Eskom	Strategy	Engineering

Title:	**Tender Technical Evaluation Strategy – Inspections, repairs, fabricate, supply, and install of ceramic lined pulverized PF pipes, PF pipes hangers and PF pipes supports**	Unique Identifier:	**555-EBP2026**
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Compiled by	Functional Responsibility	Authorized by
………………………………………	………………………………………	………………………………………
Xolani Sigwebela	**Thapelo Masokoane**	**Rofhiwa Nelwamondo**
System Engineer	**Boiler Engineering Manager**	**Engineering Manager**
Date: 21-11-2025	Date: 24/11/2025	Date: 24/11/2025

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1. INTRODUCTION

Fabrication and supply contract for the PF pipes, PF pipes hangers and PF pipes supports is going out on an open tender. The technical evaluation is in accordance with 32-1033: Eskom Procurement and Supply Chain Management Policy, 32-1034 Eskom Procurement and Supply Chain Management Procedure during the tender process, 240-168966153 Generation Tender Technical Evaluation Procedure, 555-EBP2019 Inspections, repairs, fabricate, supply, and install of ceramic lined PF pipes, PF pipes hangers and PF pipes support scope of work.

The evaluation of the tender is based on the tenderer's ability to meet both mandatory (gatekeepers) and qualitative (weighted) evaluation criteria requirements.

2. SUPPORTING CLAUSES

2.1 SCOPE

The scope of this document defines the technical criteria to be used to evaluate tender documents supplied by contractors to execute work defined on the scope of work 555-EBP2019 Inspections, repairs, fabricate, supply and install of ceramic lined PF pipes, PF pipes hangers and PF pipes support scope of work. The acceptable and unacceptable technical risks are identified and where exceptions will be allowed it is stated.

2.1.1 Purpose

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

2.1.2 Applicability

This document is applicable to 555-EBP2019 Inspections, repairs, fabricate, supply, and install of ceramic lined PF pipes, PF pipes hangers and PF pipes support scope of work at Kriel Power Station

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

[1] 240-168966153: Generation Tender Technical Evaluation Procedure

[2] 32-1033: Eskom Procurement and Supply Chain Management Policy

[3] 32-1034: Eskom Procurement and Supply Management Procedure during the tender process

2.2.2 Informative

[4] ISO 9001: Quality Management Systems

[5] 240:105658000: Supplier Quality Management Specification

2.3 DEFINITIONS

2.3.1 Classification

Controlled Disclosure: Controlled Disclosure to external parties (either enforced by law, or discretionary).

2.4 ABBREVIATIONS

Abbreviation	Description
TET	Technical Evaluation Team
EN	Europäische Norm ("European Norm"), European Standards
ID	Internal Diameter
ISO	International Organization for Standardization
NDT	Non-Destructive Testing
IWE	International Welding Engineer registered with IIW
IWT	International Welding Technologist registered with IIW
QCP	Quality Control Plan
SOW	Scope of work
WPS	Welding Procedure Specifications

2.5 ROLES AND RESPONSIBILITIES

As per 240-168966153: Generation Tender Technical Evaluation Procedure

2.6 PROCESS FOR MONITORING

N/A

2.7 RELATED/SUPPORTING DOCUMENTS

[1] 240-105658000 Supplier Quality Management Specification

[2] 555-EBP2019 Inspections, repairs, fabricate, supply and install of ceramic lined PF pipes, PF hangers and supports scope of work, Rev. 2

[3] 240-168966153 Generation Tender Technical Evaluation Procedure

[4] 240-87660096 Non-Destructive Testing Inspection Qualification Standard

[5] 240-83539994 Standard for Non-destructive Testing (NDT) on Eskom Plant

[6] 240-106628253 Standard for Welding Requirements on Eskom Plant

[7] 240-56239143 Ceramic Lined Pulverized Fuel Pipework Standard

3. TENDER TECHNCAL 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%.

3.2 TET MEMBERS

Table 1: TET Members

TET number	TET Member Name	Designation
TET 1	Xolani Sigwebela	System Engineer
TET 2	Feyane Tivane	System Engineer
TET 3	Nkosana Shabangu	Senior Supervisor Technical Maintenance - Boilers

3.3 TENDER RETURNABLES/TECHNICAL SPECIFICATIONS

3.3.1 ISO 3834-2 Certification

- Valid ISO 3834 Part 2 certificate

3.3.2 Method Statement

- Tenderer must submit a full method statement for the work as prescribed in the scope of work.
- The method statement must be complete i.e. clear and detailed inspections, dismantling, fabrications, installation and alignment of ceramic lined PF pipes, hangers and supports. This must include methods of selecting new hangers and location(s) of hangers using Caesar model.
- Describe the installation and alignment of PF pipes and hangers including VJ couplings.
- Describe detailed assembling of VJ couplings.
- Include methodology for blanking of the PF pipes when conducting maintenance on the PF Pipes line when the mill is out for service with emphasis in ensuring safety during the blank's installation and removal while the unit is on load since Kriel has no isolation point between the PF pipes and the boiler.
- Some of the maintenance work will be based on unplanned opportunity Outages (on "as and when required basis"), the contractor must stipulate in the method statement on how the skilled resources will be managed to ensure that quality service is always rendered to the Employer.
- Detail the ceramic lining process of a 90 deg PF pipe bend and a straight PF pipe to ensure that lining is of good quality and is compliant to the Eskom Standard 240-5639143.

