Obligations by providing the *Employer* with an ASGI-SA Guarantee in the form provided here.

[Note to contract compiler: If there are no ASGI-SA Obligations in this contract, delete the above statement and the ASGI_SA bond]

The organisation providing the bond / guarantee does so by copying the pro forma document onto his letterhead without any change to the text or format and completing the required details. The completed document is then given to the *Employer* within the time stated in the contract.

Pro forma Parent Company Guarantee (for use with Option X4)
(to be reproduced exactly as shown below on the letterhead of the Contractor's Parent Company)

Eskom Holdings SOC Ltd
Megawatt Park
Maxwell Drive
Sandton
Johannesburg Date:

Dear Sirs,

Parent Company Guarantee for Contract No

With reference to the above numbered contract made or to be made between

Eskom Holdings SOC Ltd (The *Employer*) and

{Insert registered name and address of the *Contractor*} (The *Contractor*), for

{Insert details of the *works* from the Contract Data} (The *works*).

I/We the undersigned .....

on behalf of the *Contractor*'s parent company .....

of physical address .....

and duly authorised thereto do hereby unconditionally guarantee to the *Employer* that the *Contractor* shall Provide the Service in accordance with the above numbered Contract.

1. If for any reason the *Contractor* fails to Provide the Service, we hereby agree to cause to Provide the Service at no additional cost to the *Employer*.

2. If we fail to comply with the terms of this Deed of Guarantee, the *Employer* may itself procure such performance (whether or not the Agreement be formally determined). The *Employer* is to notify us and we shall indemnify the *Employer* for any additional cost or expense it incurs.

3. Our liability shall be as primary obligor and not merely as surety and shall not be impaired or discharged by reason of any arrangement or change in relationship made between the *Contractor* and the *Employer* and/or between us and *Contractor*; nor any alteration in the obligations undertaken by the *Contractor* or in the terms of the Agreement; nor any indulgence, failure, delay by you as to any matter; nor any dissolution or liquidation or such other analogous event of the *Contractor*.

4. The *Employer* shall not be obliged before taking steps to enforce the terms of this Deed of Guarantee to obtain judgement against the *Contractor* in any court or other tribunal, to make or file any claim in liquidation (or analogous proceedings) or to seek any remedy or proceed first against the *Contractor*.

5. This Deed of Guarantee shall be governed by and construed in accordance with the laws of the Republic of South Africa and we hereby submit to the non-exclusive jurisdiction of the High Court of South Africa.

Signed at _____ on this _____ day of _____ 200_

Signature(s)		
Name(s) (printed)		
Position in parent company		
Signature of Witness(s)		
Name(s) (printed)		

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

1. 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.

2. 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.

3. 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).

4. 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.

4.1. 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*

Maintenance and Repairs of Electrostatic Precipitators during Running Maintenance at Lethabo Power Station for a three-year Period.

Item nr	Description	Unit of measure	Expected Quantity	Rate	Total
1.1	**Routine Maintenance in a Running Plant**				
	1 x ESP Plant Supervisor	hr	10560		
	1 x Quality Control Inspector	hr	10560		
	1 x Safety Officer	hr	10560		
	2 x Mechanical Fitters	hr	21120		
	2 x Semi-skilled personnel	hr	21120		
	1 x Assistant	hr	10560		
1.2	**ESP Casing Outages**				
	1 x ESP Plant Supervisor	hr	10560		
	1 x Quality Control Inspector	hr	10560		
	1 x Safety Officer	hr	10560		
	4 x Mechanical Fitters	hr	42240		
	4 x Semi-skilled personnel	hr	42240		
	4 x Assistants	hr	42240		
	2 x B-class welders	hr	21120		
	2 x Boiler Makers	hr	21120		
	1 x Store-man	hr	10560		
1.3	**Mechanical Inspection**				
	Site Supervisor	hr	10560		
	Quality Controller	hr	10560		
	Welding Inspector	hr	10560		
1.4	**Preliminaries and General**				
	Health and Safety Costs	Sum	1		
	Management costs	Sum	1		
	Total				

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

Contents

When the document is complete, insert a 'Table of Contents'. To do this go to: Insert, → Reference, → Index and tables → Table of Contents. Three levels and the title (but not the subtitle) may be shown if the formats used in this template are retained.

Otherwise insert list of contents manually.

1 Description of the *service*

1.1 Executive overview

Maintenance and Repairs of Electrostatic Precipitators during running and opportunity maintenance at Lethabo Power Station for a Period of 5 Years

Mechanical scope:

Daily repairs/ replacement on conditions of the following systems:

- Discharge electrode or RDE rapping system
- Collecting electrode rapping system
- Ash hoppers
- ESP dampers
- ESP doors
- Inlet and outlet expansion joints
- ESP casing plate-work (LHO/LHI/RHI/RHO)
- ESP Roof
- Perform/ check/ control job observations
- ESP Support insulators torque insulators.

ESP Casing Outages
Generic SOW will be ESP Casing repairs; determined from the inspections done during running maintenance/ the casing outages/ opportunity maintenance and it is not a pre-determined SOW.

Repairs or replacement to be executed
Internally repair/ replace Electrostatic Precipitator components after the unit shutdown for plant defects identified and determined from the scope of work for inspection.

ESP Casing Washing

- Wash all fields in the ESP casings (LHO/LHI/RHI/RHO);

Note: Casing washing will be done while unit is on load, off load on mini outages and major outages; and the washing will be carried on request from Engineering.
In addition, the contractor performing ESP washing will ensure that there is no water ingress to the dust plant conveyors and no spillage to the next unit. Note: Diversion chutes are to be installed at the ash hopper outlets in order to direct the sludge away from the transfer conveyors.

Part 2: Maintenance and Repairs of Electrostatic Precipitators during Running Maintenance at Lethabo Power Station.

Scope to be Executed

Discharge/ RIGID DISCHARGE Electrode Rapping System Repairs

- Replacement of gaskets and seals on DE/ RDE rapper gearboxes when required.
- Topping up oil on DE/ RDE rapper gearboxes when required.
- Replacement of worn or broken shearing pins on DE/ RDE system.
- Replacement of gearboxes on DE/ RDE system;
- Replacement of hexagons on DE system or RDE ratchet system if found damaged.
- Replace RDE rapper shaft bearings if found damaged.
- Replace the lifting cage frame if damaged.
- Replace tooth ratchet coupling if damaged.
- Replace RDE lifting cage system if found damaged.
- Replace RDE hammer shaft connecting flanges if damaged.
- Replace cam lifting mechanism if damaged.

