# NEC3 Term Service Contract (TSC3)

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

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

**for** **Provision of maintenance services for Outside Ash Plant at Kendal Power Station for the period of five (5) years**

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**CONTRACT No.**

# PART C1: AGREEMENTS & CONTRACT DATA

**Contents:** **No of pages**

# C1.1 Form of Offer & Acceptance

## Offer

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

**Provision of maintenance services for outside Ash Plant at Kendal Power Station for the period of five (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 | The offered total of the Prices exclusive of VAT is | **R** |
| | Sub total | **R** |
| | Value Added Tax @ 15% is | **R** |
| | The offered total of the amount due inclusive of VAT is[1] | **R** |
| | (in words) | |

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

Signature(s)

Name(s) .....

Capacity .....

**For the tenderer:** .....

*(Insert name and address of organisation)*

Name & signature of witness ..... Date .....

Tenderer's CIDB registration number:

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

## Acceptance

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

The terms of the contract, are contained in:

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

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

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

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

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

Signature(s) .....

Name(s) .....

Capacity .....

**for the Employer**

.....

*(Insert name and address of organisation)*

Name & signature of witness .....

Date .....

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

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

Note:

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

| No. | Subject | Details |
|---|---|---|
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | | |
| 6 | | |
| 7 | | |
| | | |

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

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

| | **For the tenderer:** | **For the Employer** |
|---|---|---|
| Signature | ..... | ..... |
| Name | ..... | ..... |
| Capacity | ..... | ..... |
| On behalf of | ..... *(Insert name and address of organisation)* | ..... *(Insert name and address of organisation)* |
| Name & signature of witness | ..... | ..... |
| | ..... | ..... |
| Date | ..... | ..... |

# C1.2 TSC3 Contract Data

## Part one - Data provided by the *Employer*

| 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** |
| | | **X17: Low service damages** |
| | | **X18: Limitation of liability** |
| | | **X19: Task Order** |
| | | **Z: *Additional conditions of contract*** |
| | of the NEC3 Term Service Contract April 2013[1] (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. | **011 800 2111** |
| 10.1 | The *Service Manager* is (name): | **Aaron Masehla** |
| | Address | **Eskom Holdings SOC Limited<br>Kendal Power Station<br>Private Bag X7272<br>Witbank<br>1035** |
| | Tel | **017 612 6869** |
| | e-mail | **MasehlaA@eskom.co.za** |
| 11.2(2) | The Affected Property is | **Kendal Power Station - Ash Plant** |
| 11.2(13) | The *service* is | **Provision of maintenance services for outside** |

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

| | | |
|---|---|---|
| | | **Ash Plant at Kendal Power Station for the period of five (5) years** |
| 11.2(14) | The following matters will be included in the Risk Register | **1. Access to site**<br>**2. Illegal plant modifications. All plant modifications shall follow Generation Engineering Change Management (ECM) Procedure 240 – 53114002.**<br>**3. Delays caused by Others onsite.**<br>**4. Community unrest around Kendal Power Station blocking access to site.**<br>**5. Non-compliance to the *Employer's* Life Saving Rules, OHRVS and Plant Safety Regulations (PSR).**<br>**6. Spares availability.**<br>**7. Health and Safety Risks e.g. (exposure to dust, working at heights, moving machinery etc).**<br>**8. Environmental and Regulatory Risks i.e. (Non-compliance with Air Quality Regulations, environment contamination etc).**<br>**9. Competency Issues.** |
| 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 | • **Within 24 Hours for emergency**<br>• **Within 3 days for Production related matters**<br>• **Within 5 days for other Contractual matters** |
| 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 | **Two (2) weeks after Contract effective Date** |
| 3 | **Time** | |
| 30.1 | The *starting date* is. | **01 January 2026 or soon thereafter** |
| 30.1 | The *service period* is | **60 months or 5 years** |
| 4 | **Testing and defects** | **As per core clause 4 of the NEC3 TSC** |
| 5 | **Payment** | |
| 50.1 | The *assessment interval* is | **between the 25th and 30th day of each successive month.** |
| 51.1 | The *currency of this contract* is the | **South African Rand** |

| | | |
|---|---|---|
| 51.2 | The period within which payments are made is | **60 days (Payment terms of 60 days applies where the total value of the contract amount to R50 M and above).**<br>**60 Calendar days after final assessment approval.**<br>**60 Calendar days after receipt of a valid tax 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** |
| 6 | **Compensation events** | **As per core clause 6 of the NEC3 TSC** |
| 7 | **Use of Equipment Plant and Materials** | **As per core clause 7 of the NEC3 TSC** |
| 8 | **Risks and insurance** | |
| 80.1 | These are additional *Employer*'s risks | **1. Existing Plant Defects**<br>**2. Force Majeure Events** |
| **9** | **Termination** | **Refer to NEC3 TSC Core Clause 9** |
| **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 | **As stated on the Task Order** |
| **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).** |
| 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 | **Johannesburg, South Africa** |

| | | |
|---|---|---|
| | The person or organisation who will choose an arbitrator<br>- if the Parties cannot agree a choice or<br>- 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 | **To be confirmed** |
| | The proportions used to calculate the Price Adjustment Factor are: | **proportion** / **linked to index for** / **Index prepared by**<br>**0.** / / /<br>**0.** / / /<br>**0.** / / /<br>**0.15** / **non-adjustable** /<br>**1.00** / / |
| **X2** | **Changes in the law** | **As per Secondary Option Clause X2 of the NEC3 TSC** |
| **X17** | **Low service damages** | |
| X17.1 | The *service level table* is in | **Refer to Annexure A of Data provided by the *Employer*** |
| **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 | **Not Applicable** |
| 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.**<br><br>**The *Contractor's* total liability for the additional excluded matters is not limited.**<br><br>**The additional excluded matters are amounts for which the *Contractor* is liable under this contract for**<br>• **Defects due to manufacture and fabrication outside the Affected Property,**<br>• **loss of or damage to property (other than the *Employer*'s property, Plant and** |

| | | |
|---|---|---|
| | | **Materials),**<br>• **death of or injury to a person and**<br>• **infringement of an intellectual property right.** |
| X18.5 | The *end of liability date* is | **12 months after the end of the *service period* for each Task Order.** |
| **X19** | **Task Order** | **Refer to Clause X19 of the NEC3 TSC.** |
| **X19.3** | **Delay Damages** | **0.2% per day and limited to 10% of each Task Order** |
| X19.5 | The *Contractor* submits a Task Order programme to the *Service Manager* within | **Three (3) working days for standard tasks and five (5) working days for complex tasks after receiving the Task Order** |
| **Z** | **The *additional conditions of contract* are** | **Z1 to Z16 always apply.** |

**Z1 Cession delegation and assignment**

Z1.1 The *Contractor* does not cede, delegate or assign any of its rights or obligations to any person without the written consent of the *Employer.*

Z1.2 Notwithstanding the above, the *Employer* may on written notice to the *Contractor* cede and delegate its rights and obligations under this contract to any of its subsidiaries or any of its present divisions or operations which may be converted into separate legal entities as a result of the restructuring of the Electricity Supply Industry.

**Z2 Joint ventures**

Z2.1 If the *Contractor* constitutes a joint venture, consortium or other unincorporated grouping of two or more persons or organisations then these persons or organisations are deemed to be jointly and severally liable to the *Employer* for the performance of this contract.

Z2.2 Unless already notified to the *Employer*, the persons or organisations notify the *Service Manager* within two weeks of the Contract Date of the key person who has the authority to bind the *Contractor* on their behalf.

Z2.3 The *Contractor* does not alter the composition of the joint venture, consortium or other unincorporated grouping of two or more persons without the consent of the *Employer* having been given to the *Contractor* in writing.

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

Z3.1 Where a change in the *Contractor's* legal status, ownership or any other change to his business composition or business dealings results in a change to the *Contractor*'s B-BBEE status, the *Contractor* notifies the *Employer* within seven days of the change.

Z3.2 The *Contractor* is required to submit an updated verification certificate and necessary supporting documentation confirming the change in his B-BBEE status to the *Service Manager* within thirty days of the notification or as otherwise instructed by the *Service Manager*.

Z3.3 Where, as a result, the *Contractor's* B-BBEE status has decreased since the Contract Date the *Employer* may either re-negotiate this contract or alternatively, terminate the *Contractor*'s obligation to Provide the Service.

Z3.4 Failure by the *Contractor* to notify the *Employer* of a change in its B-BBEE status may constitute a reason for termination. If the *Employer* terminates in terms of this clause, the procedures on termination are P1, P2 and P4 as stated in clause 92, and the amount due is A1

and A3 as stated in clause 93.

**Z4 Confidentiality**

Z4.1 The *Contractor* does not disclose or make any information arising from or in connection with this contract available to Others. This undertaking does not, however, apply to information which at the time of disclosure or thereafter, without default on the part of the *Contractor*, enters the public domain or to information which was already in the possession of the *Contractor* at the time of disclosure (evidenced by written records in existence at that time). Should the *Contractor* disclose information to Others in terms of clause 25.1, the *Contractor* ensures that the provisions of this clause are complied with by the recipient.

Z4.2 If the *Contractor* is uncertain about whether any such information is confidential, it is to be regarded as such until notified otherwise by the *Service Manager*.

Z4.3 In the event that the *Contractor* is, at any time, required by law to disclose any such information which is required to be kept confidential, the *Contractor*, to the extent permitted by law prior to disclosure, notifies the *Employer* so that an appropriate protection order and/or any other action can be taken if possible, prior to any disclosure. In the event that such protective order is not, or cannot, be obtained, then the *Contractor* may disclose that portion of the information which it is required to be disclosed by law and uses reasonable efforts to obtain assurances that confidential treatment will be afforded to the information so disclosed.

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

Z4.5 The *Contractor* ensures that all his subcontractors abide by the undertakings in this clause.

**Z5 Waiver and estoppel: Add to core clause 12.3:**

Z5.1 Any extension, concession, waiver or relaxation of any action stated in this contract by the Parties*,* the *Service Manager* or the *Adjudicator* does not constitute a waiver of rights, and does not give rise to an estoppel unless the Parties agree otherwise and confirm such agreement in writing.

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

Z6.1 The *Contractor* undertakes to take all reasonable precautions to maintain the health and safety of persons in and about the execution of the *service*. Without limitation the *Contractor*:

- accepts that the *Employer* may appoint him as the “Principal Contractor” (as defined and provided for under the Construction Regulations 2014 (promulgated under the Occupational Health & Safety Act 85 of 1993) (“the Construction Regulations”) for the Affected Property;
- warrants that the total of the Prices as at the Contract Date includes a sufficient amount for proper compliance with the Construction Regulations, all applicable health & safety laws and regulations and the health and safety rules, guidelines and procedures provided for in this contract and generally for the proper maintenance of health & safety in and about the execution of the *service*; and
- undertakes, in and about the execution of the *service*, to comply with the Construction Regulations and with all applicable health & safety laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the *Contractor’s* direction and control, likewise observe and comply with the foregoing.

Z6.2 The *Contractor*, in and about the execution of the *service*, complies with all applicable environmental laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the *Contractor’s* direction and control, likewise observe and comply with the foregoing.

**Z7 Provision of a Tax Invoice and interest. Add to core clause 51**

Z7.1 Within one week of receiving a payment certificate from the *Service Manager* in terms of core

clause 51.1, the *Contractor* provides the *Employer* with a tax invoice in accordance with the *Employer*'s procedures stated in the Service Information, showing the amount due for payment equal to that stated in the payment certificate.

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

Z7.3 The *Contractor* (if registered in South Africa in terms of the companies Act) is required to comply with the requirements of the Value Added Tax Act, no 89 of 1991 (as amended) and to include the *Employer*'s VAT number 4740101508 on each invoice he submits for payment.

## Z8 Notifying compensation events

Z8.1 Delete the last paragraph of core clause 61.3 and replace with:

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

## Z9 *Employer's* limitation of liability

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

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

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

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

## Z11 Ethics

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

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

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

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

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

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

**Fraudulent** means any unlawfully or illegally intentional act or omission that misleads, or attempts

**Action** 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.<br><br>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.<br><br>The *Employer*'s policy deductible as at Contract Date, where covered by the *Employer*'s insurance. |
| Loss of or damage to | The replacement cost where not covered by the |

| | |
|---|---|
| Equipment | *Employer*'s insurance.<br><br>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 | <u>Loss of or damage to property</u><br>The replacement cost<br><br><u>Bodily injury to or death of a person</u><br>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 |

**<u>Z 12.2 Replace core clause 86 with the following:</u>**

**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 |

## Z13 Nuclear Liability

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

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

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

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

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

## Z14 Asbestos

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

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

**SANAS** means the South African National Accreditation System.

**TWA** means the average exposure, within a given workplace, to airborne asbestos fibres, normalised to the baseline of a 4 hour continuous period, also applicable to short term exposures, i.e. 10-minute TWA.

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

Z14.2 Upon written request by the *Contractor*, the *Employer* certifies that these conditions prevail. All measurements and reporting are effected by an independent, competent, and certified occupational hygiene inspection body, i.e. a SANAS accredited and Department of Employment and Labour approved AAIA. The *Contractor* may perform Parallel Measurements and related control measures at the *Contractor*'s expense. For the purposes of compliance the results generated from Parallel Measurements are evaluated only against South African statutory limits as detailed in clause Z14.1. Control measures conform to the requirements stipulated in the AAIA-approved asbestos work plan.

Z14.3 The *Employer* manages asbestos and ACM according to the Standard.

Z14.4 In the event that any asbestos is identified while Providing the Services, a risk assessment is conducted and if so required, with reference to possible exposure to an airborne concentration of above the AL for asbestos, immediate control measures are implemented and relevant air monitoring conducted in order to declare the area safe.

Z14.5 The *Contractor*'s personnel are entitled to stop working and leave the contaminated area forthwith until such time that the area of concern is declared safe by either Compliance Monitoring or an AAIA approved control measure intervention, for example, per the emergency asbestos work plan, if applicable.

Z14.6 The *Contractor* continues to Provide the Services, without additional control measures presented, on presentation of Safe Levels. The contractually agreed dates to Provide the Services, including the Completion Date, are adjusted accordingly. The contractually agreed dates are extended by the notification periods required by regulations 3 and 21 of the Asbestos Regulations, 2001.

Z14.7 Any removal and disposal of asbestos, asbestos containing materials and waste, is done by a registered asbestos contractor, instructed by the *Employer* at the *Employer*'s expense, and conducted in line with South African legislation.

**Z15 Security Clearance/ Criminal Checks**

These clauses are not only, but are especially, applicable for accessing critical infrastructure in terms of the Critical Infrastructure Protection Act, 2019 (previously referred to as National Key Points), but may include other sites, and/or where persons are rendering a service or have given notice of intention to render a service to an organ of state, which service may (1) give him or her access to classified information and intelligence in the possession of the organ of state; or (2) give him or her access to or information concerning areas designated as critical infrastructure.