3.3.3 Quality Control Plans (QCPs)

QCP's must be submitted with work in a clear step-by-step manner stipulated in the Quality Control Plan with reference to the scope of work.

NB: This must be for one PF pipeline from the Distribution box to the square to round not for all pf pipes, the amount of pipe sections in the QCP must be limited to 4 i.e. two 90 deg. bends (B1/01 and B1/04), two straight pipes (B1/02 and B1/03 with a flange in between with a rope gasket), one VJ coupling with rubber seal(s) and two spring hangers with a horizontal clamp. The contractor can include one QCP for both the hanger(s) and PF pipes or separate the PF Pipes and hanger(s).

- Unsigned QCP(s) template with clear and detailed step by step detailing activities that will be done in reference to the scope of work on 555-EBP2019 Inspection, repairs, fabricate, supply and install of ceramic lined pulverized fuel pipes, hangers and supports at Kriel Power Station over a period of five years and include stakeholders (Contractor Supervisor, Contractor QC, Employer QC, Employer MMD Supervisor and Engineer) to sign the QCP.
- Unsigned QCP(s) must include inspection, rigging, repair, ceramic line and re-installation of PF pipes also include selection and installation of new hangers during unit outages, one PF pipeline from the DB box to the burner square to round including the replacement/Installation of hangers and alignments.

3.3.4 Welding Procedure Specifications (WPS)

- Submit Welding Procedure Specifications (WPS) for steel BS 4360 Grade 43A or equivalent approved material
- The WPS must be as per BS EN standard, BS 2971 and BS13480, not ASME
- The WPS must be supported by a valid WPQR/PQR approved by an IWE/IWT
- The WPS must be relevant to casing thickness as prescribed in 240:56239143 section 3.3.1 table 1 (Internal diameter 450mm, thickness of 5mm and 451mm to 800mm, thickness of 6mm).

Refer to Eskom below document:

- 240-106628253 Standard for welding Requirement on Eskom Plant, paragraph 3.1
- 240- 56239143 Ceramic Lined pulverized Fuel Pipework Standard section 3.4.1

3.3.5 Welders' Qualifications

- Submit three coded welders with relevant qualifications and trade test certificates applicable to WPS
- The Qualifications and Trade Tests Certificates must be recognized by a quality approved body

. Refer document: 240-106628253 Standard for welding Requirement on Eskom Plant for welder requirements

3.3.6 Rigger's Qualifications

- Submit two riggers with relevant qualifications and valid trade test certificates

3.3.7 Proof of experience

Submit two proofs of PF pipes and hangers' replacement and/or installation completed projects relevant to the scope of work

- Proof of two signed contracts relevant to the scope of work with contract numbers, the contract must be signed by both the contractor and the employer or employer representative.
- Proof of two signed completion certificates that are signed by both the employer and the contractor.

3.4 MANADATORY TECHNICAL EVALUATION CRITERIA

Table 2: Mandatory Technical Evaluation Criteria

	Mandatory Technical Criteria Description	Reference to Technical Specification /Tender Returnable	Motivation for use of Criteria
1.	Valid ISO 3834-part 2 certification	3.3.1	240-106628253 Eskom welding Standard stipulates that all companies performing welding related activities on Eskom Plant shall have accreditation to ISO 3834

All TET members shall independently evaluate and score each mandatory evaluation criteria for each tenderer in accordance with table2

3.5 QUALITATIVE TECHNICAL EVALUATION CRITERIA

Table 3: Qualitative Evaluation Criteria Scoring Table

Score	%	Definition
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.		

All TET members as defined in the Tender Technical Evaluation Strategy shall independently evaluate and score each Qualitative Evaluation Criteria for each tenderer.

Each TET members shall provide a scoring form detailing all allocated scores for each evaluated criteria for each tender

Table 4: Qualitative Technical Evaluation Criteria

		Qualitative Technical Criteria Description	Reference to Technical Specification Tender Returnable	Criteria Weighting(%)	Criteria Sub Weighting (%)
1.	**Quality Control Plan**		240-105658000 Supplier Quality Management Specification	40	
	1.1	Method statement as described in section 3.3.2 • (0/5) - non-responsive. • (2/5) - Unacceptable risk: Inadequate method statement that does not meet technical requirements with reference to the scope of work • (4/5) – Acceptable risk: meet technical requirement(s) with reference to the scope of work • (5/5) – Ceiling; Complete method statement with details on inspections, fabrications, installation of PF pipes, hangers and supports, and with reference to the scope of work.	3.3.2		20
	1.2	A clear step-by-step QCP as per scope of work, refer in section 3.3.3 • (0/5) - Non-responsive; No submission • (2/5) - Unacceptable risk; Inadequate and/or Incomplete QCP with reference to the scope of work. • (4/5)-Acceptable technical risk; meet technical requirement(s) with reference to the scope of work. • (5/5) - Ceiling; Complete QCP's and specific to the scope of work and QCP requirements	3.3.3		20