Collecting Electrode Rapping System Repairs

- Replacement of gaskets and seals on CE rapper gearboxes when required;

- Topping up oil on CE rapper gearboxes when required;
- Replacement of packing on the stuffing box when required;
- Replacement of CE gearboxes when found defective;

ESP Ash Hopper Casing Repairs

- Repair ESP ash hopper casing plate-work if found damaged;
- Do a window repairs on damaged ESP ash hopper casing plate work;
- Replace ESP ash hopper high level indicators if found damaged;
- Overhaul ash hopper poke rods sealing arrangement if found damaged;
- Unblock ash hoppers if found with ash build-ups or blockages;
- Secure poke rod stuffing box flange bolts to ash hopper poke rod flange (ensure there is free movement);
- Ensure poke rods agitating chains are attached properly to poke rod ends (Weld them in position if found broken off);
- Replace gland packing in poke rod stuffing box if found damaged (use 10 mm x 10 mm graphite impregnated fibre rope);
- Ensure all damaged ash hopper baffle plates are fitted back into their original position;
- Re-align misaligned baffle plates;
- Ensure all walkways and safety lines are good and in safe working condition.

Inlet and Outlet Damper Repairs

- Replace all damper seals if found damaged;
- Ensure the fitment of lagging is always in place between sealing plate and EPDM seal;
- Replace all damaged damper gearboxes if found malfunctioning;
- Perform stroke checking of inlet and outlet dampers if required;
- Lubricate guillotine damper flap manual actuator with graphite powder;

ESP Doors

- Repair of slope doors if found damaged;
- Repair of side access doors if found damaged;
- Repair of ash hopper doors if found damaged;
- Repair of roof doors if found damaged;
- Replace sealing ring on each door if found damaged;
- Replace door seals if found damaged (ensure seals are always in good working order) – Seal Material: 12.5 x 12.5 mm Graphite Impregnated Fibre Rope;
- Replace door fastening bolts and nuts if found damaged with new ones and apply copper slip before replacing the nuts;
- Lubricate all door hinges with graphite powder;
- Align all misaligned doors with door frames;

Inlet Expansion Joint

- Replace ESP expansion joints if found damaged;
- Ensure no air leakages on the expansion joints.

ESP Casing Outages

Generic SOW will be ESP Casing repairs; determined from the inspections done during the casing outage and it is not a pre-determined SOW.

ESP Repairs on Discharge/ Rigid Discharge Electrode (DE) Rapping System

- Replace gaskets and seals on DE/ RDE rapper gearboxes if required (7 per casing);
- Top up oil DE/RDE rapper gearboxes if required (7 per casing);
- Clean DE/RDE gearbox inspection covers direction indicator plate if required (7 per casing);
- Clean torque insulators (7 per casing);
- Clean support insulators (4 per field);
- Replace top steady bearings if required (7 per casing);
- Grease the top steady bearings if required (7 per casing);
- Replace universal joints if required (5 per field);
- Replace DE rapper shaft drive gearbox if required (2 per field);
- Replace DE/RDE hammers and inner bushes if required (92 per field);
- Replace V-split bushes and pads if required (7 per field);

- Replace rapping hammer anvils if required (92 per field);
- Replace triangular roof above the DE/RDE support frame if required (2 beams per field);
- Replace DE/RDE rapping hammers as required per field in each ESP casing (7 fields per casing);
- Remove loose electrodes from DE/RDE frames and replace with new;

ESP Repairs on Collecting Electrode (CE) Rapping System

- Replace gaskets and seals on CE rapper gearboxes if required (13 per casing);
- Top up oil on CE rapper gearboxes if required (13 per casing);
- Replace packing on the stuffing box if required (13 per casing);
- Replace collecting electrode hammers and inner bushes if required (47 per rapping shaft);
- Replace V-split bushes and pads if required (7 per rapping shaft);
- Replace flat bar bush bolts and nuts if required (47 per field);
- Repair rapping hammer anvils if required (47 per field);
- Replace conical bushes, bolts and nuts if required (470 per field);
- Align DE/RDE & CE if required;

Note: In a case where rapper bars dropped and unable to keep it position due to damaged CE plate conical bush hole, an insert needs to be fitted with new conical bush and adjacent two bolts.

ESP Ash Hoppers

- Repair ESP ash hopper casings if required (56 per unit);
- Repair or replace high ash hopper level indicators if required (56 per unit);
- Replace poke rods and chains if required (56 per unit);
- Overhaul poke rods sealing arrangement if required (56 per unit);
- Repair ash hopper baffle plates if found damaged;
- Replace ash hopper baffle plates if found missing;
- Re-align misaligned baffle plates.

Safety – Install walkway platform inserts before embarking on Ash hopper work and ensure the safety lines are also tested. In addition, ensure the walkway platform inserts are removed after completion of the work.

Note: The walkways must be in a safe working condition.

ESP Doors

- Repair ESP slope doors if required (64 per unit);
- Repair ESP side access doors if required (32 per casing);
- Repair ESP ash hopper doors if required (56 per unit);
- Repair ESP roof doors if required (84 per unit);
- Replace sealing ring on each door if required (236 per unit);
- Repair roof doors if required (84 per unit);
- Replace sealing ring on each door if required (236 per unit);
- Replace door seals [Seal Material: 12.5 x 12.5 mm Graphite Impregnated fibre rope] if required (236 per unit);
- Clean all door fastening bolts and nuts; and apply a copper slip before installation;
- Lubricate door hinges with graphite powder.

ESP Dampers

- Replace guillotine damper seals on inlet side of the ESP if required (4 per unit);
- Repair outlet dampers if required (4 per unit);
- Replace ESP inlet expansion joints;
- Replace ESP outlet damper gearboxes;
- Carry out inlet and outlet damper stroke-checking (Mechanically);
- Repair guillotine damper guide channel if required;
- Repair guillotine damper flap doors if required;
- Lubricate guillotine damper flap manual actuator with graphite powder;

ESP INSPECTION FOR REPAIRS/ REPLACEMENTS

- Pre-outage inspection must be carried out:
    - To determine areas of air ingress
    - To determine areas where ash leakage occurs.

