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Technical Evaluation
Strategy for Sootblowers
Maintenance**

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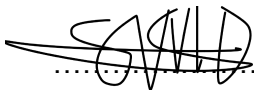
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CONTENTS	PAGE
1. INTRODUCTION.....	3
2. SUPPORTING CLAUSES	3
2.1 SCOPE.....	3
2.1.1 Purpose	4
2.1.2 Applicability	4
2.2 NORMATIVE/INFORMATIVE REFERENCES	4
2.2.1 Normative	4
2.2.2 Informative	4
2.3 DEFINITIONS.....	4
2.3.1 Disclosure Classification	5
2.4 ABBREVIATIONS.....	5
2.5 ROLES AND RESPONSIBILITIES	5
2.6 PROCESS FOR MONITORING	5
2.7 RELATED/SUPPORTING DOCUMENTS.....	6
3. TENDER TECHNICAL EVALUATION STRATEGY	6
3.1 TECHNICAL EVALUATION THRESHOLD	7
3.2 TET MEMBERS	7
3.3 MANDATORY TECHNICAL EVALUATION CRITERIA.....	8
3.4 QUALITATIVE TECHNICAL EVALUATION CRITERIA	8
3.5 TET MEMBER RESPONSIBILITIES.....	15
3.6 FORESEEN ACCEPTABLE / UNACCEPTABLE QUALIFICATIONS.....	15
3.6.1 Risks.....	15
3.6.2 Exceptions / Conditions.....	16
4. AUTHORISATION	16
5. REVISIONS	16
6. DEVELOPMENT TEAM	16
7. ACKNOWLEDGEMENTS	17

Tables

Table 1: Qualitative Evaluation Criteria Scoring	6
Table 2: TET Members.....	7
Table 3: Mandatory Technical Evaluation Criteria	Error! Bookmark not defined.
Table 4: TET Member Responsibilities.....	15
Table 5: Acceptable Technical Risk	15
Table 6: Unacceptable Technical Risks	15
Table 7: Acceptable Technical Exceptions / Conditions.....	16
Table 8: Unacceptable Technical Exceptions / Conditions	16

1. Introduction

Kusile Power Station Management has decided to outsource the Soot-Blowers Mechanical Maintenance and Repair Scope service function to a suitably qualified, experienced and well established Contractor. An invite will be issued calling for interested parties to participate in the tender process for the Scope of Work as follows: Sootblowers (Retractable/Helical and Water cannons) mechanical maintenance and repair with associated subsystem.

There are three types of soot blowers systems at Kusile:

- a) The furnace soot blowing consists of 48 motorised retractable blowers;
 - I. 8 Helical soot blowers and,
 - II. 40 Long retractable soot blowers.
- b) The Air heater soot blowing system is equipped with one soot blower each for the hot and the cold flue gas path.
- c) Water soot blowers (water cannons) are permanently installed in the boiler to clean fouled furnace walls. To cover the entire combustion chamber, 8 water cannons in 2 levels are installed.

2. Supporting Clauses

2.1 Scope

This strategy defines the technical tender evaluation strategy for Sootblowers mechanical maintenance and repair Scope of Work. The Scope of Work deliverables are as follows:

- a) Mechanical maintenance of the boiler retractable and helical sootblowers during operation of the units (Unit 1-6).
- b) Mechanical maintenance of the boiler water cannons during operation of the units (Unit 1-6).
- c) Mechanical maintenance of the Gas Air Heater (GAH) during operation of the units (Unit 1-6)
- d) Mechanical maintenance of the sootblowing system associated subsystem including, Sootblowing piping which supply Reheater steam to the sootblowers, water cannons system piping, supplying portable water to the water cannons, the water cannons booster pumps and associated accessoried such as strainers, valves and flanges. GAH sootblowers associated system such as steam supply piping, GAH sootblowers internal structures.
- e) Outage mechanical maintenance, inspection and repairs of boiler retractable, helical sootblowers, water cannons, GAH sootblowers and associated subsystem of the sootblowing system.

2.1.1 Purpose

The purpose of this tender technical evaluation strategy is to define the Mandatory Evaluation Criteria, Qualitative Evaluation Criteria and TET member responsibilities for tender technical evaluation. The technical evaluation strategy serves as the basis for the tender technical evaluation process.

2.1.2 Applicability

This document shall apply throughout Kusile Power Station, and is applicable to the Boiler Engineering, Boiler Mechanical Maintenance and Outages Department.

2.2 Normative/Informative References

Parties using this document shall apply the most recent edition of the documents listed in the following paragraphs.

2.2.1 Normative

Parties using this document shall use the most recent editions of the documents listed in this section.