Z15.1 The *Contractor* and its subcontractors implement risk and security management processes and measures to mitigate any threats against any premises, installations or sites, systems, or information of the *Employer* with only persons with criminal verification record security clearance certificates being given access after verification of these and identifying documents by the *Employer*'s security system.

Z15.2 The *Contractor* provides, at the *Contractor*'s cost, to the *Employer,* criminal verification record security clearance certificates for each person the *Contractor* or its subcontractors requires to

access any premises, installations or sites, systems, or information of the *Employer*, with copies of their identifying documents, such as passports, before allowed such access by the *Employer*. The *Employer* 's refusal to allow access to premises, installations or site/s, systems or information is at the *Employer*'s sole discretion and is not a compensation event.

Z15.3 The criminal verification record security clearance certificates provided are to have been issued by a service provider which is to be a reputable screening company accredited by the South African Police Services, are to be no older than four weeks since issue and valid for as long as each person is required to access premises, installations or sites, systems or information. The *Employer* may require updated certificates and identifying documents every 26 to 52 weeks, subject to safety and security concerns and the risk rating of the works or services undertaken and/or premises, installations or sites, systems or information.

Z15.4 If any such criminal verification record security clearance certificates is cancelled, withdrawn, invalidated, amended, or expires, or a criminal conviction is noted against any person requiring access, even if an appeal against the criminal conviction has been noted, the *Project Manager* may instruct the *Contractor* to ensure that such person leaves the premises, installations or site/s and is blocked from systems and information and the giving of this instruction is not a compensation event.

## Z16 Protection of Personal Information Act Compliance

Z16.1 For the purposes of this clause, the terms "Data Subject", "Personal Information", "Processing" and "Regulator" and "Responsible Party" have the meanings given to them in the Protection of Personal Information Act, 2013 ("POPIA").

Z16.2 Each Party acknowledges that it is an independent Responsible Party in relation to the Personal Information processed in terms of this contract ("Shared Personal Information") and that it determines the purposes for which and the manner in which the Shared Personal Information is, or is to be, processed.

Z16.3 Each Party shall always comply with POPIA when performing its obligations under this contract and shall not perform any of their respective obligations under this contract in such a way as to cause the other Party to breach any of that other Party's obligations under POPIA.

Z16.4 Each Party shall ensure that, in respect of all Shared Personal Information provided to the other Party and in respect of the use of that Shared Personal Information under this contract:-

Z16.4.1 all necessary fair Processing notices have been provided to and consents obtained from Data Subjects by that Party, where required, in terms of POPIA, including to specify that the other Party is also a Responsible Party in respect of the Data Subject's Personal Information and to provide a link (for example, https://www.eskom.co.za/about-eskom/website-terms-and-conditions/ ) to the other Party's Privacy Statement or to include a statement that the other Party's Privacy Statement can be found on the other Party's corporate website; and

Z16.4.2 all necessary steps have been taken to ensure that Shared Personal Information has been collected and processed in accordance with the principles set out in POPIA, including in particular those relating to:

- lawful, fair and transparent Processing;
- specified, legitimate and explicit purposes of Processing; and
- adequate, relevant and not excessive Processing.

Z16.5 If either Party receives any complaint, notice or communication from the Regulator which relates directly to:

Z16.5.1 the other Party's Processing of the Shared Personal Data; or

Z16.5.2 a potential failure by the other Party to comply with POPIA in respect of the activities of the Parties under or in connection with this contract,

it shall, to the extent permitted by law, promptly notify the other Party and provide such information as it shall reasonably request in that regard.

Z16.6 If a Data Subject makes a written request to either Party to exercise any of their rights under POPIA, the receiving Party shall respond to that request in accordance with POPIA. To the extent the request concerns Processing of Shared Personal Information undertaken by the other Party, the receiving Party shall:

Z16.6.1 promptly and without undue delay forward the request to the other Party; and

Z16.6.2 cooperate and provide reasonable assistance in relation to that request to enable the other Party to respond in accordance with POPIA.

Z17.7 Each Party acknowledges that the other Party may disclose Shared Personal Information to any Regulator or law enforcement authority with jurisdiction to request access to the Shared Personal Information.

Z16.8 Neither Party discloses or otherwise makes available the Personal Information to any third party (including sub-contractors, but excluding its authorised employees who require access to such Personal Information strictly in order for the Parties to carry out their obligations pursuant to this contract), unless a Party has provided, to a requesting Party, its prior written consent to do so, and the requesting Party has submitted to the other Party (consenting Party), to its satisfaction, a copy of a written contract or undertaking that the requesting Party has entered into with a third party for the protection of Personal Information of the Data Subjects or unless there is an applicable exemption in terms of the law to process or further process the personal information.

Z16.9 The requesting Party indemnifies and holds harmless the consenting Party and its staff, successors, cessionaries, delegates, and assigns, from any and all losses, costs, expenses and damage, as well as penalties and fines arising from the requesting Party's non-compliance with the provision of any relevant legislation applicable to Personal Information or data protection, as well as damage to the consenting Party's reputation and costs of compliance as directed by the Regulator, including but not limited to publication of the data breach.

Z16.10 No Party may transfer Personal Information about a data subject to a third party who is in a foreign country unless they have obtained the relevant written consent of the other Party and there is full compliance with section 72 of POPIA and any foreign applicable legislation.

## Annexure A

## Low Services Damages Table

The following Low Services Damages shall apply, providing a structured approach to managing non-performance issues. Each instance includes a description, the value of the damages and the limit on total liability.

| No. | Low Service Damage Description | Value of Low Service Damages | Limit of Low Service Damage |
|---|---|---|---|
| 1. | Failure to have Supervisors and Artisans tested and authorized in terms of Eskom's Plant Safety Regulations (PSR) after six (6) months of contract start date as per the procedure, provided that the training is arranged timeously according to the *Contractor's* proposed dates that will be provided after contract award. Should training not be arranged for those planned dates, the *Contractor* cannot be penalized due to the *Employer's* fault. | An amount equivalent to 10% of the Supervisor's fee shall be deducted from the *Contractor*'s monthly payment for each month of non-compliance.<br>An amount equivalent to 10% of the Artisan's assessment fee shall be deducted from the *Contractor's* monthly payment for each month of non-compliance.<br>**All Supervisors and Artisans shall be tested to the required PSR theoretical level no later than four (4) months after the Contract Award Date.** | Non-compliance is permitted for a maximum period of three (3) months, after which the individual shall be replaced. Each person is allowed to a maximum of two (2) training attempts to achieve compliance, failing which a replacement shall be mandatory. |
| 2. | Poor Housekeeping: Failure to maintain clean and hazard free working areas. | 5% of the value of the core crew amount per month, or 5% of the applicable Task Order value per occurrence. | Capped at 10% of the Task Order value. |
| 3. | **Technical Non-Conformance or Repeat Repairs:** Occurrence of repeat failures or repairs at the same component or equipment due to the *Contractor's* poor workmanship, inadequate root cause analysis, or failure to implement permanent corrective actions. Such incident(s) must be formally investigated by the *Employer*. Where the investigation concludes that the root cause of the failure or repeated defect is attributable to the *Contractor's* error, omission, or non-compliance with the contract requirements, the *Contractor* shall be held accountable. | 5% of the Task Order value per day of non-compliance. | Capped at 10% of the Task Order value.<br>In addition, more than five (5) Non-Conformance Reports (NCRs) in a year shall constitute grounds for termination of the contract. |

# C1.2 Contract Data

## Part two - Data provided by the *Contractor*

**Notes to a tendering contractor:**

1. Please read both the both the NEC3 Term Service Contract April 2013 and the relevant parts of its Guidance Notes (TSC3-GN)[1] 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):<br>Address<br>Tel No.<br>Fax No. | |
| 11.2(8) | The *direct fee percentage* is<br>The *subcontracted fee percentage* is | **%**<br>**%** |
| 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:<br>1 Name:<br>Job:<br>Responsibilities:<br>Qualifications: | |

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

Experience:

2 Name:

Job

Responsibilities:

Qualifications:

Experience:

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

| | | |
|---|---|---|
| **A** | **Priced contract with price list** | |
| 11.2(12) | The *price list* is in | |
| 11.2(19) | The tendered total of the Prices is | **R** |

# PART 2: PRICING DATA

## TSC3 Option A

# 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*

**1. Core crew to be onsite 27/7 across the clock (Shifts)**

| Item No | Description | Unit | Qty | Rate | Hours | Shift 1 - Qty (Day) | Shift 2 - Qty (Afternoon) | Shift 3 - Qty (Night) | Days | Monthly Price in Rands | 60 Months | Total Price in Rands |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.1.1 | Site Manager | No | 1 | 60 | 8 | 1 | 0 | 0 | 20 | R | 60 | R |
| 1.1.2 | Senior Mechanical Supervisor | No | 1 | 60 | 8 | 1 | 0 | 0 | 20 | R | 60 | R |
| 1.1.3 | Mechanical Supervisor | No | 3 | 60 | 8 | 1 | 1 | 1 | 20 | R | 60 | R |
| 1.1.4 | Quality Controllers | No | 3 | 60 | 8 | 1 | 1 | 1 | 20 | R | 60 | R |
| 1.1.5 | Safety Officer | No | 1 | 60 | 8 | 1 | 1 | 1 | 20 | R | 60 | R |
| 1.1.6 | Mechanical Fitter | No | 4 | 60 | 8 | 4 | 4 | 4 | 20 | R | 60 | R |
| 1.1.7 | Boilermakers | No | 1 | 60 | 8 | 1 | 1 | 1 | 20 | R | 60 | R |
| 1.1.8 | Welders | No | 1 | 60 | 8 | 1 | 1 | 1 | 20 | R | 60 | R |
| 1.1.9 | Riggers | No | 1 | 60 | 8 | 1 | 1 | 1 | 20 | R | 60 | R |
| 1.1.10 | Mechanical Assistant | No | 4 | 60 | 8 | 4 | 4 | 4 | 20 | R | 60 | R |
| 1.1.11 | Site Administrator | No | 1 | 60 | 8 | 1 | 0 | 0 | 20 | R | 60 | R |
| 1.1.12 | Storeman | No | 1 | 60 | 8 | 1 | 0 | 0 | 20 | R | 60 | R |
| 1.1.13 | High-up truck driver | No | 1 | 60 | 8 | 1 | 0 | 0 | 20 | R | 60 | R |
| 1.1.14 | High-up truck driver assistant | No | 1 | 60 | 8 | 1 | 0 | 0 | 20 | R | 60 | R |
| **Sub-total Excluding VAT** | | | | | | | | | | | | **R** |

**2. Preliminaries and Generals**

| Item No | Description | Unit | Qty | Rate in Rates | Total Price in Rands |
|---|---|---|---|---|---|
| 2.1 | Site Establishment (Once - Off) | Sum | 1 | R | R |
| 2.2 | Site De-Establishment (Once – Off) | Sum | 1 | R | R |
| **Sub-total Excluding VAT** | | | | | **R** |

**3. Shift Allowance (Calculated to monthly cost per applicable person):**

| Item No | Description | Unit | Qty | Rate in Rands | Total Price in Rands |
|---|---|---|---|---|---|
| 4.1 | Site Manager | Monthly | 0 | R | R |
| 4.2 | Senior Mechanical Supervisor | Monthly | 0 | R | R |
| 4.3 | Mechanical Supervisor | Monthly | 1 | R | R |
| 4.4 | Quality Controllers | Monthly | 1 | R | R |
| 4.5 | Safety Officer | Monthly | 1 | R | R |
| 4.6 | Mechanical Fitter | Monthly | 1 | R | R |
| 4.7 | Boilermakers | Monthly | 1 | R | R |
| 4.8 | Welders | Monthly | 1 | R | R |
| 4.8 | Riggers | Monthly | 1 | R | R |
| 4.9 | Mechanical Assistant | Monthly | 1 | R | R |
| 4.10 | Site Administrator | Monthly | 1 | R | R |
| 4.11 | Storeman | Monthly | 1 | R | R |
| 4.12 | High-up truck driver | Monthly | 1 | R | R |
| 4.13 | High-up truck driver assistant | Monthly | 1 | R | R |
| 4.14 | Safety Officer | Monthly | 1 | R | R |
| 4.15 | Mechanical Fitter | Monthly | 1 | R | R |
| 4.16 | Boilermakers | Monthly | 1 | R | R |
| 4.17 | Welders | Monthly | 1 | R | R |
| 4.18 | Riggers | Monthly | 1 | R | R |
| 4.19 | Mechanical Assistant | Monthly | 1 | R | R |
| 4.20 | Site Administrator | Monthly | 0 | R | R |
| 4.21 | Storeman | Monthly | 1 | R | R |
| 4.22 | High-up truck driver | Monthly | 0 | R | R |
| 4.23 | High-up truck driver assistant | Monthly | 0 | R | R |
| **Sub-total Excluding VAT** | | | | | **R** |

**4. Transport:**

| Item No | Description | Unit | Qty | Price per month | Total Price in Rands |
|---|---|---|---|---|---|
| 4.1 | Transport – Taxi (15-Seater) | ea | 2 | R | R |
| 4.2 | Transport – Taxi (23-Seater) | ea | 2 | R | R |
| 4.3 | Transport - LDV | ea | 2 | R | R |
| 4.4 | Petrol Allowance | Monthly | 1 | R | R |
| **Sub-total Excluding VAT** | | | | | **R** |

## 5. Health and Safety

| Item | Description | Qty | Price per each person | Total price |
|---|---|---|---|---|
| 1 | Medicals (only if annual medical certificate expired) | 56 | R | R |
| 2 | Health and Safety File | 1 | R | R |
| 3 | Safety Training | 56 | R | R |
| 4 | Hard hats with strips (Hooked on the hats itself not inside) | 56 | R | R |
| 5 | Overalls | 56 | R | R |
| 6 | Gloves | 56 | R | R |
| 7 | Shoes (Safety boots) | 56 | R | R |
| 8 | Hearing protection | 56 | R | R |
| 9 | Safety goggles | 56 | R | R |
| 10 | Safety harnesses (with big hooks not small hooks) | 56 | R | R |
| 11 | First Aid box for every 50 employees | 1 | R | R |
| 12 | Dust musk | 56 | R | R |
| 13 | Thermal Suit | 56 | R | R |
| 14 | Special underwear – only cotton | | | |
| 15 | Flash Suit | | | |
| 16 | Training: Appointed Operator - ORHVS | | Offered by Eskom | Offered by Eskom |
| 17 | Training: Appointed Person - PSR | | Offered by Eskom | Offered by Eskom |
| 18 | Training: Responsible Person - ORHVS & PSR | | Offered by Eskom | Offered by Eskom |
| 19 | Training: Authorised Supervisor - PSR | | Offered by Eskom | Offered by Eskom |
| 20 | Criminal Clearance Certificates | 56 | R | R |
| **HEALTH AND SAFETY TOTAL VALUE PER YEAR** | | | | **R** |

**Note:** The above-mentioned tendered prices are exclusive of Value Added Tax and CPA, but include all other costs related to this works.