- ESP inspection must be done before repairs are carried out:
  - Details for inspection are described within this scope of work.
  - Report on findings must be supplied to engineering within 3-4 days from commencement of inspection.
- QCP's must be provided and accepted by system engineer before any work on the ESP's may commence.
- Post-outage inspection.
  - To ensure zero air ingress after outage.

SCAFFOLDING

Scaffolding must be built in fields 1-7 (Total of 56 Hoppers)
Maintenance service provider must request any other scaffolding requirements.

CASING, DAMPERS AND HOPPERS

LHO-, LHI-, RHI- and RHO casing.

Washing

- Washing must be done:
  - Fields 1-7.
  - Inlet distribution screens.
  - Outlet cone.
  - Ensure top of DE support frame is also clean.
  - Ensure inlet distribution screens are free of blockage.

Guillotine dampers

- Guillotine damper rectangular seals **(1 per casing)** must be replaced. [**Fabric Expansion Joint, 450 x 22000 mm, 18 mm diameter holes drilled along the width on both sides & pitch of the holes is 100 mm, 450°C flue gas temperature**]
- Inlet expansion joints **(1 per casing)** must be replaced.
- Guillotine damper guide channel:
  - Worn and damaged areas must be repaired.
  - Clear blockages.
- Guillotine damper flap doors:
  - Repair damaged areas of flap door.
- Guillotine damper flap manual actuator.
  - Clean spindle
  - Lubricate with graphite powder.

Access doors

- ESP inlet slope- **(8 per casing),** roof- **(23 per casing),** outlet slope- **(8 per casing),** side- **(8 per casing)** and hopper doors **(14 per casing)** must be:
  - Marked (excluding roof doors)
  - Removed from plant (excluding roof doors).
  - Cleaned via sandblasting (excluding roof doors).
  - Refurbished (excluding roof doors)
  - Painted with an epoxy able to withstand temperatures >150°C.
  - Refit doors in original positions.
  - Doors must be properly aligned with doorframes.
  - Door seals must be replaced. (Seal Material: 12.5x12.5 Graphite impregnated fibre rope)
  - Door fastening bolts and nuts
    - Must be cleaned.
    - Copper slip applied before replacing nut.
  - Lubricate door hinges with graphite powder.
  - On load air ingress inspection must be carried out after outage to ensure no doors are leaking.
- Side door manholes **(8 per casing)** must be:
  - Window repairs must be carried out on areas found with holes during inspection.

Roof and dead space

Predetermined Scope

- Dead space:
  - Replace the following fields' support insulators and realign their DE frames (only if found damaged)
    - LHO 1-7
    - LHI 1 - 7
    - RHI 1 - 7
    - RHO 1 - 7

Repair Scope

- Dead space:
  - Clean dead space (Vacuum)
  - Remove any debris.
  - Strainers / venturi's must be in position and clean.
  - Clean support insulators on the inside and outside.
  - Check support insulators for cracking and electrical tracking
    - Replace insulators with track marks.
    - Replace cracked insulators.
  - Check support insulator caps for cracks.
    - Replace cracked insulator caps
- Roof:
  - Inspect roof from the dead space for signs of water penetration:
    - Repair/support and seal to prevent reoccurrence.

Hoppers

- Poke rods (1 per hopper):
    - Replace worn out/damaged poke rods.
  - Replace gland packing in poke rod stuffing box. (10mmx10mm graphite impregnated fibre rope)
  - Poke rod stuffing box flange bolts must be secured to hopper.
    - Flange may not rattle.
    - Poke rod must still be able to move freely.
  - Poke rod agitating chains must be attached to poke rod ends.
    - Re-weld broken of chains to poke rod end.
    - Repair holes with window repairs
- Field protection trip chains
  - There must be one field protection trip chain situated at the bottom of the DE frames, in each third of the hopper. (In each section of the hopper divided by the baffle plates.)
    - If these chains are not in place new chain assemblies must be installed.
- Hopper high level indication tubes (1per hopper):
  - Clean inside of hopper high level tube and ensure that the tubes are not blocked.
  - Replace/ repair for wear damage on tube.
    - Repair/replace damaged hopper high level tubes that are damaged.
    - Wear shield must be installed on each high level tube. (Shield detail: 60x60x3mm angle iron)
    - Damaged areas must be repaired with window repairs.
- Hopper side walls(56 hoppers per Unit):
    - Repair holes with window repairs
  - The poke rod agitating chains must be securely attached to hopper corners.
    - Wall thickness measurement results must be provided to system engineer for scope determination of hopper wall repairs.
  - Dye pen / MPI tests must be carried out on seam welds
    - Reports must be provided to system engineer for scope determination.
  - Carry out window repairs on the hopper walls as per visual inspection and SOW of system engineer derived from wall thickness tests and dye pen test reports.
- Hopper baffle plates:
  - Remove/Return to original position baffle plates that have fallen out of place
  - The baffle plates must be in a good working order.

- Replace missing pieces.
- Repair damaged pieces.

- The baffle plates must be aligned with each other.
  - Re-align misaligned baffle plates.

- Hopper walkways and safety lines.
  - The walkways must be in a safe working condition.
  - Install walkway platform inserts before use.
  - Safety lines must be tested before use.
  - Remove walkway platform inserts after completion of work.

Inlet and outlet cones

- Inlet cone must be
  - Cleaned of any debris and washed.
  - Holes found during inspection must be repaired with window repairs.
- Outlet cone must be:
  - Cleaned (washed)
  - Holes found during inspection must be repaired with window repairs.
- Outlet ducting leading to ID fans must be:
  - Cleaned (vacuuming)
  - Holes found during inspection must be repaired with window repairs.
- Primary-, Intermediate- and Secondary inlet distribution screen:
  - Replace damaged section.
  - Wall thickness tests must be carried out on distribution screens.
    - Report must be provided to system engineer for SOW clarification.
    - Replace sections pointed out by system engineer.

Note: Ensure QIP are submitted prior the repairs.