- 1) Occupational Health and Safety Act 85 of 1993 (OHS-Act)
- 2) ISO 9001: Quality Management Systems
- 3) SANS 10111 Engineering Drawings

ESKOM STANDARDS

- 1) 240-48929482: Tender Technical Evaluation Procedure
- 2) 240-105453648 – Fossil Fuel Firing Regulations Standard
- 3) 240-48929482: Tender Technical Evaluation Procedure
- 4) 240-44682850: PCM - Provide Engineering During Project Sourcing
- 5) 2-1033: Eskom Procurement and Supply Chain Management Policy
- 6) 32-1034: Eskom Procurement and Supply Management Procedure
- 7) 240-151163691 Kusile Power Station Sootblower inspection and repairs during outages
- 8) 240-100951859 Kusile Power Station Sootblower Maintenance Scope of Work

2.2.2 Informative

N/A

2.3 Definitions

Definition	Description
Employer	Kusile Power Station

Definition	Description
Contractor	Service provider contracted to provide a specific service to Eskom Kusile Power Station.
Boiler Tube Leak Detector	System that monitors for leaks in the boiler tubes

2.3.1 Disclosure Classification

Controlled Disclosure.

2.4 Abbreviations

Abbreviation	Description
CV	Curriculum Vitae
SE	System Engineer
TES	Technical Evaluation Strategy
TET	Technical Evaluation Team

2.5 Roles And Responsibilities

Roles	Responsibilities
Compiler	The document compiler is responsible for ensuring that this document is up- to-date and that this document is not a duplication of an existing documentation, regarding the document's objectives and content.
Functional Responsibility(Boiler Engineering)	The Functional Responsible Person shall determine if the document is fit for purpose before the document is submitted for authorisation.
Authoriser(Engineering Group Manager)	The document authoriser is a duly delegated person with the responsibility to review the document for alignment to business strategy, policy, objectives and requirements. He/she shall authorise the release and application of the document.
Lead Discipline(Engineers)	Provides input to the technical tender evaluation strategy and associated engineering activities.

2.6 Process For Monitoring

The primary process for monitoring will be governed by the Tender Technical Evaluation Procedure (240-48929482), this entails assuring that the mechanical maintenance and repairs achieves the requirements set out in this document.

2.7 Related/Supporting Documents

Refer to Section 2.4 above.

3. Tender Technical Evaluation Strategy

The evaluation criteria will be based upon a two-step process.

Mandatory Criteria Evaluation

All TET members as defined in the Tender Technical Evaluation Strategy (and specifically TET member responsibilities) shall independently evaluate each tender in terms of compliance to the defined Mandatory Evaluation Criteria. Each TET member shall provide an individual scoring form on the compliance / non-compliance of all tenderers' responses to the Mandatory Evaluation Criteria. Each TET member shall provide clear justification(s) for each Mandatory Criteria evaluated as non-compliant ('NO'). All individual scoring forms shall be evaluated by the SE to check for consistency in scoring of the Mandatory Evaluation Criteria. Should the SE find inconsistency in the scoring, an internal clarification meeting shall be conducted with all TET members (who performed the evaluation) in the presence of the Commercial Representative. This meeting shall aim to jointly establish which of the tenderers qualify for the next phase of Qualitative Technical Evaluation. In the case where no tenderer meets all Mandatory Evaluation Criteria this shall be formally escalated to the Commercial Representative who shall guide the subsequent process. All meeting minutes shall be recorded and distributed to the Commercial Representative and included in the Tender Technical Evaluation Report.

Qualitative Criteria Evaluation

Tenderers that have met all the Mandatory Evaluation Criteria shall be evaluated against the Qualitative Criteria as defined in the Tender Technical Evaluation Strategy. The scoring of qualitative criteria shall be based on the degree of achievement by the tenderer to meet the technical requirements. A score shall be allocated as per Table 1: Qualitative Evaluation Criteria Scoring Table, for each technical qualitative criterion. Each TET member shall populate a Tender Technical Evaluation Scoring Form [2] for each tenderer. Note: Individual Qualitative Criteria scores shall only be finalised after all clarification sessions have been concluded.

Table 1: Qualitative Evaluation Criteria Scoring

Score	Percentage	Description
5	100	COMPLIANT Meet technical requirement(s) AND. No foreseen technical risk(s) in meeting technical requirements.
4	80	COMPLIANT WITH ASSOCIATED QUALIFICATIONS Meet technical requirement(s) with. Acceptable technical risk(s) AND/OR. Acceptable exceptions AND/OR. Acceptable conditions.

2	40	NON-COMPLIANT Does not meet technical requirement(s) AND/OR Unacceptable technical risk(s) AND/OR; Unacceptable exceptions AND/OR. Unacceptable conditions.
0	0	TOTALLY DEFICIENT OR NON-RESPONSIVE

Note 1: The scoring table does not allow for scoring of 1 and 3.