**TOTAL OFFER**

| | |
|---|---|
| **SUBTOTAL (1 + 2 + 3 + 4 + 5)** | **R** |
| **VAT 15%** | **R** |
| **TOTAL PRICE** | **R** |

# PART 3: SCOPE OF WORK

# C3.1: EMPLOYER'S SERVICE INFORMATION

## Contents

# 1 Description of the *service*

## 1.1 Executive overview

This scope of work makes the provision of maintenance services for the Outside Ash Plant at Kendal Power Station.
The work will be performed at Kendal Power Station, which is one of Eskom's key coal-fired power plants. The site-specific conditions and operational environment require a *Contractor* with experience in power station maintenance, particularly in ash plant systems.

This contract demands a highly skilled workforce and reliable resource availability to maintain critical infrastructure efficiently.
The maintenance services include, but are not limited to:

- Troubleshooting all faults and defects pertaining to the outside ash plant systems
- Maintenance of hydraulic and mechanical systems
- Assistance during the execution of electrical and Control & Instrumentation (C&I) maintenance work

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

The *Employer* requires the *Contractor* to provide maintenance services for the Outside Ash Plant at Kendal Power Station**.** These services must be performed to ensure the continuous and reliable operation of the ash handling system, minimising downtime and maintaining compliance with Eskom's operational and safety standards.
The *Contractor* shall be responsible for the following:

### 1.2.1 Routine and Preventative Maintenance

- Conduct scheduled maintenance activities to prevent equipment failures.
- Inspect ash plant components
- Perform lubrication, cleaning and minor repairs as per maintenance schedules.

### 1.2.2 Corrective Maintenance

- Respond to equipment failures and perform repairs or replacements.
- Diagnose mechanical systems and assist in diagnosing electrical, C&I systems and restore operation within agreed timeframes.
- Ensure minimal downtime through rapid response maintenance protocols.

### 1.2.3 Opportunity Maintenance

- Execute maintenance tasks during planned outages to maximize efficiency.
- Conduct in-depth inspections and overhauls of critical components.
- Replace worn-out parts and conduct major repairs when systems are offline.

### 1.2.4 Operational Support and Compliance

- Adhere to Eskom's health, safety, environmental, and quality (SHEQ) standards.
- Ensure proper housekeeping and site cleanliness after maintenance tasks.
- Maintain documentation of work performed, including reports on failures, repairs, and spare parts usage.

### 1.2.5 Work Constraints and Key Requirements

**Work Constraints**

- Work is subject to Eskom's Permit to Work (PTW) system.
- No overtime will be permitted by the *Employer*; therefore, the *Contractor* shall operate on a three-cycle shift schedule.

**Environmental & Waste Management**

- Comply with ISO 14001 Environmental Standards.
- Maintain strict housekeeping - no oil spills, no waste in stormwater drains.
- Use Eskom-approved waste disposal processes.

**Health & Safety Regulations**

- Adhere to Occupational Health & Safety Act and Eskom's safety regulations.
- All personnel must be trained in Operating Regulations for High Voltage Systems (ORHVS) and Plant Safety Regulations (PSR).
- The *Contractor* must provide a SHE file and risk assessments before starting work.

### 1.2.3 *Contractor's* Resource and Equipment Requirements

The *Contractor* shall provide:

- Skilled personnel (Site Manager, Mechanical Fitters, Welders, Riggers, and Safety officer(s) etc).
- Certified tools and equipment (bearing pullers, hydraulic jacks, welding kits, and alignment tools etc).
- Transport and logistics support (Taxis, bakkies, tipper trucks, vacuum trucks, and loaders etc).

**Note:**
**A comprehensive scope of work document, titled "Outside Ash Maintenance Scope of Work," is included as Annexure A and forms an integral and binding part of this contract and the Parties agree to be legally bound by all obligations, deliverables and requirements set out therein.**

## 1.3 Interpretation and terminology

The following abbreviations are used in this Service Information:

| Abbreviation | Meaning given to the abbreviation |
|---|---|
| GO | General Overhaul |
| IAP | Inside Ash Plant |
| IR | Interim Repairs |
| MO | Mini Overhaul |
| SOW | Scope of Work |
| SSC | Submerged Scrapper Conveyor |
| PPE | Personal Protective Equipment |
| PCLF | Planned Capability Loss Factor |
| UCLF | Unplanned Capability Loss Factor |

# 2 Management strategy and start up.

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

### 2.1.1 Core Crew

- The *Contractor* provides permanent staffing for the duration of the contract according to the numbers and designations provided by the *Service Manager*. The *Contractor* provides project staffing for outages and day to day maintenance crew to execute the scope as agreed on the Task Order.
- The crew numbers can be changed (increased or decreased) by the *Service Manager* by giving seven (7) days' written notice to the *Contractor*.
- The core crew is supervised by the *Contractor*. The *Contractor* notifies the *Service Manager* of any changes to the core crew in writing. The *Service Manager* accepts or declines the changes within seven (7) days.
- The core crew performs assigned inspections, perform maintenance and complete maintenance documentation as per the Task Order instruction from the *Service Manager*.
- Major maintenance tasks, overhauls and outages work may require additional resources on a temporary basis. The *Contractor* supplies these additional temporary resources after a Task Order for work is issued.
- The *Contractor* supplies facilities, office equipment, supplies and miscellaneous items as needed to provide the *works*. These items are agreed with the *Service Manager*.
- The *Employer* will provide a service the supply, transportation, erection and dismantling of scaffolding structures.

### 2.1.2 Reporting Requirements

The *Contractor* shall submit the following reports:

- Daily Reports – Status of maintenance activities.
- Weekly Reports – Progress on outstanding work, resource allocation etc.
- Monthly Reports – Plant health indicators, defects and corrective actions etc.
- Outage Reports – Post-maintenance performance assessments.

### 2.1.3 Scheduling and Planning Requirements

- Weekly Planning Meetings – Coordination with Eskom Planners.

## 2.2 Management meetings

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

| **Title and purpose** | **Approximate time & interval** | **Location** | **Attendance by:** |
|---|---|---|---|
| Toolbox Talks | To be confirmed | To be confirmed | *Service Manager, Contractor* |
| Planning Meetings | To be confirmed | To be confirmed | *Service Manager, Contractor and Planner* |
| Plant Focus meetings | To be confirmed | To be confirmed | *Service Manager, Contractor and Planner* |
| Safety Hour | Every Tuesdays | To be confirmed | *Supervisor, Contractor* |
| SHEQI Meetings | To be confirmed | To be confirmed | *Service Manager and Contractor* |
| Risk register and compensation events | To be confirmed | To be confirmed | *Service Manager, Contractor and System Engineer* |
| Overall contract progress and feedback | To be confirmed | To be confirmed | *Service Manager, Contractor and System Engineer* |

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

**General Requirements:**

The *Contractor* is required to submit an Organogram illustrating their management structure, lines of authority, and communication protocols.

**Key People:**

The *Contractor* must designate and provide qualifications for the following key roles, which are subject to approval by the *Employer*:

**Site Manager**

- National Diploma (S4) in Mechanical Engineering or equivalent
- At least 4-5 years of experience in Bulk Material Handling (BMH) systems
- Contract, planning and scheduling experience
- OHS Act and risk assessment competency

**Mechanical Supervisor**

- N4 to N6 in Mechanical Engineering
- Trade Test or Red Seal Certificate
- At least 4-5 years of experience in supervising BMH systems.
- Contract, planning and scheduling experience
- OHS Act and risk assessment competency

**Quality Controller(s)**

- S4/N6 Mechanical with Trade Test
- Level 1 Welding certification
- At least 4-5 years proven experience in quality inspection.
- Qualification in Quality Management Systems (ISO 9001)
- At least five (5) years in Bulk Handling Plant

**Safety Officer**

- SAMTRAC qualification
- 3-4 years of SHEQ experience in an industrial environment

**Mechanical Fitter**

- Trade Test Certificate – Recognized Red Seal Certificate in Mechanical Fitting, Fitting & Turning, or Millwright (SAQA or equivalent).
- N2 to N6 Mechanical Engineering Certificate – From a recognized Technical College.
- Minimum of 3-5 years of experience in a heavy industrial or power generation environment**.**
- Previous work experience in Bulk Material Handling (BMH), Ash Handling or Conveyor Systems.
- Proficiency in equipment disassembly, installation, and alignment**.**

**Welders**

- Trade Test Certificate **–** Recognized Red Seal Certificate in Welding (SAQA or equivalent).
- Welder Qualification Certification (ISO 9606-1) – In line with Eskom's welding standards.
- N2 to N6 in Mechanical Engineering

- Minimum of 3-5 years of welding experience in a heavy industrial or power generation environment**.**
- Experience in fabrication, structural welding, and repair of Bulk Material Handling (BMH) equipment**.**
- Ability to perform structural welding, pipe welding, and pressure vessel welding**.**

**Boiler makers**
- Must be **qualified** boilermakers.
- Must have a **Trade Test Certificate** or **approved Red Seal Certificate**

**Riggers**
- Must be **qualified** riggers.
- Must possess a **Trade Test Certificate** or **approved Red Seal Certificate**

**Mechanical Assistants**
- Must have a **minimum of Grade 10** qualification

**Site Administrator**
- Must have an **Administration Certificate**.
- Must have **2–3 years' experience** in a relevant administrative role

**Storeman**
- Must have a **minimum of Grade 10**

**High-up Truck Driver**
- Must have a **valid national driver's licence**.
- Must have a **Professional Driving Permit (PDP) – Goods category**

**High-up Truck Driver Assistant**
- Must have **valid slinging requirements** certification

## 2.4 Provision of bonds and guarantees

Not Applicable

## 2.5 Documentation control

The *Contractor* submits all documentation on a formal transmittal form to the *Service Manager*.
All formal communications must be attached as properly compiled documents (e.g., PDF, Word) and sent via email.
All Communications will be filed and kept on site at all times as it is crucial to have the correct communication structures. These communication documents should at all times adhere to the NEC3 Engineering and Construction Contract communication requirements.

## 2.6 Invoicing and payment

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

The *Contractor* shall address the tax invoice to **invoiceslocal@eskom.co.za** and include on each invoice the following information:

- Name and address of the *Employer* and the *Contractor;*
- The contract number and title;
- *Contractor's* VAT registration number;

- The *Employer's* VAT registration number.
- Description of *goods* and *service*s provided for each item invoiced based on the Price Schedule;
- Total amount invoiced excluding VAT, the VAT and the invoiced amount including VAT;
- *Contractor's* Banking Details

## 2.7 Contract change management

**Additional Requirements for Compensation Events**

**a) Notification of Compensation Events:**

- Notifications must be submitted using the acceptable Compensation Event Notification Form
- Notifications must include a detailed description of the event, its cause, and its potential impact on time and cost.

**b) Assessment and Submission:**

Use the Compensation Event Submission Form to provide detailed assessments, including:

- Breakdown of additional costs.
- Detailed programme adjustments.
- Supporting documentation (e.g., photographs, calculations, or third-party reports).

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

**Payment Records:**

- Interim payment applications and associated supporting documents.
- Records of payments received and reconciliations against applications.
- Evidence of payments to subcontractors and suppliers.

**Electronic and Hard Copy Records:**

- All records must be maintained in both hard copy and electronic format to ensure accessibility and redundancy.
- The *Contractor* must use a standardized filing system agreed upon with the Service *Manager*.
- Electronic records should be compatible with widely used formats (e.g., PDF, Excel, or other formats approved by the *Service Manager.*

## 2.9 Insurance provided by the *Employer*

The *Employer* provides insurance as stipulated in Clause 86.1 of the TSC3 contract. This includes coverage for risks associated with the Works, Employer's liability, and other insurance obligations detailed in the Contract Data.
The *Contractor* is responsible for ensuring that its employees and subcontractors comply with all **insurance requirements** and **safety procedures** while performing work under this contract.

## 2.10 Training workshops and technology transfer

Not Applicable

## 2.11 Design and supply of Equipment

- The *Contracto*r is solely responsible for ensuring that all Equipment used in the provision of services is fit for purpose, compliant with regulations, and properly maintained.
- Any delays or failures arising from the *Contractor's* Equipment remain the *Contractor's* liability and shall not impact the *Employer's* obligations under the contract.
- The *Contractor* must notify the *Employer* in advance of any specialized Equipment requiring oversight, as per the agreed notification and inspection schedule.

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

### 1.2.1 Equipment

At the end of the service period, the *Employer* may require the continued use of certain Equipment utilized by the *Contractor* during the contract. The following provisions apply:

- Equipment to be Transferred: The *Employer* may elect to retain specific Equipment used for ash plant maintenance. Any such Equipment must be agreed upon in writing prior to the end of the service period.
- Condition and Handover Requirements: Equipment must be in good working condition and comply with Eskom's safety and operational standards. The *Contractor* shall provide all relevant documentation, including maintenance records, operating manuals, and any warranties (where applicable). A joint inspection will be conducted before transfer to assess the condition of the Equipment.
- Compensation and Ownership Transfer: If the Equipment was procured by the *Contractor* for contract execution, compensation terms will be negotiated. Ownership transfer will be formalized through an Equipment Handover Agreement signed by both parties.

### 2.2.1 Information and other things

In accordance with Clause 70.2, the *Contractor* is required to provide the following information and other deliverables to the *Employer* at the end of the service period:

**Documentation and Records**
The *Contractor* shall hand over the following updated and complete records:
- Maintenance Reports – Detailed logs of all maintenance activities performed during the contract period.
- Equipment Service Histories – Records of inspections, repairs, and replacements for key components of the Ash Plant.
- Operational Procedures and Manuals – Any revised or newly developed procedures that were implemented during the contract.
- Asset Condition Reports – A final assessment of the Ash Plant equipment, highlighting any issues requiring future attention.
- Safety and Compliance Records – Documentation of adherence to Eskom's SHEQ requirements, including incident reports and risk assessments.

**Spare Parts and Consumables**
- Any unused spare parts or consumables procured for the contract and agreed to remain with the *Employer* shall be listed and handed over.

**Close-Out Report**
- A final knowledge transfer session shall be conducted with Eskom personnel to ensure continuity of maintenance operations.
- A Contract Close-Out Report summarizing key lessons learned, challenges encountered, and recommendations for future maintenance strategies shall be submitted.