DISCHARGE/ RIGID DISCHARGE SYSTEM
LHO, LHI, RHI, RHO casings.
Electrodes
Field 1-7

- Electrodes must be clean.
- The electrodes' horizontal and longitudinal alignment must be as follow:
  - DE/RDE electrode spacing from outer edge of CE electrode is the same on both inlet and outlet sides of each field.
  - DE/RDE electrodes should be spaced 150mm centre to centre from CE electrodes with ± 10mm tolerance.
  - Replace damaged electrodes
  - Remove wire from frame.
- The electrodes must be square and level.
- The electrode fixing bolts must be torqued and tack welded.
- Electrode support brackets must be straight.
  - Straighten skew brackets

Discharge/ RIGID DISCHARGE rapper gearbox
Field 1-7

- Pre outage inspection to identify leaking gearboxes
  - Identified gearbox gaskets must be replaced during outage.
- Discharge rapper shaft rotation inspection window (7 per casing):
  - Must be cleaned.
  - Sight glass flange gaskets must be replaced. (Gasket material: PTFE gaskets)
- DE drive motor gearboxes (7 per casing):
  - Must be removed from plant and taken to Auxiliary services to be:
    - Drained
    - Flushed
    - Cleaned
    - Refilled with new oil to correct level (Castrol Alpha SP 220)

- Retrieved from auxiliary services and refitted to plant.

- Gearboxes must be test-run after completion of work.
  - Inspect gearboxes for oil leaks
  - Ensure internal condition of DE rapper is in order.

Discharge/ rigid discharge electrode rapper hammers and anvils
Predetermined SOW.
Field 4 and 7

- Replace 92 anvil assemblies per field.
- Replace 92 hammers with liner and inner bushes per field.
- Align Hammer brackets to the centre of the electrode.

Field 4, 5 & 6:

- Replace 92 hammer pivot bolts per field (Unit total: 1104)
- Replace 184 Anvil bolts per field (Unit Total: 2208)

NOTE: For components not mentioned in the predetermined SOW, follow the repair/ replacement SOW below.

Repair/ replacement SOW.
Field 1 – 7.

- Anvils (92 per field)
  - Replace damaged anvils (cracked/failed).
    - Anvil bracket bolts found loose must be replaced.
    - Replace loose anvil bolts.
    - Replace loose anvil brackets bolts.
    - Replace damaged anvil brackets
  - Bracket bolts must be tightened to torque specified in APPENDIX A
- Hammer assemblies (2 shafts per field, 46 hammers per shaft)
    - Replace missing hammers.
    - Replace hammers mushroomed on both sides.
    - Replace DE rapper hammers with inner and liner bushes with side to side movement >6mm.
  - Replaced hammers must not be scrapped.
    - Must be put aside for refurbishment.
  - Hammer pivot bolts must be tightened to torque specifications in APPENDIX A.
  - Hammers must be able to move freely
  - Hammers must be aligned to the centre of the rapper bar anvil.
    - Expansion of shaft must be taken into account. (1mm/m/100°C from fixed point.)
  - The hammer brackets must be secured to the shaft.
    - Replace U-bolts of loose brackets.
  - Replace damaged hammer brackets.
    - Worn out pivot bolt holes.
    - Buckled brackets.

Discharge rapper shafts and bearings.

Predetermined SOW
Field 2, 3, 7.

- Replace male female shearing pin coupling assembly.
- Replace self-aligning bearings.

NOTE: For components not mentioned in the predetermined SOW, follow the repair/ replacement SOW below.

Inspection SOW
Field 1 – 7.

- Vertical drive shaft.
  - Male/female shearing pin coupling assembly.
    - Worn/damaged couplings must be replaced.

- The rotation indication plate must be in place.
- Replace shearing pin.

- DE torque insulators must be:
  - Cleaned with a clean dry rag
  - Damaged torque insulators must be replaced.
- Dead space universal joints.
  - Must be cleaned.
    - Replace damaged/worn joints.
  - Re-grease crosses with high temperature resistant grease.
- Self-aligning bearings (1 per field, in dead space)
  - Must be cleaned.
    - Replace worn out bearings.
  - Repack with high temperature resistant grease.
- Visually inspect shaft for damage (twisted, bowed, etc.)
  - Inform System Engineer of damaged shaft.
- Couplings
    - Replace damaged couplings.
    - Replace couplings with worn bolt holes.

- Horizontal shafts.
  - The hammer spiral must be continuous.
    - Before and after couplings.
    - At the internal worm drive.
  - The shaft coupling bolts must be tight and tack welded.
    - Loose bolts must be replaced and tightened to torque specification in APPENDIX A
  - V-pads
    - The V-pads must be in place.
      - Replace V-pad if thinnest part is <15mm
  - Split Bushes
    - The split bushes must be in place.
      - If OD is <75mm split bush must be replaced
    - Split bushes must be aligned with V-pads.

Discharge rapper worm drive assembly/ RDE Assembly

- Internal rapper worm drives **(2 per field)** must be:
  - Stripped from plant and set aside for refurbishment.
  - Replaced with new or refurbished drives.
    - The universal joints installed with the new drives must be filled with high temperature rated grease.

COLLECTING SYSTEM
LHO, LHI, RHI, RHO casings
Fields 1-7
Electrodes

- The CE plate jumpers must be properly earthed to the ESP structure.
- Alignment
  - Collecting electrode (CE) plates must be aligned to a single reference line (±170mm from outer edge of walkway structure) on both inlet and outlet sides of each field. (refer drawing no: 0.63/5894 for reference)
  - CE plates must be spaced 300mm from each other centre to centre with ±5mm tolerance.
- Repair CE plate for arc and spark damage.
  - Inform system engineer of damaged electrodes
- Repair CE plate for crack and tear damage.
  - Inform system engineer of damage.
  - Repair damaged electrodes.
- Repair CE connecting points to rapper bars.
  - Worn out holes must be repaired.

Collecting electrode rapper bars and anvils.
Refer to Eskom drawing: 0.63/5894 for rapper bar specifications.

Predetermined SOW
Field 4 and 7

- Replace 47 rapper bars per field.

Field 4, 5 and 6:

- Replace rapper bar conical bush bolts, 470 per field (Unit Total: 9400)
  - Assure rapper bar vertical alignment is as specified in drawing number 0.63/5894.

NOTE: For components not mentioned in the predetermined SOW, follow the repair/ replacement SOW.

Repair/ replacement SOW
Field 1 – 7.

- CE rapper bars:
  - Rapper bar vertical alignment must be correct.
    - Rectify misaligned rapper bar alignment.
  - Replace damaged rapper bars
- Rapper bar anvils.
  - Cracked welds
    - Repair rapper bars with cracked welds at anvils.
  - Missing anvils
    - Replace rapper bars with missing anvils.
- Rapper bar conical/spacer bushes.
    - Install new bushes in place of missing bushes.
  - Bush bolts must be in place and secure.
    - Replace loose and missing bolts.
- Repair CE guide bars (Field 1-7):
  - Guide bar must be in place.
  - Guide bar must be perpendicular in the vertical plane to the walkway structure.
  - Guide bar must be secure to the structure.
  - Replace damaged guide bars. (50x50 square tubing)

Collecting electrode rapper hammer assemblies.
Refer to ESKOM drawing 23.63/52826 sheet 1, latest revision, for specifications of CE hammer.