Note 2: Foreseen acceptable and unacceptable risk(s), exceptions and conditions shall be unambiguously defined in the relevant Tender Technical Evaluation Strategy

3.1 Technical Evaluation Threshold

The minimum weighted final score (threshold) required for a tender to be considered from a technical perspective is 70%. The threshold is set according to Tender Technical Evaluation Procedure(240-48929482). for each of desktop and site assessment reviews. The Evaluation scores will be weighted as follows according to discipline:

Technical(100%)	
Engineering	50%
Maintenance	25%
Outages	25%
Total(100%)	
Overall minimum threshold for qualificaton(70%)	

3.2 TET Members

The full time core technical evaluation team that will be reviewing Sootblowers Mechanical Maintenance and Repairs tender application will consist of the team members in **Table 2** (in-line with Technical Evaluation Procedure 240-48929482). At least one team member must be professionally registered.

Table 2: TET Members

TET number	TET Member Name	Designation
TET 1	Selby Mahumani	System Engineer
TET 2	George Mthimkhulu	Senior Engineer
TET 3	Emmanuel Sibuyi	Boiler Mechanical Maintenance Coordinator
TET 4	France Mabula	Outage Coordinator

3.3 Mandatory Technical Evaluation Criteria

None required.

3.4 Qualitative Technical Evaluation Criteria

Qualitative Technical Evaluation Criteria are weighted evaluation criteria used to identify the highest technically ranked tenderer after determining that all the Mandatory Evaluation Criteria have been met. The Qualitative Evaluation Criteria are weighted to reflect the relevant importance of each criterion

	Qualitative Technical Criteria Description	Reference to Technical Specification / Tender Returnable	Criteria Weighting	Criteria Sub Weighting
1)	Company relevant Experience	<p>Proof of historic work/orders done within Eskom or other similar plants</p> <p>Historically approved/signed method statements for completed works.</p> <ul style="list-style-type: none"> • More than 4 orders + signed method statement submitted. Score 5 (100% of 25) • Three to four orders + method statement submitted. Score 4 (80% of 25) • One to two orders + method statement submitted. Score 2 (40% of 25) • Zero submitted. Score 0 (0% of 25) 	25	
2)	Key personnel experience	<p>Demonstration of Appropriately skilled and Qualified Personnel. Submit a CV with traceable references; the CV must be accompanied by certified copies of training certificates.</p> <p>Site Manager:</p> <ul style="list-style-type: none"> • Atleast a National Diploma in Mechanical Engineering, Managerial Qualification and Years of Experience (7+ years). Score 5 (100% of 5). • Atleast a National Diploma in Mechanical Engineering, Managerial Qualification and 	5	

		<p>Years of Experience (5+ years). Score 4 (80% of 5).</p> <ul style="list-style-type: none"> Atleast a National Diploma in Mechanical Engineering, Managerial Qualification and Years of Experience (3+ years). Score 2 (40% of 5). Atleast a National Diploma in Mechanical Engineering, Managerial Qualification and Years of Experience (<2 years). Score 0 (0% of 5). 	5	
		<p>Demonstration of Appropriately skilled and Qualified Personnel. Submit a CV with traceable references; the CV must be accompanied by certified copies of training certificates.</p> <p>Site Supervisor:</p> <ul style="list-style-type: none"> At least a National/FET Diploma in Mechanical Engineering, Supervisory training Qualification and Years of Experience (5+ years). Score 5 (100% of 5). At least a National/FET Diploma in Mechanical Engineering, Supervisory training Qualification and Years of Experience (4+ years). Score 4 (80% of 5). At least a National/FET Diploma in Mechanical Engineering, Supervisory training Qualification and Years of Experience (3+ years). Score 2 (40% of 5). 		

		<ul style="list-style-type: none"> At least a National/FET Diploma in Mechanical Engineering, Supervisory training Qualification and Years of Experience (2 to 0 years). Score 0 (100% of 5). 		
		<p>Demonstration of Appropriately skilled and Qualified Personnel. Submit a CV with traceable references; the CV must be accompanied by certified copies of training certificates.</p> <p>Artisan years of experience:</p> <ul style="list-style-type: none"> 5+ years of experience. Score 5 (100% of 5). 3+ years of experience. Score 4 (80% of 5). 2+ year of experience. Score 2 (40% of 5). 0 to 1 year of experience. Score 0 (100% of 5). 	5	
		<p>Demonstration of Appropriately skilled and Qualified Personnel with Mechanical engineering (At least National Diploma) background who have water cannons and sootblowers fault finding skills. Submit a CV with traceable references; the CV must be accompanied by certified copies of training certificates.</p> <p>Engineer/Technician years of experience:</p> <ul style="list-style-type: none"> Atleast National Diploma in Mechanical Engineering, Technician 7+ years of experience/Engineer 5+ years of water 	5	

