



Strategy

Engineering

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1. INTRODUCTION

Kriel Stores department is going out on open tender for a contract for the supply of mill labyrinth seal parts and the assembly thereof. The contract will be for 5 years.

The technical requirements for all tenderers are specified in this document. The technical evaluation is in accordance with 32-1033: Eskom Procurement and Supply Chain Management Policy and 32-1034: Eskom Procurement and Supply Management Procedure during the tender process.

2. SUPPORTING CLAUSES

2.1 SCOPE

The scope of this document defines the technical criteria used to evaluate the tender documents. 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 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 is applicable 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] 240-48929482: Tender Technical Evaluation Procedure

2.2.2 Informative

- [2] 32-1033: Eskom Procurement and Supply Chain Management Policy
- [3] 32-1034: Eskom Procurement and Supply Management Procedure during the tender process
- [4] 240-161245839 Supply and delivery of mill labyrinth seals - scope of work

2.3 DEFINITIONS

None

2.3.1 Classification

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

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2.4 ABBREVIATIONS

Abbreviation	Description
N/A	Not Applicable
SANS	South African National Standards
TET	Technical Evaluation Team
QCP	Quality Control Plan

2.5 ROLES AND RESPONSIBILITIES

As per 240-48929482: Tender Technical Evaluation Procedure

2.6 PROCESS FOR MONITORING

N/A

2.7 RELATED/SUPPORTING DOCUMENTS

N/A

3. 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%.

Tenderers will be subject to a desktop evaluation and a site evaluation. All companies passing the desktop evaluation threshold of 70% will be visited for a site evaluation. The final score will be the average of the two evaluations.

3.2 TET MEMBERS

Table 1: TET Members

TET number	TET Member Name	Designation
TET 1	Wonder Nkentshane	System engineer
TET 2	Xolani Sigwebela	Engineer
TET 3	John Mkhonto	Senior Engineer

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3.3 TENDER RETURNABLES

3.3.1 Phosphor bronze casting capability

The tenderer must submit information to show the casting capability of the foundry. The foundry needs the capability to cast Phosphor bronze up to 100 kg/s.

- 0 – Non responsive
- 2 – Unacceptable risk; Foundry does not have the capability to cast the required mass in one pour.
- 4 – Compliant with acceptable risk; Foundry has the capability to cast the required mass in one pour.
- 5 – Ceiling; Foundry has the capability to cast double the required mass in one pour.

3.3.2 Aluminium casting capability

The tenderer must submit information to show the casting capability of the foundry. The foundry needs the capability to cast Aluminium up to 250 kg.

- 0 – Non responsive
- 2 – Unacceptable risk; Foundry does not have the capability to cast the required mass in one pour.
- 4 – Compliant with acceptable risk; Foundry has the capability to cast the required mass in one pour.
- 5 – Ceiling; Foundry has the capability to cast double the required mass in one pour.

3.3.3 Carbon steel casting capability

The tenderer must submit information to show the casting capability of the foundry. The foundry needs the capability to cast carbon steel up to 850 kg.

- 0 – Non responsive
- 2 – Unacceptable risk; Foundry does not have the capability to cast the required mass in one pour.
- 4 – Compliant with acceptable risk; Foundry has the capability to cast the required mass in one pour.
- 5 – Ceiling; Foundry has the capability to cast double the required mass in one pour.

3.3.4 Workshop milling capability

The tenderer must submit information to show the workshop has the capability to machine the 12E labyrinth seal assembly. The contractor needs the capability to machine a component of with an outer diameter of 2223 mm. Where it will be outsourced, it must be indicated and the info supplied of the service provider.

- 0 – Non responsive
- 2 – Unacceptable risk; Tenderer workshop does not have the capability to machine the 12E labyrinth seal.
- 4 – Compliant with acceptable risk; Tenderer has the capability to machine a 12E labyrinth seal.
- 5 – Ceiling; Tenderer workshop has the capability to machine a 12E labyrinth seal in-house.

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3.4 SITE TECHNICAL EVALUATION

3.4.1 Confirmation of information submitted for the first round of evaluation

The tenderer workshop and foundry will be evaluated to confirm the information submitted with the tender, in specific; Phosphor Bronze casting capability, Aluminium casting capability, Carbon steel casting capability, Workshop milling capability.

0 – Non responsive

2 – Unacceptable risk; The tenderer does not have all the capabilities stated in the tender documents for technical evaluation.

4 – Compliant with acceptable risk; The tenderer has all the casting capabilities stated in the tender documents for technical evaluation, with the machining work outsourced.

5 – Ceiling; The tenderer has all the capabilities stated in the tender documents for technical evaluation and the work will be done in-house.

3.4.2 Storage of material

The storeroom or store area of the company will be inspected. The tidiness of the storeroom is important. The materials must be stored in separate bins or marked areas, bins labelled and there must be a system in place to monitor the movement of material in and out of storage.

0 – Non responsive

2 – Unacceptable risk; Storeroom is untidy and there is no documented system to control the use of material, keep track of material certificates linked to items or batches.

4 – Compliant with acceptable risk; There is a system in place to control and track the use of material and the material certificates thereof.

5 – Ceiling; Storeroom is clean and tidy, there is a documented system in place to control and track the use of material and the material certificates thereof.