Predetermined SOW
The following applies to field 2, 3, 5 (Shaft 2-5, 8 & 9)

- Replace 47 hammer assemblies per shaft (Unit Total: 1128)
  - Replace hammer with liner bush and inner bush.

Field 1, 4, 6-7 (Shaft 1, 6, 7, 10 – 13)

- Replace 47 hammer pivot bolts per shaft (Unit Total: 1316)

NOTE: For components not mentioned in the predetermined SOW, follow the repair/ replacement SOW.

Repair/ replacement SOW
The following applies to field 1-7 (Shaft 1 – 13)

- Replace missing hammers.
- Replace hammer heads mushroomed on both sides.

- Hammer bush wear measurement.
  - Sample 10% of hammers per field (as per sampling method agreed upon with engineer prior to outage).
    - Measure inner bush OD of sampled hammers
    - Measure liner bush ID of sampled hammers
    - Provide feedback to engineer

The following applies to field 1-7 (Shaft 1-13)

- Replaced hammers must not be scrapped.
  - Must be put aside for refurbishment.
- Hammer pivot bolts must be tightened to torque specifications in APPENDIX A.
- Hammers must be able to move freely

- Hammers must be aligned to the centre of the rapper bar anvil
  - Expansion of shaft must be considered. (1mm/m/100°C from fixed point.)
- The hammer brackets must be secured to the shaft.
  - Replace U-bolts of loose brackets.
- Replace damaged hammer brackets.
  - Worn out pivot bolt holes.
  - Buckled brackets.
  - Etc.

Collecting electrode rapper shafts and bearings.
Predetermined SOW
The following applies to field 2, 3, 5 (Shaft 2-5, 8 & 9)
- Replace 14 split bushes per field, 7 per shaft
- Replace 28 V-pads per field, 14 per shaft.

NOTE: For components not mentioned in the predetermined SOW, follow the repair/ replacement SOW.

Repair/ replacement SOW
The following applies to field 1-7 (Shaft 1-13)
- Inspect shaft for wear/damage.
  - Broken
  - Cracked
  - Worn etc.
  - Inform system engineer of any damage.
- The hammer spiral must be continuous before and after couplings.
- The hammer horizontal alignment to the rapper bars must be correct.
  - Hammer must strike anvil in the centre.
- The shaft coupling bolts must be tight and tack welded.
  - Loose bolts must be replaced and tightened to torque specification in APPENDIX A
- Self-aligning bearings (1 per shaft)
  - Must be cleaned.
    - Replace worn out bearings.
  - Repack with high temperature resistant grease.
- V-pads
  - The V-pads must be in place.
    - Replace V-pad if thinnest part is <15mm
- Split Bushes
  - The split bushes must be in place.
  - Replace split bushes for wear.
    - If OD is <95mm split bush must be replaced
    - The split bushes must be aligned to the V-pads.
- Stuffing box.
    - Replace worn out packing.
  - Gland follower must be tightened sufficiently.
    - Prevent air ingress
    - Still allows smooth rotation of shaft.
  - Gland follower holding bolts must still be in place.

Collector rapper gearbox.
- Run gearboxes to listen for abnormal noise.
  - Mark gearboxes with abnormal noise.
- Strip gearboxes from plant and take to auxiliary services to be:
  - Drained.
  - Flush gearbox.
  - Top up oil to correct level. (Castrol Alpha SP 220)
- Retrieve gearboxes from auxiliary services and refit to plant.
- Replace defective gearboxes.
- The gearboxes must be test-run for a minimum of 12hr's before clearance of permit.
  - Inspect for oil leaks
  - The internal condition of the CE rapper system must still be in order.

ADDITIONAL SOW ON DE ELECTRODES
The electrodes will be replaced only if the refurbishment project is not ready for the period of the outage and it will include the following:

- Removal of all broken DE wires in all the fields in units ESP casings.
- Mapping out of all the missing DE wires in all unit ESP casings.

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

Either
Describe in detail what the *Employer* requires the *Contractor* to do and how he is to do it if the *Contractor* is mainly providing labour and tools to carry out the *Employer*'s requirements
Or
Provide the *Employer*'s operating philosophy / user requirement specification (URS) / performance specification giving deliverables and constraints for the *service* from which the *Contractor* is to plan in detail how he is to achieve the required deliverables.

Reference could be made to an Annexure for a detailed classification of services or to the Price List in the case of Option A or C and if the Price List descriptions are complete.

1.3 Interpretation and terminology

If required include here definitions additional to those used in the *conditions of contract* which are required only for the purpose of making the Service Information easier to draft and read. Also list abbreviations used and provide a full interpretation of each one, for example:

The following abbreviations are used in this Service Information:

Abbreviation	Meaning given to the abbreviation
OBL	Outside battery limits

2 Management strategy and start up.

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

In the TSC3 the *Contractor*'s plan is his "design" for performing the *service* throughout the *service period*. Section 2 of the *conditions of contract* describes what the *Contractor* is to show in his plan both in the core clauses and some additional requirements in each of the main Options.

The extent of the *Contractor*'s plan will depend on whether the *Contractor* is required to develop a plan in accordance with the *Employer*'s broad outline of the *service* or whether the *Employer* has provided a plan for the *Contractor* to follow. Read the TSC3 Guidance Notes pages 21 and 22 for more information on the *Contractor*'s plan.

Use this section to describe any particulars which must be taken into account by the *Contractor* in developing his plan as required by clause 21.2. For example information about the order and timing or method of carrying out particular items of work.

List technical reporting and scheduling requirements which are to be incorporated into the *Contractor*'s plan.

