

 Eskom	Strategy	Medupi Power Station
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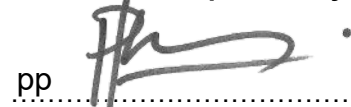
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## **1. INTRODUCTION**

Medupi Power Station is in the process of establishing a contract for LV VFD's and Soft Starters repairs. An invite will be issued for prospective suppliers to participate in the tendering process for the said contract. This document sets out the method and criteria that will be used to technically evaluate the tenderers for LV VFD's and Soft Starters repairs contract.

## **2. SUPPORTING CLAUSES**

### **2.1 SCOPE**

The document describes the acceptable and unacceptable risks and qualifications and /or conditions. The Tender Technical Evaluation Strategy will define the following technical evaluation criteria:

- Mandatory Evaluation criteria
- Qualitative Evaluation criteria
- TET Member Responsibilities
- Acceptable/Unacceptable Qualifications

No changes will be permitted to be made to the evaluation criteria once the Technical Evaluation Strategy is approved by the relevant Maintenance Group Manager.

#### **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 documents applies to the Tender Evaluation Team for Medupi Power Station LV VFD's and Soft Starters in accordance with the authorised procurement strategy.

## **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

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### 2.2.2 Informative

[1] 240-95335216: Medupi Power Station Variable Speed Drives Maintenance Strategy

## 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
EMD	Electrical Maintenance Department
ISO	International Standard Organisation
LV	Low Voltage
N/A	Not Applicable
SOW	Scope of Work
TET	Technical Evaluation Team
ITP	Inspection Test Plan
OEM	Original Equipment Manufacture
SANS	South African National Standards
IEC	International Electrotechnical Commission

## 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

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### **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 75%.

This section details the methodology to be employed by Eskom in scoring the "Technical" category of the Tender evaluation. This evaluation exercise is performed by the appointed Eskom TET members.

The evaluation of the tenders will be based on the tenderer's ability to meet the technical requirements. The evaluation consists of mandatory criteria and qualitative criteria. Results of mandatory evaluation will be "Compliant" or "Non-Compliant."

The qualitative evaluation shall apply a weighted score card approach to evaluate the tenders against the Specifications and Employer's requirements.

#### **3.2 TET MEMBERS**

**Table 1: TET Members**

<b>TET number</b>	<b>TET Member Name</b>	<b>Designation</b>
TET 1	Ntando Mbatha	Electrical Engineer – Electrical Engineering
TET 2	Peter Maheso	Senior Supervisor Tech–EMD
TET 3	George Mbangula	Electrical Engineer – Electrical Engineering
TET 4	Gawie Pienaar	Senior Technologist Engineer-PTM
TET 6	Cathrine Mathiyana	Senior Technician –EMD

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### 3.3 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.	Previous typical Inspection Test Plans used to repair VSDs	Signed Copies of ITPs	<b>(Factor, All yes = 1, otherwise 0)</b>
	Proof of ownership of a workshop for repairs with Factory Crane Size >= 350kg	Copies of Lease agreement, Valid Load certificate for the crane including pictures	
	Accreditation from an OEM for the repair of Low Voltage VFD's, soft starters and Thyristor Bank Controllers.>=3	Copy the Technical Agreement with the OEMs	
	History of previous successful VSD repair Works completed either within Eskom or other organisations similar to Eskom (at least 2 successful repairs)	Approved invoice and completion certificate ,Purchase order number	
	Warrantee on workmanship min 12 months on repaired equipment	Letter confirming warranty period	

### 3.4 QUALITATIVE TECHNICAL EVALUATION CRITERIA

**Table 3: Qualitative Technical Evaluation Criteria**

Qualitative Technical Criteria Description	Reference to Technical Specification / Tender Returnable	Tender Returnable	Criteria Weighting (40%)	Scoring Criteria (%)
<b>1. Repairing Capabilities</b>	Diagnostic tools i.e. software and cables to communicate with the VFDs,	certified copies of subscription or ownership of tools	8%	<b>Comply 8%, Partly comply =4%, no info/not comply = 0)</b>
	Testing equipment	List of test equipment's and valid calibration certificates	8%	
	Collect, strip, assess and submit breakdown report and scope, <= 5 calendar days (emergency)	Process to deal with emergency with timelines	8%	
	Collect, strip, assess and submit breakdown and scope: 5 working days (normal)	Process to deal with call outs with timelines	8%	
	Compliance to SANS/IEC Standards	Valid/latest copies of standards	8%	
Qualitative Technical Criteria Description	Reference to Technical Specification / Tender Returnable	Tender Returnable	Criteria Weighting (55%)	Scoring Criteria (%)
<b>2. Test Capability</b>	Insulation test	Method Statements and copy of previous ITP	<b>5%</b>	<b>Comply 5%, Partly comply =2.5%, no info/not comply = 0</b>
	Light load test	Method Statements and copy of previous ITP	<b>5%</b>	
	Load test	Method Statements and copy of previous ITP	<b>5%</b>	

