Eskom	Strategy	Engineering

Title: **Camden Power Station LV Motor Replacement (Equivalency) Project Tender Technical Evaluation Strategy**

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Compiled by	Functional Responsibility	Authorised by
……..	……..	p.p……..
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Date: 2023/02/01	Date: 2023/02/02	Date: 2023/02/02

CONTENTS

TABLES

1. INTRODUCTION

Camden Power Station is installed with old type Low Voltage motors that are no longer available in the market for supply and support. These motors are required to be replaced by equivalent type motors that are readily available off the shelf to fit in the plant. By doing so, a risk of LV motor spares unavailability suitable for the existing installations will be eliminated. New LV motor, gearboxes, couplings, and baseplates need to be supplied for this project.

This document outlines the strategy and criteria that should be used to evaluate the technical suitability of various service providers. Also, it will be used to determine which service provider is capable to complete the task and strictly comply with all the requirements, as set out in the works information.

2. SUPPORTING CLAUSES

2.1 SCOPE

This document covers various aspects that will be evaluated and scored by the Technical Evaluation Team (TET) to complete the technical evaluation of the enquiry for the replacement of LV motors, couplings, and baseplates. The document also describes the acceptable and unacceptable risks and qualifications and/or conditions.

The Technical Evaluation Strategy will define the following technical evaluation criteria:

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

Once the Technical Evaluation Strategy is authorised no changes will be made to the evaluation criteria without appropriate authorisation.

2.1.1 Purpose

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

2.1.2 Applicability

This document applies to the Camden Power Station LV Motor Replacement (Equivalency) Project.

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: Tender Technical Evaluation Procedure

[2] 32-1034: Eskom Procurement Procedure

[3] [383-CMDN-AABZ28-SP0004-39] **-** Camden Power Station LV Motor Replacement (Equivalency) Project Technical Specification

[4] 240-77100923 - New LV Motor Technical Schedule AB Template (Rev 2)

[5] 240-57617975 - New LV Motor Procurement Standard (Rev 3)

[6] 240-56030558 - Centrifugal Pumps Specification

[7] Works Information

2.2.2 Informative

None

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
AC	Alternating Current

Abbreviation	Description
DC	Direct Current
C&I	Control and Instrumentation
ECSA	Engineering Council of South Africa
IP	International Protection
ITP	Inspection Test Plan
LV	Low Voltage
OEM	Original Equipment Manufacturer
QCP	Quality Control Plan
SANS	South African National Standards
TET	Technical Evaluation Team

2.5 ROLES AND RESPONSIBILITIES

As per 240-168966153: Tender Technical Evaluation Procedure [1].

2.6 PROCESS FOR MONITORING

The document shall be reviewed as and when required to be always in line with the best technological practices, Eskom's procurement policies and the Tender Technical Evaluation Procedure (240-48929482) [1].

2.7 RELATED/SUPPORTING DOCUMENTS

Not applicable.

3. TENDER TECHNICAL EVALAUTION STRATEGY

3.1 TECHNICAL EVALUATION THRESHOLD

A weighted score-card approach shall be used to evaluate the technical compliance of the tenders against the specifications. The overall minimum weighted final score (threshold) required for a tenderers to technically qualify for further evaluation is 70%.

The scoring method will consider the following qualitative evaluation criteria table:

Score	(%)	Definition
5	100	**COMPLIANT** • Meet technical requirement(s), AND • No foreseen technical risk(s) in meeting technical requirement
4	80	**COMPLIANT WITH ASSOTIATED 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	
Note 1: The scoring table does not allow scoring of 1 and 3 Note 2: Foreseen acceptable and unacceptable risk(s), exceptions and conditions shall be unambiguously defined in the relevant Tender Evaluation Strategy.		

The evaluation scores will be weighted as follows according to disciplines:

Table 1: Evaluation Scores

Technical (100%)	
6.1 Electrical	50%
6.2 Mechanical	50%
TOTAL (100%)	
Overall minimum threshold for qualification (70%)	

3.2 TET MEMBERS

Table 2: TET Members

TET number	TET Member Name	Designation
TET 1	Bernie Jansen	System Engineer - Camden Electrical Engineering
TET 2	Riaan Grobler	Senior Technologist - Camden Electrical Engineering
TET 3	Paul Le Grange	System Engineer - Camden Turbine Engineering
TET 4	Jacques Kruger	Senior Engineer - Camden Turbine Engineering
TET 5	Phello Sejake	System Engineer – Camden Boiler Engineering

3.3 MANDATORY TECHNICAL EVALUATION CRITERIA

Table 3: Mandatory Technical Evaluation Criteria

No.	Mandatory Technical Criteria Description	Reference to Technical Specification/Tender Returnable	Motivation for use of Criteria
1	The tenderer must provide proof of local factory capable of testing LV motors. Before motors are delivered to site Factory Acceptance Tests (FATs) shall be performed and to be accepted by the customer.	• Proof of Letter providing Factory acceptance tests (FAT's) at local factory.	Minimum testing is required in local factory to verify Eskom's performance indicators and improve local content of the design.