2.2 Management meetings

The *conditions of contract* (e.g. Clause 16.2) and other sections of the Service Information (e.g. safety risk management) may require that a meeting shall be held. However the intention of all NEC contracts is that the Parties and their agents use the techniques of partnering to manage the contract by holding meetings designed to pro actively and jointly manage the administration of the contract with the objective of minimising the adverse effects of risks and surprises for both Parties.
Depending on the size and complexity of the *service*, it is probably beneficial for the *Service Manager* to hold a weekly risk register meeting (Clause 16.2). This could be used to discuss safety, compensation events, subcontracting, overall co-ordination and other matters of a general nature. Separate meetings for specialist activities such as planning and activities of a technical nature may also be warranted.
Describe here the general meetings and their purpose. Provide particulars of approximate times, days, location, and attendance requirements, stipulating that attendees shall have the necessary delegated authority to make decisions in respect of matters discussed at such meetings.
The following text could be used as a model for this section:

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 ___		
Overall contract progress and feedback	Monthly on _____ at ___		*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.

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

State any additional constraining requirements on *Contractor*'s supervision and key people that are not already stated in other sections such as for Health and Safety. This section could be used to solicit an organogramme from the *Contractor* showing his people and their lines of authority / communication. This would be essential if the *Contractor* is a Joint Venture.

2.4 Provision of bonds and guarantees

The form in which a bond or guarantee required by the *conditions of contract* (if any) is to be provided by the *Contractor* is given in Part 1 Agreements and Contract Data, document C1.3, Sureties.

The *Employer* may withhold payment of amounts due to the *Contractor* until the bond or guarantee required in terms of this contract has been received and accepted by the person notified to the *Contractor* by the *Service Manager* to receive and accept such bond or guarantee. Such withholding of payment due to the *Contractor* does not affect the *Employer*'s right to termination stated in this contract.

2.5 Documentation control

Specify how documentation will be identified with an alpha numeric which indicates source, recipient, communication number etc. Provide details of any particular format or other constraints; for example that 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. State any particular routing requirements but note from TSC3 who issues what to whom.

2.6 Invoicing and payment

The Z clauses make reference to invoicing procedures stated here in this Service Information. Also include a list of information which is to be shown on an invoice.

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)

2.7 Contract change management

This section is intended to deal with any additional requirements to the compensation event clauses in section 6 of the core clauses; such as the use of standard forms. Not the same thing as documentation control.

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

If Option C or E applies first read clause 52.2 and then state whether the *Contractor* is required to keep any other records. Include any other constraint which may be required in regard to format and filing of the records, and whether access for the *Service Manager* shall be provided in hard copy or electronically.

Could delete if Option A applies unless the *Employer* requires some form of control over the *Contractor*'s record keeping for the purpose of compensation event management.

2.9 Insurance provided by the *Employer.*

First read TSC3 Core Clause 86.1 and then add anything necessary for the management of insurance related issues such as a cross reference to where procedures for making claims can be found. Also provide contact details for persons capable of being able to answer any insurance related queries the *Contractor* may have, as well as to whom the information required by Marine Insurance (if any) may be addressed.

2.10 Training workshops and technology transfer

Describe type and frequency of any on job training workshops, as well as any obligation for technology transfer being included as part of the *service* or at the end of the *service period*.

2.11 Design and supply of Equipment

On some complex services (e. g. nuclear) it could be in the Parties best interests that some details of the design of Equipment are shared with the *Service Manager*, not necessarily for his acceptance but as an assurance that the Equipment will be able to allow the *Contractor* to Provide the Service efficiently and without delay. For example specialised handling Equipment for a particular maintenance operation. Clause 23.1 is always available to the *Service Manager* if this paragraph is not used.

Also the *Employer* may wish to exercise constraints or include witness and hold points during manufacture, assembly or delivery of such Equipment. Include these constraints here.

Draft in such a way that there is no doubt that the liability for such design supply and use of the Equipment remains with the *Contractor*.

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

2.12.1 Equipment

The *Employer* may wish to use some of the Equipment used by the *Contractor* after the end of the *service period*. Clause 70.2 requires that details of such requirement be stated in the Service Information. Complete here or if not applicable retain the heading and state 'None'.

2.12.2 Information and other things

Clause 70.2 requires that information and other things which the *Contractor* is to provide at the end of the *service period* be stated in the Service Information.

2.13 Management of work done by Task Order

Only use this heading if Option X19 applies to this contract.

In some cases all work may be done in terms of Task Orders in which case it may be logical to move this section closer to the start of this part 2 of the Service Information. In some cases only parts of the *service* may require to be handled by Task Order, for example a major repair which has become necessary during a continuous maintenance service contract.

Please read Option X19 before drafting requirements here as much of the procedure for the administration of Task Orders is already provided in X19, for example X19.2 specifies what a task Order should include

A Task Order format could be provided in an Annexure to this Service Information.

Many considerations can apply to Task Orders, such as availability of resources, arrangements for emergency work, Task Order reporting (work carried out and service results), assessment of additional Prices for *service* not included in the Price List etc.

Clause X19.6 requires information which should be included on a Task Order programme.
Further requirements for Task Orders include things to be provided by the *Employer* under a Task Order and the conditions under which the *Employer* or Others are to work.

3 Health and safety, the environment and quality assurance

3.1 Health and safety risk management

In addition to the requirements of the laws governing health and safety, Eskom may have some additional requirements particular to the *service* and the Affected Property for this contract. The text below provides for these being attached as an Annexure to this Service Information. PLEASE ALSO READ CORE CLAUSE 27.4 TOGETHER WITH Z7 IN THE ADDITIONAL CONDITIONS OF CONTRACT TO MAKE SURE THAT WHATHEVER IS INCLUDED IN THE ANNEXURE FOLLOWS ON FROM THOSE CLAUSES.

The Divisional/Regional Safety Risk Manager or his representative having jurisdiction over the *service* must provide the relevant safety, health and environmental (SHE) criteria for incorporation into this Service Information. The SHE specification / scope must be signed off by the Divisional/Regional Safety Risk Manager or his representative confirming that the applicable safety criteria have been taken into account.

The Commodity Manager / Buyer must refer the tender to the Divisional/Regional Safety Risk Manager or his representative in order to evaluate against enquiry-specific safety criteria.

The Divisional Safety Risk Managers who will be responsible for the allocation of resources to assist P&SCM with the above processes are as follows:

- Generation: Roley McIntyre
- Transmission: Tony Patterson
- Distribution: Alex Stramrood
- Enterprises: Jace Naidoo
- Corporate: Kerseri Pather

The *Contractor* shall comply with the health and safety requirements contained in Annexure _____ to this Service Information.

