

	<p style="text-align: center;"><b>Strategy</b></p>	<p style="text-align: center;"><b>Engineering</b></p>
---	--	---

Title: **Tender Technical Evaluation Strategy: Kriel PS Boilers Apertures and Bottom Ash Hoppers Refractory Supply and Services for a period of five (5) years on an "As and When" require basis.** Unique Identifier: **559-287009225**

Alternative Reference Number: **N/A**

Area of Applicability: **Engineering**


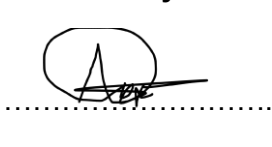
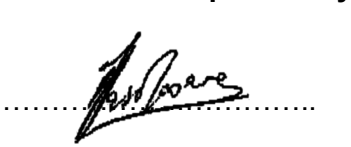

Documentation Type: **Strategy**

Revision:

Total Pages: **15**

Next Review Date: **N/A**

Disclosure Classification: **CONTROLLED DISCLOSURE**

<p><b>Compiled by</b> </p>	<p><b>Reviewed by</b> </p>	<p><b>Functional Responsibility</b> </p>	<p><b>Authorised by</b> </p>
<p><b>Feyane Tivane</b> <b>System Engineer</b></p>	<p><b>Wonder Nkentshane</b> <b>System Engineer</b></p>	<p><b>Thapelo Masokoane</b> <b>Boiler Plant Engineering Manager</b></p>	<p><b>Rofhiwa Nelwamondo</b> <b>Kriel PS Engineering Manager</b></p>
<p>Date: <u>21/01/2026</u></p>	<p>Date: <u>21/01/2026</u></p>	<p>Date: <u>03/02/2026</u></p>	<p>Date: <u>18/02/2026</u></p>

**CONTROLLED DISCLOSURE**

When downloaded from the EDMS, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

## CONTENTS

	<b>Page</b>
<b>1. INTRODUCTION</b> .....	<b>4</b>
<b>2. SUPPORTING CLAUSES</b> .....	<b>4</b>
2.1 SCOPE .....	4
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 CLASSIFICATION.....	5
2.4 DEFINITIONS .....	5
2.4.1 Classification .....	5
2.5 ABBREVIATIONS .....	5
2.6 ROLES AND RESPONSIBILITIES .....	5
2.7 PROCESS FOR MONITORING .....	5
2.8 RELATED/SUPPORTING DOCUMENTS .....	5
<b>3. TENDER TECHNICAL EVALUATION STRATEGY AND SCOPE</b> .....	<b>6</b>
3.1 TECHNICAL EVALUATION THRESHOLD AND TUBING MATERIAL .....	6
3.2 TET MEMBERS .....	6
3.3 CRITERIA .....	7
3.3.1 Mandatory Technical Evaluation Criteria .....	7
3.3.2 Qualitative Technical Evaluation Criteria for Part 1.....	8
3.3.3 TET Member Responsibilities for Part 1 .....	11
3.4 FORESEEN ACCEPTABLE / UNACCEPTABLE QUALIFICATIONS.....	11
3.4.1 Risks .....	11
3.4.2 Exceptions / Conditions.....	12
<b>4. AUTHORISATION</b> .....	<b>13</b>
<b>5. REVISIONS</b> .....	<b>13</b>
<b>6. DEVELOPMENT TEAM</b> .....	<b>13</b>
<b>7. ACKNOWLEDGEMENTS</b> .....	<b>13</b>

### CONTROLLED DISCLOSURE

When downloaded from the EDMS, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

## **TABLES**

Table 1: TET Members.....	6
Table 2: Mandatory Technical Evaluation Criteria .....	7
Table 3: Qualitative Technical Evaluation Criteria for Part 1 .....	9
Table 4: TET Member Responsibilities for Part 1 .....	11
Table 5: Acceptable Technical Risks .....	11
Table 6: Unacceptable Technical Risks .....	11
Table 7: Acceptable Technical Exceptions / Conditions .....	12
Table 8: Unacceptable Technical Exceptions / Conditions .....	12

### **CONTROLLED DISCLOSURE**

When downloaded from the EDMS, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

## **1. INTRODUCTION**

Kriel Power Station is situated approximately 10 kilometers from the town of Kriel in Mpumalanga. Access to the station is by road.