## 2.13 Management of work done by Task Order

**Overview**
Certain maintenance activities under this contract may be executed through Task Orders, particularly for major repairs, emergency work, or non-routine services that arise during the contract period. The administration of Task Orders will follow the provisions outlined in Option X19 of the contract.

### 2.13.1 Issue of Task Orders

The *Service Manager* will issue a written Task Order detailing the scope, objectives, and constraints of the work required.
- Each Task Order will include the elements specified in Clause X19.2, including:
- Description of the work to be done.
- Starting and completion dates.
- The completion criteria and any performance requirements.
- The method for assessing costs if not already covered in the Price List.

### 2.13.2 *Contractor's* Response

- Upon receipt of a Task Order, the *Contractor* shall:
- Review the scope and assess resource availability.

- Submit a Task Order Programme, in compliance with Clause X19.6, detailing planned activities, timelines, and resource allocation.
- Provide a cost estimate if the work falls outside the agreed Price List.

**2.13.3 Approval and Execution**

- The *Service Manager* will review and approve the Task Order within the *period of reply* stated in the Contract Data.
- The *Contractor* will proceed with the work upon formal authorization.
- Work must be completed as per the agreed schedule, with regular progress reporting.

**2.13.4 Emergency Work**

- In the event of urgent repairs or critical failures, an expedited Task Order process will apply, with response and approval times reduced to ensure minimal operational disruption.
- The *Contractor* must be available on a 24/7 emergency response basis, with designated contacts for rapid mobilization.

**2.13.5 Reporting and Completion**

The *Contractor* shall submit a Task Order Completion Report, summarizing:

- Work carried out.
- Service results and any deviations from the original plan.
- Any recommendations for further actions or preventive measures.

The *Service Manager* will review and confirm satisfactory completion before closing the Task Order.

# 3 Health and safety, the environment and quality assurance

## 3.1 Health and safety risk management

The *Contractor* must comply with the Occupational Health and Safety Act of 1993, this includes the following:

(a) Occupational Health and Safety Act 37(2) – Agreement Form
(b) Eskom SHEQ Policy, 32-727
(c) Eskom Vehicle and Drivers Safety, 32-93
(d) Eskom Vehicle Safety Specification, 32-345
(e) Eskom Substance abuse, 32-37
(f) Eskom Life Saving Rules, 32-421
(g) Eskom Incident Management Procedure, 32-95
(h) Eskom Smoking Procedure, 32-36
(i) Eskom Medical Surveillance Procedure, 32-282
(j) Eskom SHE requirements, 32-726 (Annexure B and C)

The *Contractor* must ensure that all his employees attend the *Employer's* Health and Safety Induction Course free of charge prior to commencement of any work. The course is usually presented at the power station, Monday to Friday and normally from 09:00 to 11:00. This is a two (2) hour course and is valid for the duration of one (1) year.

## 3.2 Environmental constraints and management

The *Contractor* shall comply with but not limited the following environmental requirements:

- Waste management procedure
- Emergency preparedness plan
- Environmental competency training and awareness

## 3.3 Quality assurance requirements

The *Contractor* shall comply with ISO 9001: 2015 Quality Management System and category 1 of Eskom Supplier Quality Management Specification QM 58 240-105658000.

### 3.3.1 General

The *Contractor* complies with the *Employer's* Quality Requirements Standards.

a) The *Contractor* and all Subcontractors comply with the *Employer's* quality requirements including those listed in the *Employer's* specification document, (240-105658000).

b) The *Contractor* and sub-contractor shall develop, implement, and maintain a formal quality management system that conforms to the latest ISO 9001 standard this includes but is not limited to providing an ISO 9001:2015 certificate which is a mandatory requirement for this contract. The *Contractor* uses the QMS for all phases of the Project. The *Contractor* provides evidence of a fully implemented QMS within its own organisation. The *Employer* may, at his sole discretion, carry out an audit on the *Contractor* or Subcontractor's QMS for acceptance.

c) On-site assessment for the *Contractor* can be performed by the *Employer's* Quality department if required, to established whether the submitted documentation/ requirements are the true reflection of the QMS on site.

### 3.3.2 Quality Management Documents Requirements

The *Contractor* conforms to the quality management requirements as per ISO 9001:2015 and the *Employer's* Supplier Contract Quality Requirements Specification (240-105658000). The *Contractor* shall adhere to the following:

During the Pre-Contract Award: Quality Requirements Categories (1, 2, 3 and 4)

Eskom supplier quality requirements for all existing and potential suppliers and sub-suppliers are classified into four Categories. The following is the minimum documentation for Category 1 to 4:

**Category 1**

**SECTION A:** Valid certification of Quality Management System by an ISO accredited body

- The supplier shall submit a copy of ISO 9001 (or the latest application revision) certificate.

**SECTION B:** Evidence of QMS in operation

- Copy of appointment letter & CV/ resume of a Quality Representative for the project.
- Documented information for defined roles, responsibilities and authorities for those who will be working on site
- Copy of procedure for control of suppliers & subcontractors
- Copy of an internal management system audit report (with NCR, corrective & preventive report).
- Copy of an external management system audit report (with NCR, corrective & preventive report).
- Copy of Customer satisfaction surveys
- Copy of a Quality Plan (incl ITP's) on previous project < 2yrs
- Records of Management Review meetings (minutes, attendance registers etc.)

**SECTION C:** Contract Quality Plan as per Scope of Works (Ref ISO 10005)

- Draft Contract Quality Plan

**SECTION D:** QCP /ITP (Quality Control Plans) as per Scope of Works

**SECTION E:** Form A is completed and signed.

### 3.3.3 The Contract Quality Plan (CQP)

The *Contractor* submits to the *Service Manager* within 30 days of Contract Date for review and acceptance prior to the commencement of work, a CQP which will detail the *Contractor's* organisation, quality assurance and quality control procedures within that organisation specific to this project. The CQP must be aligned to, and reference ISO 10005:2005 QMS, guidelines for quality plans and in compliance with the guideline in QM 240-105658000.

The QCP will refer to the *Contractor's* QMS documents to be used in this Contract:

a) The *Contractor's* QMS compliance with the requirements of ISO 9001
b) *Contractor's* quality manual
c) *Contractor's* quality procedures

d) *Contractor's* quality forms and work instructions
e) *Contractor's* quality system documents referenced in this Works Information
f) *Employers* Works Information, drawings, specifications, standards and codes, etc.

### 3.3.4 Quality Control Plan or Inspection and Test Plan

As defined in the approved CQP the *Contractor* drafts and submits to the *Service Manager* for acceptance, prior to the commencement of any works, the requisite Inspection and Test Plan (ITP) or Quality Control Plan (QCP). The ITP/QCP shows each activity from the Works Information. The *Service Manager* inserts intervention points based on the risk profile of the equipment.

a) The interventions points include all witness, hold, verification, surveillances and review points required by the *Service Manager*. The *Contractor's* failure to allow the intervention points will constitute a non-conformance.
b) The intervention requirements take into consideration the criticality of the Plant and Materials.
c) Where intervention points have been bypassed without prior written waver from the *Service Manager*, result in the repeat performance of the activity in question and a Non-conformance (NC) is issued.

### 3.3.5 Operational Documents

The *Contractor* submits as a minimum the following documents, as required by the *Service Manager* during the execution of the works:

a) Updated QCP register
b) Inspection notifications accompanied by their inspection report
c) Non-conformance and Defects registers and reports
d) Updated Site and off-site inspection schedules.
e) Inspection and or FAT / SAT dates.
f) Inspections completed and outstanding.
g) Inspection and test reports
h) Weekly and monthly contract quality progress report
i) Data books for the completed works, before commissioning can commence (refer to the data book specification)

### 3.3.6 Inspections and Tests

All Plant and Materials is comprehensively tested in accordance with the agreed ITP/ QCPs prior to delivery. The *Employer* reserves the right to appoint others to inspect all parts during manufacturing, erection and commissioning to be present at any of the tests specified. The witnessing of tests by the *Service Manager* or Others, and if the *Service Manager* chooses to waive the witnessing of any tests, it does not relieve the *Contractor* of his responsibilities.

Tests that are required by the *Employer* are carried out by the *Contractor* during manufacturing, erection and commissioning to prove compliance with the specification independently of any test that may have been carried out at the *Contractor's* premises.

The *Service Manager* inspects parts of the Plant at his discretion during manufacturing stages and before shipment as per the agreed ITP/QCP;

a) The *Contractor* is responsible for the inspection of all the work that is performed, and the *Service Manager* only verifies that the work is conducted as per the Works Information.
b) The *Contractor* conducts all inspections in accordance with the accepted ITP/QCP.
c) The *Contracto*r provides suitably qualified personnel to conduct on-and-offsite inspections
d) The *Contractor* ensures that all are inspected and approved before the *Supervisor* is invited for verification.
e) The *Contractor* provides a minimum of five (5) working days' notice for local off-site inspections, 24 hours for local on-site inspection, and 21 working days' notice for foreign inspections. The notice contains copies of the *Contractor's* inspection reports.

### 3.3.7 Quality Responsibility

The *Contractor* responsibilities include but are not limited to the following:

a) The *Contractor* is accountable for the quality of the output and liable for any failures.
b) Implementation of their QMS on site
c) Administration of their QA/QC systems on site
d) Verification of approval status of Subcontractor's Quality programmes, that is, CQP's, QCPs, NC's, Defects and all their operational procedures and works instructions
e) On-and-offsite inspections
f) Weekly and monthly progress reporting on quality performance
g) The *Contractor* is responsible for defining the level of intervention of QA/QC or inspections in line with the Employers requirements.
h) The *Contractor* is responsible for defining the level of intervention of QA/QC or inspections to be imposed on his Subcontractor, suppliers and sub-suppliers and must ensure that these are in line with the *Employer's* requirements.

The *Service Manager* will be responsible for the following:

a) Reviews of the quality submissions
b) Verification of the *Contractor's* intervention points
c) Reviews the *Contractor's* ITP/QCP documents (procedures, test results)
d) Reviews the data book
e) Issue of Defects Certificate
f) Checks and marks off materials off site

### 3.3.8 Non-Conformances and Defects

Where Non-Conformance (NC) notifications are issued, the *Contractor* acknowledges receipt within the period of reply and proposes corrective and preventive actions to the *Service Manager*. The corrective and preventive actions will include the implementation and completion dates. Progress on all NCs notifications issued to the *Contractor* must be reported to the *Service Manager* on weekly basis.

a) The *Contractor's* Quality Manager keeps a register of all NC notifications issued
b) Records of NCs notifications are kept and form part of the data book records.
c) Deviations from the Contract are treated as a non-conformance.

During the contract execution phase, the *Contractor* will be monitored by the *Service Manager* for performance on quality related aspects. The monitoring will be in the form of audits and assessments.

### 3.3.7 Quality Reporting

The *Contractor* submits a monthly quality report, on the last working day of the month. The report includes but not limited to the following:

a) A register of NCRs and defects
b) Updated QCP / ITP register
c) QA monthly report summary
d) Planned and completed local and foreign inspection dates
e) Completed and outstanding Inspections
f) Audit findings report
g) Risks with Mitigation plan

### 3.3.10 Preservation, shipping and transportation

The *Contractor* ensures that all Plant and Materials are preserved in an appropriate manner as described in the product specifications or in the *Employer* preservation, shipping and transportation procedures as applicable. The *Contractor* submits the preservation, shipping and transportation procedures to the *Service Manager* for review and acceptance. The *Service Manager* may choose to witness the packaging, loading and offloading of the products depending on the equipment criticality, this will be indicated in the intervention points on the ITP/QCP.

The *Contractor* also ensures that all storage requirements for Plant and Materials are properly implemented to preserve the products against adverse conditions, deterioration, damages, etc. Storage and preservation procedures for the different equipment must be submitted to the *Service Manager* for review and acceptance. The *Service Manager* may request to inspect the stored Plant and Materials at any given point during the storage period of the product.
The *Contractor* shall comply with the quality criteria and constraints stated in this Works Information.
Plant and Materials for this contract is not shipped by the *Contractor* until all the documents stated in the Particular Specification have been submitted to the *Service Manager*.

# 4 Procurement

Materials, equipment, and services shall be procured only from approved suppliers. Approval for any deviations must be obtained in writing from the *Service Manager*.

## 4.1 People

### 1.2.1 Minimum requirements of people employed

All personnel employed on the site must have valid work permits and comply with all South African labour laws and immigration regulations.
All personnel must possess the necessary qualifications, skills, and experience relevant to their roles.

### 2.2.1 BBBEE and preferencing scheme

The *Contractor* is required to comply with the following Broad-Based Black Economic Empowerment (B-BBEE) and Preferencing Scheme measures after the contract award.

**a) B-BBEE Level Compliance:**

- The *Contractor* must maintain its B-BBEE status throughout the duration of the contract.

**b) Skills Development and Enterprise Development**:

- The *Contractor* must implement skills development initiatives as part of the project, including on-the-job training, mentorship programs, or sponsorship of accredited training for local labourers and subcontractors.

**c) Audit and Verification:**

- The *Contractor's* compliance with B-BBEE and preferencing scheme requirements will be subject to audit. All documentation related to B-BBEE compliance, including subcontracting agreements, invoices, and training records, must be readily available for review upon request.

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

The *Contractor* complies with and fulfils the *Contractor's* obligations in respect of the Accelerated and Shared Growth Initiative - South Africa in accordance with and as provided for in the *Contractor*'s ASGI-SA Compliance Schedule.
The *Contractor* shall keep accurate records and provide the *Service Manager* with reports on the *Contractor*'s actual delivery against the stated ASGI-SA criteria.

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

### 1.2.1 Preferred subcontractors

Not Applicable

### 2.2.1 Subcontract documentation, and assessment of subcontract tenders

- The *Contractor* must follow Eskom's procurement procedures for subcontracting, ensuring compliance with Preferential Procurement, B-BBEE, and ASGI-SA requirements where applicable.
- The *Contractor* must prepare a Subcontract Tender Document that clearly defines the scope of work, specifications, and NEC contract conditions.

- Subcontract opportunities must be advertised transparently, ensuring fair competition among qualified bidders.
- Eskom may specify pre-approved suppliers or service providers for certain specialized work.

#### 3.2.1 Limitations on subcontracting

The *Contractor* shall not subcontract more than 30% of the total contract value without prior written approval from the *Employer*.

#### 4.2.1 Attendance on subcontractors

The *Contractor* shall be responsible for managing and coordinating all subcontracted work to ensure compliance with contract requirements. The following attendance requirements apply:

**4.2.1.1 Supervision and Oversight**

- The *Contractor* must provide adequate supervision and management of all subcontractors.
- The *Contractor* shall ensure that subcontractors comply with all health, safety, environmental, and quality requirements.
- The *Contractor* shall be responsible for ensuring that all subcontractor personnel attend Eskom's site induction training before commencing work.
- The *Contractor* must arrange for security clearances, permits, and access control as required for subcontractors.