		<p>cannons and sootblowers fault finding experience. Score 5 (100% of 5).</p> <ul style="list-style-type: none"> • Atleast National Diploma in Mechanical Engineering, Technician 5+ years of experience/Engineer 3+ years of water cannons and sootblowers fault finding experience. Score 4 (80% of 5). • Atleast National Diploma in Mechanical Engineering, Technician 3+ years of experience/Engineer 1+ years of water cannons and sootblowers fault finding experience. Score 2 (40% of 5). • Atleast National Diploma in Mechanical Engineering, Technician <3 years of experience/Engineer <1 years of water cannons and sootblowers fault finding experience. Score 0 (0% of 5). 		
3)	Technical support	<ul style="list-style-type: none"> • Does the Company have technical back up support of Maintenance/Engineering skills to ensure resolution of plant failure. At least four skilled personnel with more than 5 years' experience in Sootblowers. Also Registered with a Professional Body (ECSA) as a Professional. Score 5 (100% of 10). • If none compliant. Score 0 (0% of 10). 	10	

4)	Method Statement	<p>Method statement shall detail how the tenderer proposes all deliverables on the SOW.</p> <ul style="list-style-type: none"> Detailed method statement. Score 5 (100% of 15). Partially complete method statement. Score 2 (40% of 15). None compliant. Score 0 (0% of 15). 	15	
5)	Technical Approach	<ul style="list-style-type: none"> Demonstrate the ability to execute Sootblower Maintenance with an illustration of work execution plans and Quality Control plans. Work execution and Prioritization system. Development of Maintenance strategies and continues improvement process on soot blowers. Availability of atleast (3) three authorised Plant safety regulation authorised Responsible personnel. Detailed Soot blower Quality Control Plans. Score 5 (100% of 15). None compliant. Score 0 (0% of 15). 	15	
6)	Resources required on an Ad-hoc basis	<p>Extended working hours and standby:</p> <ul style="list-style-type: none"> Signed declaration letter providing assurance of availability and provision of technical support for 24hrs (i.e. after hours, emergencies, public holidays). Score 5 (100% of 10). None compliant (0%). Score 0 (0% of 10). 	10	
7)	Knowledge on the significance of sootblwing system in the boiler plant	Submit a detailed knowledge report for:	5	

		<ul style="list-style-type: none">• Understanding of the significance of the sootblowing system in the boiler plant• Effects of not having availability of the sootblowing system,• Causes of boiler tube leaks due to sootblower erosion,• Contribution of the maintenance and repair contractor in prevention of boiler tube leaks for the station. <p>Detail knowledge report submitted. Score 5 (100% of 5).</p> <p>Partial knowledge report submitted. Score 2 (40% of 5).</p> <p>None compliant. Score 0 (0% of 5).</p>		
			Total 100	

3.5 TET Member Responsibilities

Table 3: TET Member Responsibilities

Mandatory Criteria Number	TET 1	TET 2	TET 3	TET 4
1	X	X	X	X
2	X	X	X	X
3	X	X	X	X
Qualitative Technical Criteria	TET 1	TET 2	TET 3	TET 4
1	X	X	X	X
2	X	X	X	X
3	X	X	X	X
4	X	X	X	X
5	X	X	X	X
6	X	X	X	X
7	X	X	X	X

3.6 Foreseen Acceptable / Unacceptable Qualifications

3.6.1 Risks

Table 4: Acceptable Technical Risk

Risk	Description
1.	N/A

Table 5: Unacceptable Technical Risks

Risk	Description
1.	N/A

3.6.2 Exceptions / Conditions

Table 6: Acceptable Technical Exceptions / Conditions

Risk	Description
1.	N/A

Table 7: Unacceptable Technical Exceptions / Conditions

Risk	Description
1.	N/A

4. Authorisation

This document has been seen and accepted by:

Name	Designation
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Siyakudumisa Mtsweni	Boiler Engineering Manager
Given Rikhotso	Boiler Mechanical Maintenance Manager
Emmanuel Sibuyi	Boiler Mechanical Maintenance Coordinator
France Mabula	Outage Coordinator
Ntsiki Hlapisi	Outage Manager
Pogiso Mavusa	Senior Advisor Outage
Joseph Ngqendesha	Engineering Manager (Acting)

5. Revisions

Date	Rev.	Compiler	Remarks
June 2025	1	Selby Mahumani	First Issue
December 2025	2	Selby Mahumani	Criteria amended to remove C&I scope and removal of mandatory requirement

6. Development Team

The following people were involved in the development of this document:

N/A

7. Acknowledgements

N/A