3.4 QUALITATIVE TECHNICAL EVALUATION CRITERIA

Table 4: Qualitative Technical Evaluation Criteria

3.4.1 Electrical Evaluation Criteria (50%)

No.:	Qualitative Technical Criteria Description		Criteria Weighting (%)	Criteria Sub Weighting (%)	Tender Returnable(s)	Scoring Criteria
1.	**LV Motor Replacement**		**50**			
	1.1	Provide a list of the LV motors and gearboxes to be supplied as per Technical Specification including detailed drawings. Refer to Section 3.2 of the Technical Specification and the list of materials (List_New_LV motors_gearboxes_couplings_baseplates).		**70**	• Provide a list detailing the LV motors that should be supplied. • Datasheets • Dimension outline drawings. • Completed Technical Schedule A&B 240-77100923	5 – Full Compliance with Works Information. 4 – Compliance with Works Information with minor risks/qualification. 2 – Does not comply with Works Information. 0 – No Responsive.
	1.2	Relevant Experience: • Company experience in supplying electrical motors and gearboxes. • Key resources experience, CV's of Key Resources.		**30**	A list of Traceable references that adequate proves that the tenderer has at least completed similar projects CV's of the proposed key resources each having a minimum of 5 years' relevant electrical experience	5 – Full Compliance with Works Information. 4 – Compliance with Works Information with minor risks/qualification. 2 – Does not comply with Works Information.

No.:	Qualitative Technical Criteria Description		Criteria Weighting (%)	Criteria Sub Weighting (%)	Tender Returnable(s)	Scoring Criteria
					(construction manager, site engineer/agent). Copies of relevant electrical/ wiring certificate to be provided. Organogram of site team. Letter providing Factory acceptance tests (FAT's)	0 – No Responsive.
			TOTAL: 100			

3.4.2 Mechanical Evaluation Criteria (50%)

No.:	Qualitative Technical Criteria Description		Criteria Weighting (%)	Criteria Sub Weighting (%)	Tender Returnable(s)	Scoring Criteria
2.	**Motor Mechanical Requirements**		**50**			
	2.1	Provide a list of the motor base plates that will be supplied as per Technical Specification including detailed drawings. Refer to Section 3.3 of the Technical Specification and the list of materials (List_New_LV_motors_gearboxes_couplings_baseplates).		**30**	Provide a list detailing the motor base plates that will be supplied.	5 – Full Compliance with Works Information. 4 – Compliance with Works Information with minor risks/qualification. 2 – Does not comply with Works Information.

No.:	Qualitative Technical Criteria Description		Criteria Weighting (%)	Criteria Sub Weighting (%)	Tender Returnable(s)	Scoring Criteria
						0 – No Responsive.
	2.2	Provide a list of the motor couplings that need to be supplied as per Technical Specification including detailed drawings. Refer to Section 3.3 of the Technical Specification and the list of materials (List_New_LV_motors_gearboxes_couplings_baseplates).		**30**	• Provide a list detailing the motor couplings that will be supplied.	5 – Full Compliance with Works Information. 4 – Compliance with Works Information with minor risks/qualification. 2 – Does not comply with Works Information. 0 – No Responsive.
	2.3	Relevant Experience: • Company experience in supplying mechanical equipment. • Key resources experience, CV's of Key Resources.		**40**	• A list of Traceable references that adequate proves that the tenderer has at least completed similar projects • CV's of the proposed key resources each having a minimum of 5 years' relevant electrical experience (construction manager, site engineer/agent). Copies of relevant electrical/ wiring certificate to be provided.	5 – Full Compliance with Works Information. 4 – Compliance with Works Information with minor risks/qualification. 2 – Does not comply with Works Information. 0 – No Responsive.

No.:	Qualitative Technical Criteria Description		Criteria Weighting (%)	Criteria Sub Weighting (%)	Tender Returnable(s)	Scoring Criteria
					Organogram of site team	
			TOTAL: 100			

3.4.3 TET Member Responsibilities

Table 5: TET Member Responsibilities

Mandatory Criteria Number	TET 1	TET 2	TET 3	TET 4	TET 5
1	X	X			
Qualitative Criteria Number	**1**	**1**	**2**	**2**	**2**
1. LV Motor Replacement	X	X			
2. Motor Mechanical Requirements			X	X	X

3.5 FORESEEN ACCEPTABLE / UNACCEPTABLE QUALIFICATIONS

3.5.1 Risks

Table 6: Acceptable Technical Risks

Risk	Description
1.	Marginally failing to meet the 70% threshold as stipulated in section 3.1.

Table 7: Unacceptable Technical Risks

Risk	Description
1.	Failing to meet the Mandatory Technical criteria as listed in section 3.3, Table 2.

3.5.2 Exceptions / Conditions

Table 8: Acceptable Technical Exceptions / Conditions

Risk	Description
1.	As per the requirements set out under the Qualitative Technical Evaluation Criteria section 3.4 of this document.

Table 9: Unacceptable Technical Exceptions / Conditions

Risk	Description
1.	As per the requirements set out under the Mandatory Technical Evaluation Criteria section 3.3 of this document.

4. AUTHORISATION

This document has been seen and accepted by:

Name	Designation
Riaan Grobler	Senior Technologist – Camden Electrical Engineering
Paul Le Grange	System Engineer – Camden Turbine Engineering
Jacques Kruger	Senior Engineer – Camden Turbine Engineering
Phello Sejake	System Engineer - Camden Boiler Engineering

5. REVISIONS

Date	Rev.	Compiler	Remarks
September 2021	1	M. Mkhize	Original doc
November 2022	2	B. Jansen	Rev 1

6. DEVELOPMENT TEAM

Bernie Jansen

Riaan Grobler

Paul Le Grange

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7. ACKNOWLEDGEMENTS

None