2.	**Welding and Rigging**		240-106628253 Standard for welding Requirement on EskomPlant	20	
	2.1	Welding Procedure Specifications (WPS) accompanied by approved WPQR/PQR, refer in section 3.3.4 • (0/5) – Non-responsive; No submission(s), incorrect material specified, incorrect standard • (2/5) – Unacceptable risk; WPS not accompanied by valid WPQR/PQR. • (5/5) – Ceiling; Fully compliant with requirements, WPS accompanied by a valid WPQR/PQR	3.3.4		10
	2.2	Three coded welders' qualifications with a valid trade test certificate, refer to section 3.3.5 • (0/5) – Non-responsive; No submission, No trade tests or no qualifications or invalid documents. • (2/5) – Unacceptable risk. One coded welder with valid qualification and trade test certificate • (4/5) – Acceptable risk; meets technical requirement(s), incomplete submission (two coded welders with valid qualifications and valid trade tests certificate) • (5/5) – Ceiling; Full Submission (valid qualifications and valid trade tests certificates for all three welders)	3.3.5		5
	2.3	Two riggers with valid qualifications and valid trade test certificate, refer to section 3.3.6 • (0/5) – Non-responsive; No submission, invalid qualifications or invalid trade test certificate. • (2/5) – Unacceptable risk; one rigger with a valid qualification and a valid trade test certificate. • (5/5) – Ceiling; Full submission (valid qualifications and valid trade tests certificate for both riggers)	3.3.6		5

3.	**Proof of relevant experience**			40	
	3.1	Two proofs of experience relevant to the scope of work, refer to section 3.3.7 • (0/5) – Non-responsive; No submissions; No proof of signed completed contracts on PF pipes or hangers' relevant to the scope of work. • (2/5) – Unacceptable risk; Proof of contract in place but no proof of completed projects on PF pipes and hangers project(s) relevant to the scope of work or scope of experience not relevant to the scope of work. • (4/5) – Acceptable risk; one signed contract and completion certificate of work on PF Pipes and hangers relevant to the scope of work (Contract and completion certificate signed by both the employer and contractor) • (5/5) – Ceiling; full submission (two signed contracts and two signed completion certificates of works on PF pipes and hangers relevant to the scope of work signed by both contractor and employer.	3.3.7		40
			TOTAL	100	

3.6 TET MEMBER RESPONSIBILITIES

Table 3: TET Member Responsibilities

Mandatory Criteria Number	TET 1	TET 2	TET 3
1	X	X	X
Qualitative Criteria Number	**TET 1**	**TET 2**	**TET 3**
1.1	X	X	X
1.2	X	X	X
2.1	X	X	X
2.2	X	X	X
2.3	X	X	X
3.1	X	X	X

3.7 FORESEEN ACCEPTABLE / UNACCEPTABLE QUALIFICATIONS

3.7.1 Risks

Table 4: Acceptable Technical Risks

Risk	Description
1.	

Table 5: Unacceptable Technical Risks

Risk	Description
1.	
2.	
3.	

3.7.2 Exceptions / Conditions

Table 6: Acceptable Technical Exceptions / Conditions

Risk	Description
1.	

Table 7: Unacceptable Technical Exceptions / Conditions

Risk	Description
1.	

4. AUTHORISATION

This document has been seen and accepted by:

Name	Designation	Signature
Feyane Tivane	System Engineer	
Senior Supervisor Technical -Boilers	Nkosana Shabangu	

5. REVISIONS

Date	Rev.	Compiler	Remarks
October 2022	0	X. Sigwebela	• Draft document for tender technical evaluation criteria • Document registered with documentation center
October 2022	0.1	X. Sigwebela	• Reviewed by TET members
November 2022	1	X. Sigwebela	• Final Document
October 2023	2	X. Sigwebela F Tivane	Final Document review after squad check • Replacement of TET Member, • Change of CIDB rating, • Change mandatory criterion 3, • Amendments in qualitative criteria, • Amendments on construction codes and material groupings)
October 2023	3	X. Sigwebela F Tivane	Addition of • Mandatory Criterion number 4 requirement(s) • Amendment subsection 3.3.4
October 2023	4	X. Sigwebela F Tivane	Removal of • Mandatory Criterion number 4 changed to Qualitative Criterion requirement & Qualitative Criterion number 3.12
November 2025	5	X. Sigwebela F. Tivane	Document revised to align with revision 2 of 555-EBP2026 scope of work document requirements.

6. DEVELOPMENT TEAM

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

Xolani Sigwebela

7. ACKNOWLEDGEMENTS

N/A