**4.2.1.2 Provision of facilities and resources**

The *Contractor* shall ensure that subcontractors have access to shared site facilities, including:

- Welfare and ablution facilities
- Designated storage areas for tools and materials
- Access to workspaces
- The *Contractor* shall provide temporary site offices for subcontractors

## 4.3 Plant and Materials

#### 1.2.1 Specifications

The *Employe*r will supply the required spare parts, which the *Contractor* must **store, handle, and use properly**.

The *Contractor* shall:

- Verify the quality of supplied spares before installation.
- Notify the *Employer* in writing of any defects or quality concerns before use.
- Maintain a weekly inventory report of all spares used.

#### 2.2.1 Correction of defects

**a) Defect Repairs:**

- In the event of a notified Defect, repairs must be undertaken to restore the affected Plant or Material to its original condition and functionality as per the *Employer's* quality requirements.
- If the repair is not feasible or fails to meet the required quality standards, the defective item must be replaced with new Plant or Material of equivalent or superior quality.

**b) Quality Assurance and Testing**:

- The *Contractor* must implement and maintain a quality assurance system to verify that all Plant and Materials comply with the specified standards.
- The *Employer* reserves the right to inspect and test any Plant or Material at any stage of the Works to ensure compliance.

**c) Rejection of Non-Compliant Materials:**

- The *Employer* has the authority to reject any Plant or Material that fails to meet the required quality standards.
- Rejected items must be removed from the Site promptly and replaced at the *Contractor's* expense without impacting the project schedule.

**d) Record-Keeping:**

- The *Contractor* must maintain comprehensive records of all quality assurance and control activities, including certificates of compliance, inspection reports, and test results.
- These records must be made available to the *Employer* upon request

### 3.2.1 *Contractor*'s procurement of Plant and Materials

The *Contractor* shall communicate with the *Service Manager* and ensure that all required spares are drawn and made available on time for execution. It is the responsibility of a *Contractor* to list all required spares on time.

### 4.2.1 Tests and inspections before delivery

Not applicable

### 5.2.1 Plant & Materials provided "free issue" by the *Employer*

All Plant and Materials required for the Works are to be provided by the *Contractor* at their own expense and in accordance with the specifications.

### 6.2.1 Cataloguing requirements by the *Contractor*

Not Applicable

# 5 Working on the Affected Property

### 5.1.2 Health and safety facilities on Site

The following health and safety facilities and measures will be in place on the Site to ensure compliance with the Occupational Health and Safety Act (OHSA) and to address potential emergencies, disease outbreaks, and other health risks:

- **First Aid Facilities**
  *Employer's* Provided Facilities: First Aid stations equipped with basic medical supplies will be available at the following locations on Site:
  - Offices
  - Construction Area
- **Emergency Medical Services**
  Emergency Contact Numbers: A list of emergency contact numbers (ambulance, fire department, nearest hospital, etc.) will be prominently displayed at all work areas and First Aid stations.
  On-Site Ambulance: Where applicable, an on-site ambulance will be available to handle critical medical emergencies.
- **Disease Prevention and Epidemics**
  Hygiene Facilities: The *Employer* will provide handwashing stations, sanitizers, and hygiene posters at key locations.
  Vaccinations and Health Screening: Where required by local regulations or during epidemic outbreaks, personnel must provide proof of vaccinations or undergo health screenings.
  Isolation Facilities: A designated area will be set aside for isolating individuals showing symptoms of contagious illnesses until medical assistance arrives.
- **Emergency Procedures**
  Evacuation Plan: An emergency evacuation plan will be displayed at prominent locations on the Site. Regular drills will be conducted to ensure readiness.
  Fire Safety: Fire extinguishers and fire alarms will be installed at all major work areas. The *Contractor* must ensure personnel are trained in fire safety protocols.
  Incident Reporting: All incidents, including near misses, must be reported immediately to the *Service Manager* and recorded in the Site incident log.

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

The following requirements apply to the *Contractor's* personnel, subcontractors, and visitors for entry, access, and operations on the Site:

**a) Site Access Permits and Entry Requirements**

- All personnel must obtain **Site Access Permits** issued by the *Employer* before entry.
- Valid identification documents (e.g., South African ID or passport) must be presented for security clearance.
- Foreign workers must have valid work permits, and their details must be submitted for prior approval.
- Access permits are non-transferable and must be displayed at all times.
- The *Contractor* is subjected to alcohol testing on a daily basis.
- The *Contractor* obtains a "Gate Removal Permit" from the *Service Manager* before materials and equipment can be removed from site. The "Gate Removal permit" gives itemised list of materials and equipment to be removed from site.
- The *Contractor* ensures that a tool list is available on the day of arrival and that all tools are captured on the tool list. The tool list will be handed over to the Reception Security official that will stamp the tool list. The tool list will be kept safe and will be used when tools need to be removed from site. This message should be handed over to any of the *Contractor's* Subcontractors

**b) Security Screening**

- All individuals will undergo a background check as part of the permit approval process.
- The Employer reserves the right to deny entry to any person based on security concerns.

**c) Vehicle Access**

- Only vehicles authorized by the *Employer* will be permitted on Site.
- Vehicle permits must be obtained in advance, and all vehicles will be subject to security inspection upon entry and exit.

**d) Personal and Equipment Inspections**

- Security personnel may conduct random searches of individuals, equipment, and vehicles entering or leaving the Site.
- Any prohibited items found will be confiscated, and disciplinary action may be taken.

**e) Compliance with Site Regulations**

- All personnel must adhere to the *Employer's* Site Regulations, including but not limited to:
- Health, Safety, and Environmental (HSE) standards.
- Emergency response protocols.
- Restricted areas and access zones.
- Behavioural and ethical guidelines.

**f) Induction and Training**

- All personnel must complete the *Employer's* Site Induction Program before commencing work.
- Refresher training may be required periodically or as determined by the *Employer*.

**g) Costs**

- All costs associated with obtaining permits, access clearances, or delays caused by non-compliance with entry requirements shall be borne by the *Contractor*.

**h) Breach of Security Protocols**

- Any breach of security protocols will result in immediate removal of the offending party from the Site.
- The *Contractor* may be held liable for any resulting damages, delays, or penalties

## 5.2 People restrictions, hours of work, conduct and records

The following restrictions and requirements apply to the *Contractor's* personnel, including subcontractors, while on the Site:

**Hours of Work**

- **Standard Working Hours**: The *Contractor's* personnel may work on Site from 07:15 to 16:30, Monday to Friday, excluding public holidays, unless otherwise agreed upon with the *Service Manager.*
- **Overtime and Extended Hours**: Any work outside standard hours, including weekends or public holidays, must be approved in advance by the *Service Manager*.
- **Restricted Operations**: Certain operations may be prohibited during specific hours due to environmental, community, or operational constraints.

## 5.3 Health and safety facilities on the Affected Property

The following health and safety facilities and measures will be in place on the Site to ensure compliance with the Occupational Health and Safety Act (OHSA) and to address potential emergencies, disease outbreaks, and other health risks:

- **First Aid Facilities**
  Employer-Provided Facilities: First Aid stations equipped with basic medical supplies will be available at the following locations on Site:
  - Main Site Office
  - Construction Area Safety Cabin

  Trained Personnel: The *Employer* will ensure that trained first aiders are available during standard working hours.
- **Emergency Medical Services**
  Emergency Contact Numbers: A list of emergency contact numbers (ambulance, fire department, nearest hospital, etc.) will be prominently displayed at all work areas and First Aid stations.
  On-Site Ambulance: Where applicable, an on-site ambulance will be available to handle critical medical emergencies.
- **Disease Prevention and Epidemics**
  Hygiene Facilities: The Employer will provide handwashing stations, sanitizers, and hygiene posters at key locations.
  Vaccinations and Health Screening: Where required by local regulations or during epidemic outbreaks, personnel must provide proof of vaccinations or undergo health screenings.
  Isolation Facilities: A designated area will be set aside for isolating individuals showing symptoms of contagious illnesses until medical assistance arrives.
- **Emergency Procedures**
  Evacuation Plan: An emergency evacuation plan will be displayed at prominent locations on the Site. Regular drills will be conducted to ensure readiness.
  Fire Safety: Fire extinguishers and fire alarms will be installed at all major work areas. The *Contractor* must ensure personnel are trained in fire safety protocols.

Incident Reporting: All incidents, including near misses, must be reported immediately to the *Supervisor* and recorded in the Site incident log.

## 5.4 Environmental controls, fauna & flora

The *Contractor* is required to comply with the following environmental controls, measures for protecting fauna and flora, and procedures for managing objects of historical or cultural significance on Site:

**a) Environmental Controls**

- **Site Preservation:** The *Contractor* must minimize environmental damage to the Site, including avoiding unnecessary clearing or grading of land.
- **Pollution Prevention:** Measures must be in place to prevent air, soil, and water pollution.

**b) Fauna & Flora**

- **Protection of Wildlife:** The *Contractor* must avoid harming local wildlife. Any encounters with protected species must be reported to the *Employer* and dealt with under the guidance of environmental authorities.
- **Vegetation Management**:
  - Avoid clearing vegetation outside designated work areas.
  - For any unavoidable vegetation removal, the *Contractor* must consult the *Employer* or environmental officer.
  - Replanting or restoration may be required in disturbed areas.

**c) Dealing with Objects of Historical Interest**

- **Identification and Reporting:** If any objects of historical, archaeological, or cultural significance are discovered during the works, the *Contractor* must immediately cease work in the affected area and notify the *Service Manager*.
- **Preservation:** The *Contractor* must take steps to protect the object or area from damage or disturbance until guidance is provided by relevant authorities or the *Employer*.
- **Consultation:** Work must not resume in the affected area until approval is given by the *Service Manager* or authorities after proper assessments have been conducted.

**d) Compliance and Monitoring**

- The *Contractor* must comply with all applicable environmental regulations and standards.
- Regular inspections will be conducted by the *Service Manager* or environmental officers to ensure compliance. Non-compliance may result in penalties or work stoppages.

## 5.5 Cooperating with and obtaining acceptance of Others

The *Contractor* must cooperate fully with any Others as defined in clause 11.2(9), including but not limited to:

- Other contractors or service providers working on the Site.
- Representatives of the *Employer* and designated agents.
- Other stakeholders involved in or affected by the Works.

## 5.6 Records of *Contractor*'s Equipment

- The *Contractor* must maintain accurate and up-to-date records of all Equipment brought onto the Site.
- The records must specify the ownership status of each item of Equipment (owned, hired, or leased).
- These records must be made available to the *Service Manager* upon request.
- All Equipment must be maintained in good working order, and regular inspections must be conducted to ensure operational safety and compliance.
- The *Contractor* is responsible for the removal of all Equipment from the Working Areas upon completion of the Works or when no longer required.
- The *Contractor* must ensure that Equipment is positioned and operated in a manner that does not obstruct Site access, walkways, or operations by Others.
- Adequate barriers and warning signs must be in place when Equipment is in use to prevent unauthorized access or accidental interference.

## 5.7 Equipment provided by the *Employer*

## 5.8 Site services and facilities

### 5.8.2 Provided by the *Employer*

The following outlines the site services and facilities provided by the *Employer* and the requirements for their use:

**a) Power Supply**

- The *Employer* will provide access to electrical power.
- The *Contractor* is responsible for installing appropriate temporary connections, ensuring safety compliance, and adhering to all regulatory standards.
- Power usage is restricted to activities directly related to the execution of the Works.

**b) Water Supply**

- Potable and non-potable water will be available at designated locations on-site,
- The *Contractor* must provide the necessary hoses, tanks, or infrastructure to connect to the water supply.

**c) Waste Disposal**

- Waste disposal facilities, including general waste and hazardous waste disposal areas, will be provided by the *Employer*.
- The *Contractor* is responsible for ensuring proper segregation, storage, and disposal of waste in compliance with local environmental regulations.
- Any additional waste management requirements beyond what is provided by the *Employer* will be the *Contractor's* responsibility.

**d) Additional Requirements**

- The *Employer* will not provide additional facilities or services beyond those stated above.
- The *Contractor* is responsible for providing all other necessary site services, equipment, and infrastructure to complete the Works.

### 5.8.3 Provided by the *Contractor*

**a) Storage Facilities**

- Secure storage facilities must be provided for storing tools, equipment, and materials required for the Works.
- Separate storage for hazardous materials must be established, compliant with health, safety, and environmental regulations.

**b) Office Equipment**

The *Contractor* shall supply and maintain all required office equipment, including but not limited to:

- Computers with licensed software and internet connectivity.
- Printers, copiers, scanners, and stationery.

**c) Location and Layout of Facilities**

- The *Contractor* must submit drawings of the proposed site facilities for approval by the *Service Manager* before commencing construction.
- Facilities must not interfere with ongoing site operations or encroach on restricted areas.
- The location of all temporary facilities shall comply with environmental and zoning regulations.

**d) Post-Completion Disposition of Facilities**

- Upon completion of the contract, temporary facilities such as site accommodation and construction camps must be dismantled.
- The *Contractor* is responsible for the removal of debris and the restoration of the site to its original or agreed-upon condition.
- Any permanent facilities provided by the *Contractor* that are to remain on-site must be formally handed over to the *Employer* in an agreed-upon condition.

## 5.9 Control of noise, dust, water and waste

The *Contractor* must implement measures to control noise levels on-site in compliance with relevant local regulations and standards. Noise control must be a priority to ensure that it does not exceed the prescribed limits or cause unnecessary disturbance to surrounding communities and workers.
The *Contractor* is required to take all necessary precautions to minimize dust generation on-site, particularly during dry weather, excavation, or material handling processes.
The *Contractor* must ensure the proper management and disposal of waste generated on-site, in accordance with local waste disposal regulations and environmental requirements.

## 5.10 Hook ups to existing works

The adjacent plant and equipment may not be modified without written permission from the *Service Manager*. The *Contractor* complies with Eskom Life Saving Rules and will report any non-conformance.

## 5.11 Tests and inspections

### 5.11.2 Description of tests and inspections

- **Visual Inspections:** Routine checks for wear, corrosion, leaks, and structural integrity.
- **Functional Tests:** Verification that systems operate as intended under normal and peak conditions.
- **Non-Destructive Testing (NDT):** Techniques such as ultrasonic, radiographic, or dye-penetrant testing to detect hidden defects.
- **Mechanical Performance Tests:** Assessments of moving parts, including bearings, motors, and conveyors.
- **Electrical Testing:** Verification of insulation, grounding, and operational status of electrical components.