3.4.3 Tracing of parts/jobs in the workshop

The traceability and identification of jobs will be evaluated. Linking the parts in the workshop with job cards and tracing of the job in the workshop will be scored.

0 – Non responsive

2 – Unacceptable risk; Castings and assemblies in production can't be linked to a job card or documented tracking system

4 – Compliant with acceptable risk; All pieces and assemblies in the machine shop can be linked to their job cards/ a documented tracking system (everything leaving the cast shop)

5 – Ceiling; All cast pieces in the foundry and machine shop can be linked to their job cards/ a documented tracking system. This includes the use of unique serial numbers on the castings.

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3.4.4 Equipment condition – Cranes and lifting equipment

The general condition of the cranes and lifting equipment will be scored:

- 0 – Non responsive
- 2 – Unacceptable risk; Lifting equipment is out of service and not in a good condition
- 4 – Compliant with acceptable risk; All lifting equipment is in a serviceable condition
- 5 – Ceiling; All lifting equipment is in a serviceable condition and have maintenance plans in place

3.4.5 Equipment condition – Machines (turning and/or milling)

The general condition of the machining equipment will be scored:

- 0 – Non responsive
- 2 – Unacceptable risk; Machining equipment is out of service and not in a good condition
- 4 – Compliant with acceptable risk; All machining equipment is in a serviceable condition
- 5 – Ceiling; All machining equipment is in a serviceable condition and have maintenance plans in place

3.4.6 Equipment condition – Workshop

The general condition of the workshop will be scored.

- 0 – Non responsive
- 2 – Unacceptable risk; The workshop is untidy
- 4 – Compliant with acceptable risk; Workshop tidy, good housekeeping practiced
- 5 – Ceiling; Workshop tidy, very good housekeeping practiced

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3.5 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.	None		

3.6 QUALITATIVE TECHNICAL EVALUATION CRITERIA

Table 3: Qualitative Technical Evaluation Criteria

	Qualitative Technical Criteria Description		Reference to Technical Specification / Tender Returnable	Criteria Weighting (%)	Criteria Sub Weighting (%)
1.	Foundry capability			100	
	1.1	Phosphor bronze casting capability	See 3.3.1		20
	1.2	Aluminium casting capability	See 3.3.2		20
	1.3	Carbon steel casting capability	See 3.3.3		20
	1.4	Workshop milling capability	See 3.3.4		40
				TOTAL: 100	

Table 4: Site Technical Evaluation Criteria

	Qualitative Technical Criteria Description		Reference to Technical Specification / Tender Returnable	Criteria Weighting (%)	Criteria Sub Weighting (%)
1.	Systems and Processes			70	
	1.1	Confirmation of information submitted for the first round of evaluation	See 3.4.1		60
	1.2	Storage of material	See 3.4.2		20
	1.3	Tracing of parts/jobs in the workshop	See 3.4.3		20
2.	Equipment condition			30	
	2.1	Cranes and lifting equipment	See 3.4.4		50
	2.2	Machines (Milling and/or turning)	See 3.4.5		30
	2.3	Workshop cleanliness	See 3.4.6		20
				Total: 100	

Table 5: Summarised evaluation Criteria

	Qualitative Technical Criteria Description		Reference to Technical Specification / Tender Returnable	Criteria Weighting (%)	Criteria Sub Weighting (%)
1.	Qualitative Technical Evaluation Criteria			40	
2.	Site Technical Evaluation Criteria			60	
				Total: 100	

3.7 TET MEMBER RESPONSIBILITIES

Table 5: TET Member Responsibilities

Mandatory Criteria Number	TET 1	TET 2	TET 3
None			
Qualitative Criteria Number	TET 1	TET 2	TET 3
3.3.1	X	X	X
3.3.2	X	X	X
3.3.3	X	X	X
3.3.4	X	X	X
3.4.1	X	X	X
3.4.2	X	X	X
3.4.3	X	X	X
3.4.4	X	X	X
3.4.5	X	X	X
3.4.6	X	X	X

3.8 FORESEEN ACCEPTABLE / UNACCEPTABLE QUALIFICATIONS

3.8.1 Risks

Table 6: Acceptable Technical Risks

Risk	Description
1.	
2.	

Table 7: Unacceptable Technical Risks

Risk	Description
1.	
2.	

3.8.2 Exceptions / Conditions

Table 8: Acceptable Technical Exceptions / Conditions

Risk	Description
1.	Where machining will be outsourced the condition of the equipment will be scored as 70%.

Table 9: Unacceptable Technical Exceptions / Conditions

Risk	Description
1.	

4. AUTHORISATION

This document has been seen and accepted by:

Name	Designation
Harry Mokabane	Boiler Engineering Manager
Zama Mkondweni	Senior Advisor Mechanical Maintenance
Wonder Nkentshane	Engineer
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5. REVISIONS

Date	Rev.	Compiler	Remarks
February 2021	0	FW le Roux	Document created
May 2021	1	FW le Roux	Document approved
July 2024	2	MJ Mkhonto	New TET members

6. DEVELOPMENT TEAM

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

John Mkhonto

7. ACKNOWLEDGEMENTS

Xolani Sigwebela

Zama Mkondweni

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