The purpose of this scope is to briefly outline the listed components' requirements and specifications which any potential service provider will be evaluated with. It is also essential to note that this scope is only applicable to Kriel Power Station.

## **2. SUPPORTING CLAUSES**

### **2.1 SCOPE**

The scope of the document defines the technical evaluation criteria by which tenderers for the purchase and supply of Auxiliary Plant Long Lead Spares as listed on tables below will be subjected to.

#### **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 basis for the tender technical evaluation process.

#### **2.1.2 Applicability**

This document shall apply to 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] Quality Standard ISO 9001:2008

#### **2.2.2 Informative**

[3] 240-105658000: Supplier Quality Management Specification

[4] BS EN 10204:2004 Metallic Products: Types of Inspection Documents

### **CONTROLLED DISCLOSURE**

When downloaded from the EDMS, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

## 2.3 CLASSIFICATION

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

## 2.4 DEFINITIONS

Definition	Description
Pipework	Pipes and fittings are used for the conveyance of steam, water, gases, or other fluids.

### 2.4.1 Classification

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

## 2.5 ABBREVIATIONS

Abbreviation	Description
PS	Power Station
TET	Technical evaluation team
QMS	Quality Management System
QCP	Quality control plan
PO	purchase orders

## 2.6 ROLES AND RESPONSIBILITIES

As per 240-168966153 Generation Tender Technical Evaluation Procedure

## 2.7 PROCESS FOR MONITORING

N/A

## 2.8 RELATED/SUPPORTING DOCUMENTS

N/A

### **CONTROLLED DISCLOSURE**

When downloaded from the EDMS, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

### 3. TENDER TECHNICAL EVALUATION STRATEGY AND SCOPE

#### 3.1 TECHNICAL EVALUATION THRESHOLD AND TUBING MATERIAL

The minimum weighted final score (threshold) required for a tender to be considered from a technical perspective is **70%** as per 240-168966153 Generation Tender Technical Evaluation Procedure.

#### 3.2 TET MEMBERS

**Table 1: TET Members**

<b>TET number</b>	<b>TET Member Name</b>	<b>Designation</b>
TET 1	Feyane Tivane	Engineer, Kriel Boiler Engineering
TET 2	Wonder Nkentshane	Engineer, Kriel Boiler Engineering
TET 3	Landi Njapha	End-User, Boiler Pressure Parts Coordinator

**CONTROLLED DISCLOSURE**

When downloaded from the EDMS, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

### **3.3 TENDER RETURNABLES/TECHNICAL SPECIFICATIONS**

#### **3.3.1 ISO 3834-2 Certification**

- N/A

#### **3.3.2 Quality management system**

- Valid Certificate of approval in terms of SABS ISO 9001:2015
- Submit a Signed off Quality Management System (QMS) Policy

#### **3.3.3 Valid proof of Workshop Ownership/Lease Agreement**

- N/A

#### **3.3.4 Method statement**

The tenderer shall submit a detailed methodology of how the tenderer will:

- Supply and deliver order to specification as per the SOW and handle defective material and premature failure of components.
- Perform quality verification.
- Provide onsite and offsite material storage procedure as per the equipment manufacturer requirements.
- Perform safe stock handling and transportation of critical components.
- Provide technical support to Eskom of delivered components as per the SOW in liaising with respective equipment manufacturer.
- Transport and provide technical support.
- Use of all resources – personnel and equipment to prepare and install the refractory.
- Preliminary tasks to be considered prior to refractory installation.