The *Contractor* is responsible for conducting inspections and tests to verify the condition and performance of equipment. *Service Manager* and Eskom representatives may conduct independent inspections to ensure compliance with standards. Third-party inspections may be required for specialized assessments.

### 5.11.3 Materials facilities and samples for tests and inspections

The *Contractor* shall provide the following materials and facilities for conducting tests and inspections:

- **Testing Equipment:** Tools and instruments required for mechanical, electrical, and non-destructive testing (e.g., vibration analyzers, ultrasonic testers, insulation resistance meters).
- **Workshops and Testing Areas:** On-site or off-site facilities for conducting necessary tests and analysis.
- **Consumables and Testing Media:** Lubricants, chemicals, calibration gases, and other materials needed for testing.
- **Safety Equipment:** PPE (Personal Protective Equipment) and lifting gear to ensure safe access to test areas.
- **Qualified Personnel:** Certified inspectors and technicians to perform required testing.

# 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 |
|---|---|---|
| | | |
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# 7 Appendix A

## 7.1 Detailed Scope of Work

This page is left purposely blank.

| Eskom | Kendal Outside Ash Maintenance Scope of Work | Engineering |
|---|---|---|

| | | | |
|---|---|---|---|
| Title: | **Outside Ash Maintenance Scope of Work** | Document Identifier: | *1039474 |
| Type: | **Mechanical Maintenance** | Alternative Reference Number: | **N/A** |
| Planned Start Date: | **TBD** | Area of Applicability: | **Kendal Power Station** |
| Duration: | **5 Year** | Functional Area: | **Mechanical Maintenance** |
| Submission Interval: | **As Required** | Revision: | **00** |
| | | Total Pages: | **32** |
| | | Next Review Date: | **N/A** |
| | | Disclosure Classification: | **Controlled Disclosure** |

| Compiled By: | Supported By: | Approved By: | Authorised by: | Accepted By: |
|---|---|---|---|---|
| **R Maserumule** | **A Kgatla** | **S Malgas** | **P Takane** | **A Masehla** |
| **System Engineer** | **Snr Supervisor Maintenance** | **Engineering line Manager (Act.)** | **Engineering Manager (Act.)** | **Maintenance Line Manager** |
| **Date:** 11/03/25 | **Date:** 11/03/25 | **Date:** 11/03/2025 | **Date:** 13/03/2025 | **Date:** 11 March 2025 |

## Content

## 1. Scope Compilation Reference

| SCOPE COMPILATION REFERENCES | | | | |
|---|---|---|---|---|
| **SOURCE & Ref No.** | **Yes** | **No** | **N/A** | **Comments** |
| **Previous outage service reports** | | X | | |
| **Return to service data packages** | | X | | |
| **Maintenance Strategy with Rev number** | X | | | *1024674 |
| **SAP defects (attach list as appendix)** | X | | | |
| **GHRMS (STEP) reports** (Generation Heat Rate Management System) | | X | | |
| **Online Condition Monitoring** | | X | | |
| **Pre-outage performance test results** | X | | | To be assessed before Execution |
| **Post outage performance test results** | X | | | To be assessed before Execution |
| **GPSS/ Plant Performance data on UCLF incurred** | | | X | |
| **OMS / IIRMS recommendations** (Audits Reports) | | | X | |
| **Risk controls (IRM system)** | | | X | |
| **Previous audits and reviews (e.g. ERAP)** | | | X | |
| **Engineering Change Requests (Projects)** | | | X | |
| **LOPP strategy reports** | | | X | |
| **URS** | | | X | |
| **Philosophy (Outage)** | | | X | |
| **Condition Monitoring Report** | X | | | |
| **VA/PHD Viewer trends** | | | X | |
| **Corrective Actions** | X | | | To be informed by failures |
| **CARAB reports** | | | X | |
| **Statutory Requirements** | | | X | |
| **Grid code requirements** | | | X | |
| **Waivers and Exemptions** | | | X | |
| **Calibration requirements** | | | X | |
| **Previous Outage SOW variations** | | | X | |
| **Post Mortems Actions from previous outages** | | | X | |
| **Pre–Outage plant walks** | X | | | |
| **Risk based inspection (RBI) report** | | | X | |
| **Simulation, TOIs, OON, SI** | | | X | |

| SUBSYSTEM | Y / N | Page № |
|---|---|---|
| | | |

## 2. Executive Overview

The *Contractor* shall provide and manage an all-inclusive mechanical maintenance service for the Outside Ash Plant at Kendal power station as specified in the Works information.

The *Contractor* will comply with the applicable SHE legal and Eskom SHEQ requirements to ensure that Eskom's goal of zero harm to employees, *Contractor*s, public and the environment is achieved. The *Contractor* shall develop a SHE plan and prepare a SHE file which meets these requirements as well as all relevant applicable legislation. The high-level works information covers trouble shooting all faults and defects pertaining to the Outside Ash Plant systems, maintenance of all mechanical and hydraulic systems, assistance during the execution of electrical and C&I maintenance work, and all administration work related to services provided.

The *Contractor* shall perform planned and opportunity maintenance work. The *Contractor* shall provide all necessary resources in the form of qualified and competent crew, and certified tools and equipment required to provide services. The Contractor will be expected to provide Spares to execute the scope of work. The *Contractor*'s team must be led by competent, qualified, and experienced leaders constituting of site manager, safety manager, quality controller and supervisors.

The *Contractor* shall ensure that asset management activities are performed to improve reliability, availability and sustainability of Eskom's assets and will be in line with strategic objectives and principles of Eskom as per Eskom Maintenance Policy, Document Identifier 32-1205. The *Contractor* is subjected to requirements of Maintenance Effectiveness Assessment Standard, Unique Identifier 240-105733494.

## 2.1 Definitions

| Definition | Explanation |
|---|---|
| General Overhaul | (> 6 weeks)<br>This is a full turbine centreline outage<br>Boiler statutory inspection/tests and refurbishment<br>Boiler & turbine auxiliary plant refurbishment |
| Inspection | (1 - 2 weeks)<br>For inspection purposes only to determine scope of work or obtain history, i.e., fans, boiler, ducting, air heaters and precipitators/FFP |
| Interim Repairs | (2 - 4 weeks)<br>This is done between a GO and MO<br>Scheduled to perform critical repairs to prevent plant failures until the next scheduled outage like boiler tube leak prevention, air heater- and precipitators/FFP repairs/washing |
| Mini Overhaul | (4 - 6 weeks)<br>This is a partial turbine centreline outage<br>Scheduled at intervals between GOs to perform outage related refurbishment work that:<br>Prevents the unit to run from GO to GO, typically boiler, air heater, burner, and ducting work etc.<br>GO activities that can fit in during the outage without extending the duration to relieve resource risks and congestion during GO's, typically turbine steam admission valve refurbishment and generator inspections |
| Short Term Planned Repairs | (As required)<br>Any planned work required outside of the normal outage philosophy<br>Planned and requested 28 days in advance |

| | |
|---|---|
| | Readiness indicator and ORC Risk Report to be submitted with the request |
| Maintenance | A combination of all technical, administrative, and managerial actions during the lifecycle of an item intended to retain it in, or restore it to, a condition in which it can perform its required function. |
| Condition Based Maintenance | Predictive maintenance carried out because of findings from analysis of parameters measured under a condition-monitoring regime, or from recommendations from reliability analysis. |
| Corrective Maintenance | The process of restoring asset / plant and equipment which have failed or deteriorated to a state which renders it unable to meet the acceptance criteria required for its application. |
| Preventive Maintenance | Planned time or schedule-based maintenance carried out with the explicit objective of preventing functional failures and is directed towards maintaining the physical condition of the asset / plant or equipment. It includes scheduled overhauls and scheduled replacement of worn-out parts or failure prone components. |
| Reliability Centred Maintenance (RCM) | RCM represents a disciplined decision logic approach that focuses on the consequences of failure to develop the most cost-effective lifetime maintenance programme. The decision logic question is sequenced to those parts of the asset / plant that are maintenance significant. Significant components failure modes are evaluated to identify appropriate maintenance tasks and their costs |
| Reliability Basis Optimisation (RBO) Analysis | A structured methodology for analysing equipment or component failure and defining the tasks required to detect, mitigate, or even tolerate potential failures. Considerations are many and include the component function, its history of failure, its failure modes, the consequence of failure and the causes of failure.<br>**NB**: currently Maintenance Basis Standardization is being phased in to replace the RBO. |

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|---|---|
| Inspection | Activities, which by means of examination, observation, or measurement, determine the conformance of material, parts, components etc., to predetermined specifications and quality requirements. |
| Functional failure | The inability of a system or component to fulfil one or more intended function/s to a standard performance that is acceptable including the complete failure to perform its intended function. |
| Testing | All activities required determining the actual performance or condition of an item. |
| Critical spares | Critical spares are items of plant that will result in partial or full load loss or result a significant increase in the risk of having load losses or will have a negative impact on health, safety, the environment, or statutory compliance, if the replacement item is not available. Spares for all Level 1 and 2 components are also classified as critical spares. For critical components a minimum of one spare must be always kept. |

## 2.2 Abbreviations

| Abbreviation | Explanation |
|---|---|
| AHP | Ash Handling Plant |
| APM | Ash Plant Manager |
| DHP | Dust Handling Plant |
| EMD | Electrical Maintenance Depart |
| ENG | Engineering |
| EOD | Electrical Operating Desk |
| GO | General Overhaul |
| IR | Interim Repairs |
| i/s | In Service |
| MO | Mini Overhaul |
| MPa | Mega Pascal |

| Abbreviation | Explanation |
|---|---|
| MW | Mega Watt |
| PTW | Permit to work |
| P.O | Plant Operator |
| RP | Responsible Person |
| s/by | Stand By |
| SE | System Engineer |
| SM | Shift Manager |
| SOW | Scope Of Work |
| SS | Shift Supervisor |
| SSC | Submerged Scrapper Conveyor |
| SSS | Senior Shift Supervisor |
| PPE | Personnel Protective Equipment |
| PCLF | Planned Capability Loss Factor |
| TPH | Tons Per Hour |
| UCR | Unit Control Room |
| UCLF | Unplanned Capability Loss Factor |

### 2.3Roles and Responsibilities

The goal of this scope of work is to establish the contract for mechanical maintenance activities on the Kendal Outside Ash plants; therefore, the Maintenance Services sought must help Eskom – Kendal power station with the realisation of the following benefits:

- Flexibility in the effective management of workload and the control of the work force involved in the service and operations of the Outside Ash Plant,
- Reduction in Mean Time to Repair,
- Increase in plant availability, reliability, and efficiency of the Outside Ash Plant systems to achieve station KPI targets.

Below are the roles and responsibilities of the *Contractor* to ensure that the above benefits are realised:

a) All *Contractor* employees shall comply with Eskom's policies and site regulations, and it is *Contractor*'s responsibility to ensure that his / her staffs are conversant with them throughout the duration of the contract.

b) The staff utilised on site shall meet all the requirements to ensure that good quality work is always achieved, and Kendal culture is upheld.

c) The number of staff required to execute all the maintenance activities is to be decided by the contractor after his / her assessment of the scope of work and then submit to the *Employer* for approval.

d) The performance of the contractor shall be scored on the percentage completion of Engineering SOW, Outside Ash Plant's availability and reliability after handover to OPS.

e) *Contractor* shall do a comprehensive risk assessment prior executing any work on the plant, subsystem, and equipment, then take a PTW using his / her RP and on completion of the work shall properly conduct function testing, re-commissioning prior to the clearance of the PTW.

f) The *Contractor* shall be responsible to safely transport personnel while utilising the appropriate means as defined by Eskom requirements the resources (staff, equipment, and spares) to and from the site.

g) The *Contractor* shall be responsible or held liable for any defects arising from maintenance or operational faults after an intervention. The Contractor will be held responsible for poor workmanship performed by his or her staff and intentionally use of inferior spare parts. The guarantee periods shall be agreed upon with the contract Manager.

h) The *Contractor* shall be responsible for the return to service of the plant (including redundant plant) after a maintenance opportunity.

## 3. Objectives

The objective of this document is to provide a suitable contactor with the mandatory prerequisites to perform competent and quality mechanical maintenance activities on Kendal Power Station's Ash Handling Plant.

## 4. System Description

The Outside Ash plant is defined by the following boundaries:

- Transverse conveying system is subdivided into the following subsystems.
  - Transfer chutes from the conditioned ash and coarse ash conveyors
  - Transfer house E, housing drive units and tension carriage system
  - Emergency dumping facility
  - Belt conveying system:
    - Transverse conveyors, 00ETK11 and 00ETK21
    - Belt protection system (belt skew detectors, belt rip detectors) and mass meters.
    - Transfer chutes
    - Impact stations
    - Belt scrappers
    - Hydraulic moving heads
    - Winches and gravity take-up system for belt tension
- Overland conveying system is subdivided into the following subsystems
  - Transfer house F, housing drive units and tension carriage system
  - In-loading conveyor
  - Belt conveying system:
    - Overland conveyors, 00ETK12 and 00ETK22
    - Belt protection system (belt skew detectors, belt rip detectors) and mass meters.
    - Transfer chutes
    - Impact stations
    - Belt scrappers
    - Hydraulic moving heads
    - Winches and gravity take-up system for belt tension
- Extendible conveying system is subdivided into the following subsystems
  - Drive unit and tension carriage system
  - Belt conveying system:
    - Extendible conveyors, 00ETK13 and 00ETK23
    - Belt protection system (belt skew detectors, belt rip detectors)
    - Transfer chutes
    - Impact stations

- Belt scrappers
- Electric Winches for belt tension

- Shiftable conveying system is subdivided into the following subsystems
  - Drive unit and tension carriage system at the head stations
  - Belt conveying system:
    - Shiftable conveyors, 00ETK14 and 00ETK24
    - Belt protection system (belt skew detectors, belt rip detectors)
    - Transfer chutes
    - Impact stations
    - Belt scrappers
    - Electric Winches for belt tension

## 5. General Work Description

- The contractor will perform refurbishment and repair maintenance on the above mentioned plants as planned on opportunity maintenance.
- The contractor shall be highly competent in performing the required work BMH plant but won't be limited to these descriptions/instructions. The contactor will supply all the necessary tools, spares, and equipment to execute the job correctly and safely.
- The contractor will conduct site surveys on the ash plant condition and integrity before the planned work starts.
- The contractor shall submit a report to the System engineer containing the results of the survey with recommendations to prolong the plant life span and prevent breakdowns.
- Contactor will have enough qualified riggers, boiler makers and artisans to complete the work.
- An approved SOW with all the relevant Quality Control documents and an approved schedule will be given to the relevant Outage Planner and System Engineer.
- Contractor will also provide the following:
  - Artisans on site
  - Assistants on site
  - Standby schedule