3.2 Environmental constraints and management

Describe or cross refer to environmental constraints applicable to the *Contractor*'s plan and his activities on the Affected Property and how they should be managed. Include here or cross refer to an Annexure to the Service Information.

The *Contractor* shall comply with the environmental criteria and constraints stated in Annexure _____

3.3 Quality assurance requirements

Specify minimum requirements for the *Contractor*'s Quality Plan and Work Procedures or provide the *Employer*'s Quality Plan if that is to be used. Make sure witness and hold points are identified generally and describe any particular requirements for QA outside the Affected Property. Indicate how the *Contractor*'s QA documentation is to be submitted for acceptance and any conditions that need to be imposed relating to acceptance. State whether ISO compliance is a condition and if so which ISO standard shall apply.

RISK	MITIGATING FACTORS	LEVEL OF IMPACT (H/M/L)
Time: Unavailability of personnel during call outs.	• Service Manager to ensure that the supplier adheres to the call out requirements. Failure to adhere to call out times will result in an NCR being issued to the service provider.	Medium
People: Unskilled or in-experienced resources. Short notice resignations	• The Service Manager to ensure that the supplier submits CV's and certified copies of qualifications for quality inspectors that have relevant Power Station quality control experience or similarly (applicable to replacement personnel as well). • 4-week notice period should be included in the employment contract of all quality inspectors to allow easier transition/handover without interruption to inspection activities.	Medium
Costs: Unplanned plant breakdowns, and call outs	• The Service Manager to ensure that all over time be kept below 60hrs pm pp as per Eskom Holdings SOC Limited procedure. Normal overtime rate will be built into the contract.	Medium
Quality: Quality requirements categorisation Quality Management Documents Requirements Inspections Non-Conformance and Defects Preservation and transportation Requirements	Category 2 – Quality Requirements to be met. A fully detailed Quality Control Plan (QCP) for acceptance within three (3) weeks of the Contract Date, which details all the aspects of the quality management system to be applied. It includes the methods that will be utilized to ensure quality assurance, control and improvement of the identified activities as stated in the Scope of Works The service provider is required to conduct sufficient inspections and tests to satisfy that all requirements of the SOW are met, and the results of inspections and tests are made available to the client. NCR's and defects notifications are issued, the Service provider will acknowledge the receipt	Medium

Method Statement Documentation control	within 48 hours and proposes corrective and preventive actions to the client as per the contract response period. The corrective and preventive actions will include the implementation and completion dates. The service provider is to ensure that all products are preserved in their appropriate manner as described in their specifications or in Eskom's Preservation, Shipping and Transportation procedures as applicable. The service provider ensures that all storage requirements for products are properly implemented to preserve the products against adverse conditions, deterioration, damage, etc. Storage and preservation procedures for the different products must be submitted to the *client* for review and acceptance. The *client* may request to inspect the stored products at any given point during the storage period of the product. The service provider to submit a detailed Construction Method Statements for each activity of his work, together with activity durations, to the client for review and acceptance prior to starting any work. All documents and records management should be performed according to Technical Document and Record Management Work Instruction (240-76992014). The Project Manager ensures that the service provider is provided with the latest revision	
Safety: Suppliers not complying with OHS Act and Eskom holdings SOC Limited safety, health and quality, procedure and guidelines	• contractor safety plans that shall be signed and approved by the responsible managers and their safety practitioners. Ensure what is listed on the file shall be implemented during project execution • Hazard Identification and Risk Assessments submitted to the Client must be in alignment with the Risk Assessment issued by the	Medium

		Client during the tendering phase. • Contractor shall ensure that a full time Safety Practitioner registered with the statutory body approved by DOL is appointed on full time basis. • PPE and Vehicle inspections must be conducted on daily basis and records must be kept. • Contractor to be familiarised with Eskom's Health & safety policy. • Compliance to the SHE requirements for the Eskom commercial process • Employer's project manager to also ensure that all required permits are issued to the contractor's authorised supervisor on daily basis. (Both the contractor and Eskom) • The contractor's personnel shall undergo PSR training to be qualified as Authorised supervisor to carry out the works under the permit. • The contractor shall be expected to conduct task risk assessment and pre-job briefs every time before performing work. • The contractor must ensure that they align themselves with the requirements of PTW wherever it is issued. • Strict adherence to the PPE requirement by the contractor • The contractor shall prepare a safety file for approval by Safety Risk Management • before work commences. • Adherence to vehicle maintenance plans and daily/pre-trip inspections • Strict adherence to travelling task risk assessment	

	• The contractor to ensure that the employees are trained and competent on the activities to be done.	
Environment	Contractor to be familiarized with Lethabo Environmental statement of commitment (PS010) Contractor to be ISO14001:2015 compliant SHE File to be approved by the Environmental Department using LFM 443 checklist. Upon commencement of repair the contractor shall submit: • An Aspect and Impact Register that complies with the ISO 14001:2015 standard. • Environmental Management Plan (EMP) associated with environmental risks related to the project, EMP shall comply with the ISO 14001 standard. Regular awareness to be conducted on environmental related topics Contractor's site shall be clean and tidy at all times. Contractor shall report all incidents or risks whilst performing the repairs to the Eskom Project leader who will inform the environmental department. Contractor shall comply to all environmental procedures on site, including the following • LBE23003 Environmental non-conformance; investigation and reporting • LBE22004 Environmental waste management procedure The Employer has the right to stop the supplier's use of any equipment or appliances, which does not comply with current environmental legislation, ISO 14001 Environmental management System	Medium

	Procedures or any other legal requirements pertaining to the activity. The supplier may be audited by any member of the environmental department at any time if non-compliance is suspected. The environmental department has a mandate to ensure that any harm caused to the environment is prevented where possible or in situations whereby where activities that may cause harm cannot be stopped is mitigated as best as possible, thus enforcing Section 28 of the National Environmental Management Act (No107 of 1998) that refers to the "Duty of Care" principle.	

4 Procurement

There is a cross reference from the core clause 11.2(6) definition of Disallowed Cost to the Service Information regarding procurement procedures. This part of the Service Information MUST include any such procedures to be able to administer Disallowed Cost.

4.1 People

4.1.1 Minimum requirements of people employed

Specify any constraints relating to people employed to Provide the Service; for example permits for foreigners, training (other than H & S), use of labour from designated areas and industrial relations.

4.1.2 BBBEE and preferencing scheme

Specify constraints which *Contractor* must comply with after contract award in regard to any Broad Based Black Economic Empowerment (B-BBEE) or preferencing scheme measures.