**CONTROLLED DISCLOSURE**

**3.3.5 QCPs**

QCPs must be submitted, with clear step-by-step tasks stipulated in the Quality Control Plan. Preferably three historically fully signed-off plans to be submitted/comprehensive new template with all stakeholders to sign-off. Quality control plan (QCP). This must provide assurance in terms of the inclusion of the services of:

- Materials controller
- Quality controller
- Material supervisor

Referenced document: 240-105658000: Supplier Quality Management Specification: referred sections/paragraphs: 3.4.11, 3.4.12; 3.4.4.be included as minimum.

**3.4 Mandatory Technical Evaluation Criteria**

**Table 2: Mandatory Technical Evaluation Criteria**

	<b>Mandatory Technical Criteria Description</b>	<b>Reference to Technical Specification / Tender Returnable</b>	<b>Motivation for use of Criteria</b>
1.	A signed declaration letter (on the company letter head) stating that the Service Provider will always supply the Refractory Material with <b><u>required quality control measures attached</u></b> to this declaration letter as required in the scope.	Supporting Technical Returnable Criterion 4	To ensure quality of workmanship and that the material is always supplied
2	Confirmation of the certificate showing all specifications and heat treatment capability plus charts of the oven OR Lease agreement of the oven (with its certificates attached) meeting the required specifications.	Oven certificate with specifications highlighted & Heat treatment capability plus chart.	Proof of capability to execute the scope. Refractory blocks whenever needed.

**CONTROLLED DISCLOSURE**

### 3.5 Qualitative Technical Evaluation Criteria scoring matrix

The qualitative criteria will be scored according to the scoring matrix set out in the Tender Engineering Evaluation Procedure

### 3.6 TECHNICAL EVALUATION THRESHOLD AND TUBING MATERIAL

The minimum weighted final score (threshold) required for a tender to be considered from a technical perspective is **70%** as per 240-168966153 Generation Tender Technical Evaluation Procedure.

**Table 1: Qualitative Technical Evaluation Criteria Scoring Matrix**

Score	%	Definition
5	100	<p style="text-align: center;"><b>COMPLIANT</b></p> <ul style="list-style-type: none"> <li>• Meet technical requirement(s) AND;</li> <li>• No foreseen technical risk(s) in meeting technical requirements.</li> </ul>
4	80	<p style="text-align: center;"><b>COMPLIANT WITH ASSOCIATED QUALIFICATIONS</b></p> <ul style="list-style-type: none"> <li>• Meet technical requirement(s) with;</li> <li>• Acceptable technical risk(s) AND/OR;</li> <li>• Acceptable exceptions AND/OR;</li> <li>• Acceptable conditions.</li> </ul>
2	40	<p style="text-align: center;"><b>NON-COMPLIANT</b></p> <ul style="list-style-type: none"> <li>• Does not meet technical requirement(s) AND/OR;</li> <li>• Unacceptable technical risk(s) AND/OR;</li> <li>• Unacceptable exceptions AND/OR;</li> <li>• Unacceptable conditions.</li> </ul>
0	0	<b>TOTALLY DEFICIENT OR NON-RESPONSIVE</b>
<p><b>Note 1:</b> The scoring table does not allow for scoring of 1 and 3.</p>		

**CONTROLLED DISCLOSURE**

### 3.7 QUALITATIVE TECHNICAL EVALUATION CRITERIA

**Table 4: Qualitative Technical Evaluation Criteria for Part 1**

	Functionality Criteria	Total Weight (100%)	Tenders will be expected to score at least the minimum threshold ( <b>70%</b> ) per functional area to proceed to the next phase
1.	Method Statement: <ul style="list-style-type: none"> <li>- Emphasis on refractory installation (10%)                             <ul style="list-style-type: none"> <li>o Mixing (3%)</li> <li>o Water quality - dos and don'ts (3%)</li> <li>o Curing philosophy (2%)</li> <li>o Mixing time (1%)</li> <li>o Initial Heat-up and final Inspection done (1%)</li> </ul> </li> <li>- Refractory Supports philosophy – anchors and Pins (5%)</li> <li>- Operating temperature &amp; pressure capabilities remarks (5%)</li> <li>- Non-specific methodology steps (0%) (0pts)</li> </ul>	20%	
2.	Quality Control Plan: <ul style="list-style-type: none"> <li>- QCP for the refractory installation scope specific and short as possible and as per the QM58 and provided template (5%) (5pts)</li> <li>- When are holding points required (4% score) (4pts)</li> <li>- What critical steps are to be taken in carrying out refractory installations (4%) (2pts)</li> <li>- Include signature matrix make provision for the following people in your matrix, outage coordinator, Eskom QC, Contractor's supervisor as per the QM58 as minimum, (2%) (2pts)</li> <li>- No information submitted (0%) (0pts)</li> </ul>	10%	