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	Testing of rectifier and Inverters switches (Diodes, thyristors and IGBT's)	Method Statements and copy of previous ITP	<b>5%</b>	
	Testing of DC link capacitors	Method Statements and copy of previous ITP	<b>5%</b>	
	Checks on Printed circuit boards.	Method Statements and copy of previous ITP	<b>5%</b>	
	Checking of auxiliary devices	Method Statements and copy of previous ITP	<b>5%</b>	
	Checking of the protective devices	Method Statements and copy of previous ITP	<b>5%</b>	
	Temperature rise	Method Statements and copy of previous ITP	<b>5%</b>	
	EM Immunity and EM Emission	Method Statements and copy of previous ITP	<b>5%</b>	
	Capabilities to complete all Special and type tests on table 7 and table 8 (IEC 61800-2)	Method Statements and copy of previous ITP	<b>5%</b>	
<b>Qualitative Technical Criteria Description</b>	<b>Reference to Technical Specification / Tender Returnable</b>	<b>Tender Returnable</b>	<b>Criteria Weighting (5%)</b>	<b>Scoring Criteria (%)</b>
<b>3. Experience</b>	Staff competency	CV and certified copies of qualifications and other relevant training for the following personnel: Engineering Support, Technician and Artisan relevant to the scope of this contract	<b>2.5%</b>	<b>Comply 2.5%, Partly comply =1.25%, no info/not comply = 0</b>
	Company profile	Details of company operation in repairing VFDs	<b>2.5%</b>	



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3.5 TET MEMBER RESPONSIBILITIES

Table 4: TET Member Responsibilities

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

### **3.6 FORESEEN ACCEPTABLE / UNACCEPTABLE QUALIFICATIONS**

#### **3.6.1 Risks**

**Table 5: Acceptable Technical Risks**

<b>Risk</b>	<b>Description</b>
1.	Tendering without conducting site visit/s for plant walk-down/s.

**Table 6: Unacceptable Technical Risks**

<b>Risk</b>	<b>Description</b>
1.	Failure to meet mandatory criteria requirement

#### **3.6.2 Exceptions / Conditions**

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






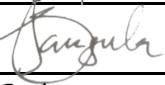
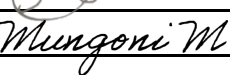
<b>Risk</b>	<b>Description</b>
1.	Declining to provide technical details accurately deemed intellectual proprietary.

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

<b>Risk</b>	<b>Description</b>
1.	Deviation from technical criteria requirements

#### 4. AUTHORISATION

This document has been seen and accepted by:

Name	Designation	Signature
Pontsho Letsholonyane	Contracts Management	
Peter Maheso	Senior Supervisor Tech –EMD	
Cathrine Mathiyana	Senior Technician –EMD	
Gawie Pienaar	Senior Technologist Engineer-PTM	
Ntando Mbatha	Electrical Engineer – Electrical Engineering	
George Mbangula	Electrical Engineer – Electrical Engineering	
Mungoni Muchavi	Senior Supervisor Tech –EMD	

#### 5. REVISIONS

Date	Rev.	Compiler	Remarks
June 2022	1	P Twala	Final document for Authorisation

#### 6. DEVELOPMENT TEAM

Rejoice Mavutana  
Cathrine Mathiyana  
Khotso Magaela  
Gawie Pienaar  
Nkosinathi Mahlangu  
Peter Maheso  
Mungoni Muchavi  
Tshilidzi Matini  
Portia Lutumbu  
Phuti Thlathla

#### 7. ACKNOWLEDGEMENTS

Nkosinathi Mahlangu –Chief Technologist Electrical, Thanks for your input and assistance in developing the technical evaluation criteria

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## **8. ANNEXURE A**

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