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

If the ASGI-SA requirements are to be included in this contract specify constraints which *Contractor* must comply with after contract award in regard to any ASGI-SA requirements. The ASGI-SA Compliance Schedule completed in the returnable tender schedules is reproduced here. If ASGI-SA does not apply, delete this paragraph.

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.

4.2 Subcontracting

4.2.1 Preferred subcontractors

TSC3 does not make use of nominated subcontracting, but the *Employer* may list which subcontractors or suppliers the *Contractor* is required to enter into subcontracts with. This is usually only required where specialist services need to be obtained from a particular supplier or group of suppliers in order to comply with operational standards.

4.2.2 Subcontract documentation, and assessment of subcontract tenders

Specify any constraints on how the *Contractor* is to prepare subcontract documentation, whether use of the NEC system is compulsory or not (compulsory is recommended) and how subcontract tenders are to be issued, received, assessed (using a joint report?) and awarded.

4.2.3 Limitations on subcontracting

The *Employer* may require that the *Contractor* must subcontract certain specialised work, or that the *Contractor* shall not subcontract more than a specified proportion of the whole of the contract.

4.2.4 Attendance on subcontractors

State requirements for attendance on Subcontractors, if any

4.3 Plant and Materials

4.3.1 Specifications

Plant and Materials are defined as items intended to be included in the Affected Property. This will refer to replacement of worn or defective parts, routine replacement as part of regular preventative maintenance and supply of spare parts. Quality is usually designed in or specified in the technical specifications. However to cover circumstances where quality may not be prescribed, this sub-paragraph could also be used to state an overarching default requirement – fitness for purpose etc.

Either specify here or provide a list of the applicable specifications and attach them as Annexure or state where they can be obtained from.

4.3.2 Correction of defects

State any constraints when dealing with defective Plant and Materials such as how repairs are carried out - can the item be fixed up or must it be replaced by a new one.

4.3.3 *Contractor*'s procurement of Plant and Materials

Specify any constraints on how the *Contractor* is to order, codify, expedite, freight, import, transport to the Affected Property and any other requirements for delivery and storage before installation. The *Employer* may require warranties from suppliers to be in favour of the *Employer* and not just to the *Contractor*. The *Employer* may also need schedules of vendor data for his own use after the end of the *service period*.

4.3.4 Tests and inspections before delivery

Core Clause 41.1 makes reference to the Service Information stating which Plant and Materials are to be inspected and tested before delivery. Specify any requirements particularly if such tests and inspections are to be carried out by agents of the *Employer* overseas.

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

List any Plant and Materials which are to be provided by the *Employer*.

State arrangements for collection by *Contractor* or delivery by others on behalf of the *Employer*, off loading, inspection, storage, care custody and control, return of unused Plant and Materials, etc. Always include a statement to the effect that 'all other Plant and Materials are to be provided by the *Contractor*'.

4.3.6 Cataloguing requirements by the *Contractor*

State whether cataloguing is applicable, if it is, reference the requirements for cataloguing that need to be satisfied by the *Contractor* (consult Procurement Instruction Number 1 of 2018 – Incorporating Cataloguing into the Procurement Environment, Unique Identifier 240-1289988974).

5 Working on the Affected Property

This part of the Service Information addresses constraints, facilities, services and rules applicable to the *Contractor* whilst he is doing work on the Affected Property.

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

Sites such as Koeberg Nuclear Power Station have very strict entrance requirements which tendering contractors need to allow for in their prices, and the *Contractor* has to comply with. State these or similar requirements here.

In addition to the above there may be other restrictions once on the site, plus rules relating to roads, walkways and the provision of barricades

5.2 People restrictions, hours of work, conduct and records

Restrictions and hours of work may apply on some sites. It is very important that the *Contractor* keeps records of his people working on the Affected Property, including those of his Subcontractors. State that the *Service Manager* shall have access to them at any time. These records may be needed when assessing compensation events.

5.3 Health and safety facilities on the Affected Property

Section 3 deals with contractual H & S requirements in addition to those of the OHSA Act. This section allows the *Employer* to state what measures are to be taken on the Affected Property by describing where First Aid facilities provided by the *Employer* are located and any other emergency arrangements. Do not use if already addressed in 2.3.

5.4 Environmental controls, fauna & flora

This sub-paragraph may not be required in a service contract or if these matters are dealt with in the general environmental requirements referred to in section 3 above.

5.5 Cooperating with and obtaining acceptance of Others

This sub-paragraph could be used to deal with two issues.

1) The cross reference from core clause 25.1 about cooperation generally as well as details about Others with whom the *Contractor* may be required to share the Affected Property. See clause 11.2(9) for the definition of Others.
2) Requirements for liaison with and acceptance from statutory authorities or inspection agencies.

5.6 Records of *Contractor*'s Equipment

This sub-paragraph is intended to address how records are to be kept of Equipment on Site including whether it is owned or hired. Include any constraints about scaffolding, rigs, heavy lifts and cranes, including removal from the Affected Property.

5.7 Equipment provided by the *Employer*

Provide details of equipment (e.g. overhead cranes) made available for use by the employer and set out conditions relating thereto.

5.8 Site services and facilities

5.8.1 Provided by the *Employer*

This is a mandatory cross reference form clause 25.2 in TSC3. State what the *Employer* will provide in the way of power, water, waste disposal, telecomms, ablutions, fire protection and lighting (etc) on the Affected Property. Give hook up locations and any constraints on how the hook up is to be done. Always conclude by stating that the *Contractor* shall provide everything else necessary for Providing the Service.

5.8.2 Provided by the *Contractor*

Describe what the *Contractor* is to provide in the way of accommodation, laboratories, storage, vehicles and office equipment for the *Service Manager* and any restrictions or minimum requirements concerning the *Contractor*'s own facilities. Also state what happens to these facilities upon completion of the contract.

5.9 Control of noise, dust, water and waste

State requirements, if any.

5.10 Hook ups to existing works

State any constraints

5.11 Tests and inspections

5.11.1 Description of tests and inspections

Describe the tests and inspections to be carried out by the *Contractor* and the *Service Manager* and others [40.1].

5.11.2 Materials facilities and samples for tests and inspections

State what materials facilities and samples for tests and inspections the *Contractor* and the *Employer* are to provide, per core clause 40.2.

6 List of drawings

6.1 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