**CONTROLLED DISCLOSURE**

**Tender Technical Evaluation Strategy: Kriel PS Boilers Apertures and Bottom Ash Hoppers Refractory Supply and Services for a period of five years on an As-and-When required basis.**

Unique Identifier: **559-287009225**  
 Revision: **2**  
 Page: **11 of 15**

3	<p>Proof of experience only (No CV's) for the personnel on this project:</p> <ul style="list-style-type: none"> <li>- Site Supervisor, one or more years – signed proof of employment (Fully signed – Signed by both parties, Service records or appointment letters) (5%)</li> <li>- Project manager with 1 year(s) minimum years of experience – signed proof of employment (5% score)</li> <li>- Proof of relevant work experienced operators - at least 8 personnel – 15%:                         <ul style="list-style-type: none"> <li>o Two or less than two operators (0%) (0pts)</li> <li>o Three to four operators (4%) (2pts)</li> <li>o Five to seven operators (10%) (5pts)</li> <li>o Eight and more operators (15%) (5pts)</li> </ul> </li> </ul>	20%	
4.	<p>4.1. Installation and Inspection records from the lead contractor-No subcontractor information will be accepted (historically used and relevant to scope of work).</p> <p>4.2. Submit the MSDS for the Refractory material used on the hot furnace burner mouths, with the following properties:</p> <ol style="list-style-type: none"> <li>a. Temperature: Minimum</li> <li>b. Application: Furnace apertures (e.g. – burner mouths)</li> <li>c. Thermal conductive: Yes</li> <li>d. Thermal conductivity: minimum – w/m. K</li> <li>e. Abrasive area: Yes</li> <li>f. Brick/castable/throwable: Throwable</li> <li>g. Maximum Water Mixture: percentage</li> <li>h. Cold crush strength ----°C. Minimum ----MPa</li> <li>i. Minimum SiC%: ----</li> <li>j. Alumina min Al<sub>2</sub>O<sub>3</sub>%: ---</li> <li>k. Iron Oxide Fe<sub>2</sub>O<sub>3</sub>% min: ---</li> <li>l. Optimised fibre mix%: ---- of mixture</li> </ol> <ul style="list-style-type: none"> <li>• Submitted 4.1 and all twelve MSDS properties in 4.2 shown (20%) (5pts)</li> <li>• Submitted 4.1 and only Six or more of the MSDS properties in 4.2 shown (16%) (4pts)</li> <li>• Submitted 4.1 and only less than Six of the MSDS properties in 4.2 shown (8%) (2pts)</li> <li>• Submitted only 4.1 and nothing on the MSDS properties in 4.2 and vice versa. And/or nothing submitted (0%) (0pts)</li> </ul>	20%	
5	<p>Submit an approved (<b>signed off</b>) Project Schedule which is written on a professional planning tool like MS Project/Primavera/Excel/other, this must show how the service provider will maximize production by assigning specific workers to tasks, tracking labour hours, and avoiding overstaffing or idle time. The schedule must be from the lead contractor-No subcontractor information will be accepted. <b>NB:</b> It must be a historically used schedule on the same scope as the one in this tender or newly compiled schedule from the given scope in this tender.</p> <ol style="list-style-type: none"> <li>1. Project phases/tasks – Work breakdown</li> <li>2. Roles and resources allocations – Personnel identification</li> <li>3. Timeline – Start and End dates for each role on specific task</li> <li>4. Man-hours and Man-days must be indicated</li> <li>5. Manpower curve must also be indicated</li> </ol>	10%	