- Vehicles to transport personnel, equipment, components, and supplies.
- Safety clothing and equipment
- Radios for communication with Outside plant control room.
- On site containers for personnel and spares.
- Eskom Approved Responsible persons for permits
- Quality control officers

- The contactor will be responsible for the removal of non-functioning equipment from the plant.
- The contractor shall keep track of all spares used within the maintenance period and submit a detailed report every week to the planner, contract manager and System Engineer.
- The contractor shall develop an execution timeline and complete the task within the given time frame.
- The contractor shall report and defect any additional defects to the system engineer, planner, and contract manager.
- The contractor will plan and arrange with the onsite Scaffolding contactor to erect any scaffolding that's required.
- The contractor will also comply to the following requirements:

| No | Activity description | Acceptance criteria |
|---|---|---|
| 1 | Standard performance criteria used to assess and improve effectiveness of maintenance | Maintenance effectiveness assessment standard unique identifier 240-105733494 |
| 2 | Training, evaluation, and authorisation of personnel for Operating Regulations for High Voltage Systems and Plant Safety Regulations | To comply with the mandatory requirements within generation environment refer to procedure identifier number 240-46979537 |
| 3 | Administrate or manage maintenance work | Management of maintenance within Eskom – Generation shall ascribe to Eskom's PCM for manage maintenance work, 32-1304 |

| | | |
|---|---|---|
| 4 | Housekeeping<br>**NB**: Plant cleaning e.g., unblocking, floor seeping and removal of excessive ash is executed by third party contractor | Working area to be clear of foreign objects and waste material e.g., used parts while the waste produced to be handled according to applicable environmental legislations (to properly disposed of onto the demarcated area).<br>Gearboxes, hydraulic power packs and plumber block shall always be free from oil or ash deposits |
| 5 | Inspection and function testing of the conveyor system protections<br>**NB**: All Ash Plant alarms and signals testing to be conducted by C&I maintenance in the presence of the contractor and all stakeholders including fire systems, but fire extinguishers will be done by the fire risk department. | The South African Mines Health and Safety Act of 1996<br>Occupational Health and Safety Act 85, of 1993 |
| 6 | Belt conveyor replacement and splicing. | Quality control standards: 240-55864585 and 240-55864586 |
| 7 | Equipment service or refurbishment or modification | Eskom's Quality Control Plan Unique Identifier no. *1021707 |
| 8 | Replacement of components | Technical data sheet or specification and OEM manuals |
| 9 | Alignment and calibration | Quality assurance by third party |
| 10 | Quality Root Cause Analysis | Eskom Unique Identifier: QM-56 |
| 11 | Function testing and commissioning | Plant operating parameters |
| 12 | Plant walk-downs | Check sheets |
| 13 | Plant Status | System Health report |

Note: The Scope is focused on plant specific failures that have contributed to the poor system health and affected the general availability of the ash handling plant.

## 5.1 Outside Ash general systems

a) It is the responsibility of the contractor to do all preparation work for the part of the plant that he/she will be working at.

b) **Note:** when doing belt replacement, it is the responsibility of the contractor to de-tension the conveyor belt.

c) The contractor shall assure that they have and provide welding, rigging, fitting, boiler making and artisan expertise and all associated equipment.

d) The contractor shall assure that they have and provide Hydraulic systems expertise and equipment.

e) The contractor shall provide own personnel to apply and take permits for work execution.

f) The contractor shall perform their own quality control for all jobs on site. This must include the relevant quality control documentation withhold-points. All jobs must follow Eskom SMP's and PM's where applicable. If an SMP or PM is not available, the contractor must work together with Engineering, technical support, and maintenance to develop one.

g) The contractor shall be conversant with safe rigging methodology where rigging activities will be executed by the third-party contractor.

h) The contractor shall assist with the decommissioning of old OAP systems and installation on the new OAP systems.

i) The contractor shall be conversant with scaffolding plan and associated safety requirement where its building and removal will be done by the third-party contractor.

j) The contractor shall be conversant with fire system equipment.

k) The contractor shall be conversant with electrical and C&I activities.

l) The contractor shall be conversant with plant safety regulations as applicable to PSR.

m) The contractor shall be conversant with hot and cold splicing methods.

n) The contractor shall be conversant with conveying system protections.

o) The contractor should be conversant with all belt shift activities on an ash dump.

p) The contractor shall be conversant with ash stacker and ash spreader machines. This must include all functions such as crawling, luffing, and slewing of the machines.

q) The contractor shall be conversant with maintenance execution activities and all related planning and scheduling activities within OAP systems.

r) The contractor shall possess skills to interpret the condition monitoring report obtained from P&T and shall address all defects as stipulated by the report.

## 5.2 Ash conveying systems

1) The Contractor shall be responsible for resolving all defects (faults and failures) within the outside ash handling plant.

2) Typical belt conveying system defects are damaged idlers and pulleys, ash leakages at transfer stations, defective protection devices, belt misalignment, ripped conveyors belt and splices, damaged and missing safety guards and warning signs, defective drives, cleanliness, damaged unsafe structural work etc.
3) The contractor shall be responsible for plant walk-downs and inspections to identify parts of the plant that is not in a safe and good working condition and rectify those deficiencies. There shall be two types of check sheets in used, when the belt conveying system is running and stationary.
4) The Contractor shall be responsible for replacing all damaged idlers and pulleys on the entire ash handling plant. Idlers include (troughing, return, mass meter, impact, garland etc.)
5) Note: all pulley lagging activities will be performed by third party contractor, but it is expected that the contractor will provide general assistance required during the pulley lagging.
6) The Contractor shall be responsible for adjusting and replacing the belt and pulley scrapers i.e. (primary, tertiary, secondary and plough). The contractor will also be responsible for the maintenance, removal and installation of impact systems, belt skirting systems and belt guidance systems.
7) Note: Related splice work on all OAP conveyor belts will be performed by the third-party contractor but the expectation is that all the general assistance required will be provided by this contract.
8) The Contractor shall be responsible for replacing all defective bearings as part of the OAP conveying systems including cleaning, greasing, and changing all related parts. The contractor shall address all the defects coming from the P&T condition monitoring report where condition monitoring is done by the third-party contractor.
9) The Contractor shall be responsible to clean and service of all stacker and spreader hydraulic power packs including its respective lifting & lowering systems, all moving head power pack systems and gearbox oil circulation systems including their respective oil bund areas or drip trays.
10) The Contractor shall be responsible for maintenance, removal and replacement of the following systems, units, related equipment, and related components as per applicable strategy:
    - Impact stations
    - Hydraulic moving heads
    - mass meters,
    - NB: calibration of mass meters will be conducted by third part contractor.
    - In-loading conveyor
    - All electrohydraulic actuators
    - Bins and chutes liners
    - Ash plant chutes
11) The Contractor shall assure that conveyor belts are trained and not running skew.
12) The Contractor shall replace all missing and damaged belt skirts on all conveyor belts.

13) The Contractor shall be responsible to assist with all mechanical and structural scope during a belt shift outage on the ash dump. This will include but is not limited to:
    - Removal and installation of pontoons and associated equipment
    - Cable reel repairs and servicing and associated equipment
    - Movement of the head station platforms and associated equipment
    - Structural repairs

### 5.3 Lubrication work

**1)** The contractor shall provide the lubrication activity schedule or execution program aligned to the weekly OAP maintenance schedule which he or she must follow when providing the lubrication or greasing services. The contractor shall continuously revise the program to ensure its effectiveness.

**2)** All equipment and associated parts lubricated while the plant is in operation shall be monitored for abnormal noises and vibrations. Any anomalies should be reported to the maintenance supervisor, defect prioritised accordingly and then loaded on the system.

**3)** The contractor shall accordingly perform the leak checks on all responsible plant areas as part of the inspection schedule, raise and load the defect accordingly.

**4)** The contractor shall lubricate and grease all rotating equipment, flush, and top up all gearboxes and power pack systems and addressing the related.

**5)** The contractor shall execute all defects raised by P&T, all recommendations and all remedial actions identified by the third-party condition monitoring programme.

**6)** The contractor shall assist the third-party conditioning monitoring contractor during the taking of all oil and grease sample from the plant.

**7)** Clean and check for any mechanical damage and oil or grease or coolant leaks, all conveyor belts drive i.e., motors, gearboxes, hydraulic drives systems, coupling and moving head tanks and power packs including the ash dump machines hydraulic power packs and cylinders.

**8)** The Contractor shall be responsible for servicing, replacing, and greasing all plumber blocks including replacing missing nipple covers on all OAP conveyors and equipment.

**9)** The contractor shall be responsible for collection of oil and grease used from stores and to transport it to site for lubricating activities where dispensing equipment and transporting tools and equipment used are provide by the contractor.

**10)** The client shall provide the contractor with all grease or lubricants and oil used.

### 5.4 Drive train

**1)** The Contractor shall be responsible for maintaining, installing, or servicing ash conveying drive units

**2)** The Contractor shall be responsible for assuring that the gearboxes and couplings are inspected and have correct oil level

**3)** The Contractor shall be responsible for removal and installation of all filters and breathers on associated conveying systems

**4)** It is the responsibility of the Contractor to assure that hydraulic piping, joints, and fittings are not leaking

**5)** It is the responsibility of the Contractor to clean and service the cooling fan, its motor and radiator on applicable system

**6)** It is the responsibility of the contractor to ensure that all drive train baseplates have jacking bolts. The contractor is also to assist with laser alignment of the drive trains by providing manpower, rigging equipment and alignment expertise. The contractor will be responsible for performing all slow speed alignment using clock gauges etc.

7) **Note**: Related laser alignment work on all OAP conveyor belts will be performed by the third-party contractor but the expectation is that all the general assistance required will be provided by this contract. Laser alignment is only applicable to the high-speed section of the drive trains.

### 5.5 Ash structures

Taking into consideration that the maintenance contractor is responsible and accountable for the overall performance (reliability and availability) of the complete OAP to achieve station KPI targets and that the liners are main contributor to the conveyor belt damage, therefore chutes and bin repairs shall form the part of this contract where specifics are listed below:

**1)** The Contractor shall ensure that all transfer chutes and bins in the OAP are kept in good and sound working condition, therefore the contractor shall put in place measures to assure that chutes are proactively prevented from spilling ash. This can be assured by conducting integrity monitoring, prioritizing the identified defects, and executing work as per plan.

**2)** The contractor shall conduct scheduled inspections, test the functionality of the block chute detectors, check the condition of the liners and the inspection or access doors, and then compile the defects list.

**3)** The contractor shall assist with the removal of damaged liners of the chute and bins, and replacement thereof.

**4)** The contractor shall be responsible for all fabrication work of the chute, belt structures, machine structures and bin structures within the OAP.

**5)** The contractor shall be responsible for all cutting and welding activities within the OAP.

## 5.6 Cleaning

**1)** During maintenance activities, the contractor shall supply manpower, equipment, tools, safety equipment, and PPE, consumables, and cleaning equipment to be able to provide plant cleaning services at the locations where mechanical maintenance is required, where the cleaning methods utilised shall be effective and conducted in a safe manner.

**2)** Cleaning of all grease and lubricants spillages because of contractor's activity shall form the part of the plant housekeeping.

**3)** The contractor shall be responsible for cleaning and removing all grease or oil, dust and ash fines build ups from all plumber blocks and complete coupling systems within the OAP.

**4)** The removal of excessive dirty or ash spillages around the working area during emergency situations will be done by the third-party cleaning contractor on instruction from RP prior conducting the maintenance activities.

**5)** The contractor shall ensure that the integrity of the plant labelling is always upheld and immediately report all prevailing deficiencies. The contractor shall not install its own identification labels on the plant.

**6)** The contractor shall be responsible for the removal to the designated areas of all waste during the execution of the maintenance activities as per applicable legislation.

## 5.7 General information notes:

**1)** In the case of a breakdown, the contractor shall be highly competent in performing the required work on each plant but won't be limited to these descriptions/instructions. The contractor will supply all the necessary tools and equipment to execute the job correctly and safely. This must be done within a 2-hour repair commencement envelope.

**2)** Contractor must provide a daily standby schedule and standby crew for weekends

**3)** The contractor must have an on-site container for personnel and spares.

**4)** The contractor must have an Eskom Approved Responsible person for taking job permits

**5)** The contactor will be responsible for the removal of non-functioning equipment from the plant.

**6)** The contractor shall keep track of all spares used within a 30-day period and submit a detailed report every month to the Maintenance Manager and System Engineer.

**7)** The contractor shall attend to defect according to Priority and complete the task within the given time frame.

**8)** The contractor shall report and defect any additional defects found. This must be done through emails and logged onto the FLIP and SAP systems.

9) The contractor will plan arrange with the onsite Scaffolding contactor to erect any scaffolding that's required.

## 5.8 Welding Criteria

The contractor shall comply with the following, but not limited to:

- Welder qualification ISO 9606

- Welding operation shall be in compliance to Eskom Welding Procedure 15614
- Control of Welding during Construction, Repair and Maintenance Activities Standard-240-56241933

### 5.9 Technical Criteria

The *Contractor* shall possess the skills to carry out the technical plant risk assessment on all the systems that form the part of the OAP and submit the report with recommendations to the system engineer on prior and during outages.

Technical plant risk assessments expected are as follows:

- **FMECA** (Failure Mode Effects and Criticality Analysis) in accordance with Eskom FMECA Guideline: 240-49230046
- **RAM** (Reliability, Availability, and Maintainability study) in accordance with Eskom Guideline: 240-52844017
- **HAZOP** (Hazards and Operability) Study in accordance with Eskom HAZOP Guideline: 240-49230111

The objectives of the above assessments are to ensure that required plant reliability, availability and efficiency are sustained, and to feed new information into the maintenance optimisation programme refer to as System Health

Key performance indicators by which the contractor will be scored:

- Completion within agreed time frame based on the approved project plan (As supplied by the Contractor prior to the maintenance activity).
- Number of scope activities executed (Target 100%)
- Number of repeat defects after commissioning (Target = 0%).
- Time contribution for downtime of critical plant (Target = 0%).
- Quality of workmanship for known defects and timeous identification and addressing of defects.
- Identification of potential plant problems during inspections and addressing of these known issues.
- Zero forced shut down for rework will be allowed.
- Zero trips because of poor workmanship.

It is the responsibility of the C*ontractor* to ensure the correct quality of spares is used prior to installation. The *Contractor* shall report in writing if any quality issue is picked up prior to installation of such spares and written permission shall be granted before the work is executed using the specific spares. The *Contractor* is accountable for failure of spares and the rework of any breakdown or planned maintenance due to the lack in quality work.

### 5.10 Scope Variations

The contractor will attend to any variance in scope solely if it is approved by the Outage manager and if the new scope is clearly defined and understood.

### 5.11 Time Management

SOW shall be executed by the *Contractor* within the allocated outage duration. No work will be executed after the Unit is handed over to Operating.