**CONTROLLED DISCLOSURE**

**Tender Technical Evaluation Strategy: Kriel PS Boilers Apertures and Bottom Ash Hoppers Refractory Supply and Services for a period of five years on an As-and-When required basis.**

Unique Identifier: **559-287009225**  
 Revision: **2**  
 Page: **12 of 15**

	<ul style="list-style-type: none"> <li>• Submitted and all five components shown (10%) (5pts)</li> <li>• Submitted and only four components shown (8%) (4pts)</li> <li>• Submitted and only three or less components shown (4%) (2pts)</li> <li>• No information submitted (0%) (0pts)</li> </ul>		
6	<p>Specification Sheets – Submit three (3) off different refractory material <b>specification sheets</b> with associated verifiable <b>purchase orders</b> of the Refractory Material which has been historically supplied by the service provider or the <b>principal contractor</b> in case of a JV. The <b>product information</b> and <b>chemical compositions</b> of these three (3) materials must be submitted as well.</p> <p><b>Note:</b>              - Lead/Principal contractor must be clearly indicated in both the relevant form and in the Statement of intent to make a JV.              If there is no mention of which partner will be the lead, criterion 5 and 3 will be failed by the JV.</p> <ul style="list-style-type: none"> <li>- Specification sheets, associated PO's, product information and chemical composition all submitted (20%) (5pts)</li> <li>- Only the specification sheets, associated POs submitted (16%) (4pts)</li> <li>- Only the specification sheets and no associated POs submitted (8%) (2pts)</li> <li>- No information submitted and no mention of the lead contractor (0%) (0pts)</li> </ul>	20%	

**CONTROLLED DISCLOSURE**

**Table 5: TET Member Responsibilities for Part 1**

<b>Mandatory Criteria Number</b>	<b>TET 1</b>	<b>TET 2</b>	<b>TET 3</b>
1. Commitment Letter/Declaration form	X	X	X
<b>Qualitative Criteria Number</b>	<b>TET 1</b>	<b>TET 2</b>	<b>TET 3</b>
1. Material Specification sheets	X	X	X
2. Material MSDS	X	X	X

**4 FORESEEN ACCEPTABLE / UNACCEPTABLE QUALIFICATIONS**

**i. Risks**

**Table 5: Acceptable Technical Risks**

<b>Risk</b>	<b>Description</b>
1.	None

**Table 6: Unacceptable Technical Risks**

<b>Risk</b>	<b>Description</b>
1.	Material without MSDS
2.	Material not marked properly

**CONTROLLED DISCLOSURE**

ii. Exceptions / Conditions

**Table 7: Acceptable Technical Exceptions / Conditions**

Risk	Description
1.	None

**Table 8: Unacceptable Technical Exceptions / Conditions**

Risk	Description
1.	None

**CONTROLLED DISCLOSURE**

## 6. AUTHORISATION

This document has been seen and accepted by:

<b>Name</b>	<b>Designation</b>
Landizwe Njapha	End-User, Boiler Pressure Parts Coordinator
Wonder Nkentshane	Engineer, Kriel Boiler Engineering
Feyane Tivane	Engineer, Kriel Boiler Engineering
Thapelo Masokoane	Boiler Engineering Manager
Rofhiwa Nelwamondo	Kriel Engineering Manager

## 7. REVISIONS

<b>Date</b>	<b>Rev.</b>	<b>Compiler</b>	<b>Remarks</b>
June 2025	1	FJ Tivane W Nkentshane	New document compilation
January 2026	2	FJ Tivane W Nkentshane	To add Criteria 5 and the “/or” on criterion 4 as per the CFT review from the Squad check meeting. Add criterion 5 – as suggested by the end-user

## 8. DEVELOPMENT TEAM

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

- See section 3.2 above

## 9. ACKNOWLEDGEMENTS

- N/A

**CONTROLLED DISCLOSURE**