### 5.12 Skills required

Various skills which are required for Ash Plant maintenance activities includes but are not limited to inspection or plant walk down, interpreting all related technical drawings, parts replacement, equipment installation, systems decommissioning and function testing, maintenance and repair of all mechanical equipment, hydraulic equipment and related structures used. It is expected that the contractor's crew has the technical understanding and knowledge of all the associated process control equipment for the EC&I systems.

The Contractor shall ensure that appropriate skills are available as and when required to evaluate, plan, assign, coordinate and execute outage and opportunity maintenance tasks. The Contractor shall be responsible for the administration work which involves execution plan development, job coordination, relevant resources assignment, availability of correct and sufficient spares prior execution, PTW management, commissioning, performance of the repaired system evaluation and reporting.

The contractor shall provide an organisational organogram related to this contract, which shall cover all the levels of execution from the site manager down to the lowest level of responsibility.

Below is the list of the minimum personnel required to properly execute the contract activities, but the onus is with the tenderer to ensure that all skills are indicated including the required quantity of the resources required:

| Resources | Quantity | Qualifications |
|---|---|---|
| Site Manager | 1 | National Diploma (S4). Experience in management of the Bulk Material Handling Plant.<br><br>At least 4-5 years proven experience on management of the Bulk Material Handling Plant<br><br>At least 4-5 years proven planning and scheduling software experience. |
| Senior Mechanical Supervisor | 1 | N4 to N6. Trade Test Certificate or approved Red Seal Certificate (certified copies). experience on management of the Bulk Material Handling Plant<br><br>At least 4-5 years proven experience on supervision of the Bulk Material Handling Plant |

| | | |
|---|---|---|
| | | At least 4-5 years proven planning and scheduling software experience. |
| Mechanical Supervisors | 3 | N4 to N6 in Mechanical Engineering. Trade Test Certificate or approved Red Seal Certificate (certified copies). Experience in welding, boiler making and fitting.<br><br>At least 5 years proven Bulk Material Handling Plant |
| Quality controllers | 3 | S4 Mechanical/ N6 Mechanical with a trade test. Level 1 welding. At least 4-5 years proven experience in quality inspection or assurance field. At least a qualification in Quality Management Systems ISO 9001<br><br>At least 5 years proven Bulk Material Handling Plant maintenance experience. (certified copies). |
| Safety Officer | 3 | SAMTRAC 3-4 years' experience, or alternatively NEBOSH 2 years' |

| | | |
|---|---|---|
| | | experience. (certified copies). |
| Mechanical Fitter | 12 | Fitters employed by the Contractor shall be qualified and be able to submit proof of such qualification. Trade Test Certificate or approved Red Seal Certificate (certified copies). |
| Boiler Makers | 3 | Boiler Makers employed by the Contractor shall be qualified and be able to submit proof of such qualification. Trade Test Certificate or approved Red Seal Certificate (certified copies). |
| Welders | 3 | At least Welder qualification 9606. Trade Test Certificate or approved Red Seal Certificate (certified copies). |
| Riggers | 3 | Riggers employed by the Contractor shall be qualified and be able to submit proof of such qualification. Trade Test Certificate or approved Red Seal Certificate. (certified copies). |
| Mechanical assistants | 12 | Grade 10 (certified copies). |

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|---|---|---|
| Site administrator | 1 | Administration certificate and 2-3 years' experience. |
| Storeman | 1 | Grade 10 (certified copies). |
| High-up truck (with wet rate) | 1 | 8-10 tons |
| High-up truck driver | 1 | Valid national driver's license and PDP (Goods) |
| High-up truck driver assistant | 1 | Valid slinging requirements. |

The contractor shall provide the personnel with the following minimum requirements in the form of a CV which is accompanied by valid and authenticable qualifications, experience, training, and related competency:

### 5.13 Tools and equipment requirements

The list of tool requirements to be supplied by the *Contractor* includes the following as a minimum but is not limited based on the *Contractor*'s own scope of work assessment:

- Complete toolboxes.
- Pneumatic/ Electric impact tools.
- Calibrated clocking gauges.
- Calibrated Torque wrenches.
- Bearing pullers and wrenches (Different sizes).
- Certified measuring equipment (Feeler gauge, Vernier, Micrometre etc.)
- Rigging tools and equipment.
- Supply and Use of Boiler-making tools if required to address the defects on the system. This may include $CO_2$ or Arch Welding equipment, Gas cutting and brazing etc.

- Supply and Use of a 380V/220V generator and lights for the use of tools to address defects in the plant and anytime of the day.
- Supply and use of mobile compressor for pneumatic tools.
- Electrical extension cords.
- Hydraulic jacks.

**Note: Any other tools that might be required for the execution of the scope to be supplied by the contractor.**

### 5.14 Preservation requirements

- N/A

### 5.15 Transportation Requirements

- Contractor is responsible to arrange transport to and from Kendal Power Station for the employees and must be within Eskom standards.

## 6. Detailed Scope of work

The Contractor shall obtain, interpret, clarify, and accordingly apply all appropriate compliance documentation and work execution requirements to safety, execution, function testing and commissioning of the conveyor equipment and ancillaries before proceeding. The Contractor shall prepare all material and resources required to effectively execute the allocated work. The Contractor shall prepare and approve all the execution project programs with duration, project team & responsibility per each task, QCPs and technical data or info required.

The Contractor shall coordinate his or her activities with others at the site prior commencement of and during the work activity. The Contractor shall apply and monitor safe requirements (isolation and tag out procedures) and housekeeping to establish and maintain a safe working environment throughout the outage. The Contractor shall perform allocated work in accordance with agreed plan, quality and within operating capabilities. The acceptance criteria for all activities executed shall be the quality control procedure (QCP). The Contractor shall ensure that the replaced equipment or

instrument is correctly labelled and coded. The contractor will be required to work 24 hours a day (7 days a week) and must provide shift roster.

| System | Subsystem | Job Description |
|---|---|---|
| Transverse Conveyors 00ETK11 & 00ETK21<br><br>Overland Conveyors 00ETK12 & 00ETK22<br><br>Extendable Conveyors 00ETK13 & 00ETK23 | Maintenance of discharge chute area. | Clean discharge chute and inspect/replace liners. |
| | | Clean, repair install and set new belt scraper. |
| | Maintenance of conveyor and structure. | Replace pulley assemblies as well as pulley laggings as required based on inspections. |
| | | Replace all worn idlers. Repair bent frames and fabricated missing frames. |
| | | Open, clean, and repack or replace all pulley bearings. |
| | | Inspect the physical condition of the conveyor belt. Replace conveyor belt if required. |
| | | Inspect structure for damage corrosion and repair when needed. |
| | Maintenance of loading chute area | Clean discharge chute and inspect/replace liners. |
| | | Clean chute and replace missing or worn tiles. |
| Shiftable conveyors 00ETK14 & 00ETK24 | Maintenance of discharge chute area. | Clean discharge chute and inspect/replace liners. |
| | | Clean, repair install and set new belt scraper. |
| | Maintenance of conveyor and structure. | Replace pulley assemblies as well as pulley laggings as required based on inspections. |
| | | Replace all worn idlers. Repair bent frames and fabricated missing frames. |
| | | Open, clean, and repack or replace all pulley bearings. |
| | | Inspect the physical condition of the conveyor belt. Replace conveyor belt if required. |

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|---|---|---|
| | | Inspect structure for damage corrosion and repair when needed. |
| | Maintenance of loading chute area | Clean discharge chute and inspect/replace liners. |
| | | Clean chute and replace missing or worn tiles. |
| | Belt shifts | Structural repairs during |
| | | Removal and installation of pontoons and associated equipment |
| | | Movement of the head station platforms and associated equipment |
| | | Cable reel repairs and servicing of associated equipment |

## 7. General Arrangement & Location Drawings

| № | DRAWING NUMBER | TITLE |
|---|---|---|
| Drawing will be supplied as required and will remain the sole property of Kendal Power Station. | | |

## 8. Applicable Corporate/Generation/International Guidelines and Standards

| № | REFERENCE NUMBER | DOCUMENT TITLE |
|---|---|---|
| 1 | Mine Health & Safety Act 29 of 1996 | Mines Regulations |
| 2 | Occupational Health & Safety Act 85 of 1993 | Factories Regulations |
| 3 | Unique Identifier 1016526 | Permit to Work as per Plant Safety Regulations (GGR 0992) |
| 4 | ESKPVAEY6 | Operating Regulation for High Voltage Systems |
| 5 | Unique Identifier 32-188 | Eskom's Procurement and Supply Chain Management |

| № | REFERENCE NUMBER | DOCUMENT TITLE |
|---|---|---|
| 6 | Unique Identifier 240-48929482 | Tender Engineering Evaluation Procedure |
| 7 | Unique Identifier 32-1304 | Process Control Manual (PCM) for Manage Work |
| 8 | Unique Identifier 240-53114002 | Engineering Change Management Procedure |
| 9 | Unique Identifier 36-943 | Engineering Drawing Office and Engineering Documentation Standard |
| 10 | OPG 0159-35 | Configuration Management Guideline |
| 11 | OPG 0163 | KKS Coding and Identification System for Power Stations Guideline |
| 12 | Unique Identifier 32-727 | SHEQ policy |
| 13 | ISO 9001:2008 | Quality Management Systems Requirements |
| 14 | 240-105658000 (QM 58) | Supplier Contract Quality Requirements Specifications |
| 15 | Unique Identifier *1017482 | Quality Control Plan template form |
| 16 | BS EN 620 STD | Continuous Handling Equipment and Systems |
| 17 | Unique Identifier 36-1126 | Specification for Corrosion Protection of Plant & Equipment with Coatings |
| 18 | GGSS 0407 | Specification for Belt Conveyor Structural Steelwork & Welding |
| 19 | Unique Identifier 240-55864574 | Onsite Hot Repairs on Steel Cord Reinforced Conveyer Belt Standard |
| 20 | Unique Identifier 240-55864576 | Onsite Hot Repairs on Ply or Textile Reinforced Conveyor Belt Specification |
| 21 | 240-56030556 | Splicing procedure |
| 22 | ISO 14001 | Environmental management Policy |
| 23 | 240-53114002 | Engineering Change Management Procedure |
| 24 | *1023822 | Kendal outage Philosophy |
| 25 | GPM0072 | Outage Management Procedure |

## 9. General Considerations

| ACTIVITIES | SPECIFICATIONS |
|---|---|
| **PRE-REQUISITES / PRE-CONDITIONS** | |
| Pre-work plan | a. The executor shall obtain, interpret, clarify and accordingly apply all appropriate **compliance documentation** and **work execution** requirements to safety, execution, function testing and commissioning of the conveyor equipment and ancillaries before proceeding<br>b. The executor shall obtain, interpret, clarify and accordingly apply geological and survey data required to complete the allocated work<br>c. The executor shall prepare all material and resources required to effectively execute the allocated work<br>d. The executor shall prepare and approve all the **execution project programs** with duration, project team & responsibility per each task, **QCPs** and **technical data** or info required |
| Execution of the allocated work | a. The executioner shall coordinate his or her activities with others at the site prior commencement of and during the work activity<br>b. The executioner shall apply and monitor safe requirements (*isolation and tag out procedures*) and housekeeping to establish and maintain a safe working environment throughout the outage<br>c. The executioner shall perform allocated work in accordance with agreed plan, quality and within operating capabilities<br>d. The acceptance criteria for all activities executed shall be the quality control procedure (QCP)<br>e. The executioner shall ensure that the replaced equipment or instrument is correctly labelled and coded |

| | |
|---|---|
| | f. The executioner shall be responsible to update and approve all the existing reference drawings used in Micro Station or at least marked up |
| Pre-hand over | a. All the executed work shall be function tested to ensure compliance with OEM's instructions & site requirements, and commissioned (*start-up, shut down & running procedures*) prior hand over to Eskom<br>b. Any modifications conducted to follow Engineering Change Management where all relevant technical documentation e.g. re-design information, component selection process, technical specification data and relevant technical drawings to be handed by Contractor during the hand over as requested by Kendal |
| **SAFETY**<br>**Specified safety requirements for the specific system** | |
| **System or Plant** | **Safety requirements** |
| Access to Kendal site | All individuals shall attend induction course and the contractor shall provide and ensure that Safety File is approved |
| Inside ash plant areas | Agreement to comply to OHSA regulations (section 37 (2)) |
| Inside ash plant areas | Appoint principal contractor to safely carry out construction work as per OHSA construction regulation 4 |
| Inside ash plant areas | Ensure plant and equipment safety as per Kendal procedure 30/20/05-PI 001 |
| Before starting any activity | Plant Isolation (permit to work) and tag out procedures |
| Inside Kendal site | 32-95, Procedure to conduct EH&S Incident Management |
| **ENVIRONMENT** | |

| **Specified pollution control requirements, specified waste management requirements, specified energy efficiency requirements.** | |
|---|---|
| **System or Plant** | **Environmental requirements** |
| Ash Plant | Constant housekeeping to ensure safe working environment |
| | Oil spillages to be handled as per National Environmental Management Act |
| | Working areas to be cleared or cleaned from ash fines & debris |
| | Working areas to be well light and ventilated |
| **QUALITY**<br>**All Outage QCP's to be done as per Kendal Control and Approval of QCP Process. (*1017482)** | |
| **System or Plant** | **Quality requirements** |
| Equipment manufacturing & / or repairs | On or off Kendal site manufacturing to be quality checked by Eskom – Kendal representative for acceptance |
| Function testing & commissioning | Function testing and commissioning to be conducted as per pre-approved function testing & commissioning procedure |
| Replacement or new equipment | No new or replacement component and instrument will be installed without a signed QCP and accompanying datasheet |
| **RISK ASSESSMENT**<br>**A risk report with a complete list of risks, risk rating and mitigating actions for the specific plant system.** | |
| **System or plant** | **Risk requirements** |
| **Prior and during any task every day** | **Safety Officer to ensure that risk assessment, and risk control & management are properly conducted** |

## 10. Acceptance

This document has been seen and accepted by:

| Name | Designation |
|---|---|
| Siyanda Malgas | Auxiliary Engineering Manager (Acting) |
| Sazi Jele | Auxiliary Engineering Snr Engineer |
| Ramahlodi Maserumule | System Engineer |
| Mfanelo Hlongwani | System Engineer |
| Phindile Takane | Engineering Manager (Acting) |
| Aaron Masehla | Ash Maintenance Manager |
| Noma Khwele | Maintenance Manager |
| A Kgatla | Snr Supervisor Maintenance |

## 11. Revisions

| Date | Rev. | Compiler | Remarks |
|---|---|---|---|
| March 2025 | 00 | R. Maserumule | Outside Ash Maintenance SOW |