

Title: **Duvha Replacement of Fuel Oil Pressure Control Valves and Actuators Tender Technical Evaluation Strategy**

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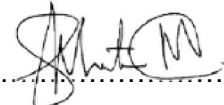


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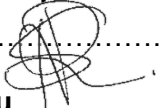


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1. INTRODUCTION

Duvha power station located in Emalahleni, Mpumalanga, is an existing Eskom power station comprising of six 600MW coal fired units. Since the original commissioning of Duvha Power Station the fuel oil pressure control are still performed by the same control valves and hydraulic actuators on the South and North fuel oil plant. These controllers and valves are now obsolete. The valves are worn (spindles and seats) and the refurbishment efforts to date were not successful.

The objective is to ensure that the fuel oil pressure on all Units will be properly and reliably controlled at 4.2MPa to the oil burners with the new installed globe pressure reducing valves with quick acting hydraulic actuators

The Tender Technical Evaluation Strategy defines the mandatory and qualitative evaluation criteria, which serve as a basis for the technical evaluation process.

2. SUPPORTING CLAUSES

2.1 SCOPE

This document covers the different aspects that will be evaluated by the multidisciplinary technical evaluation team (TET) to complete the technical evaluation of the Replacement of Fuel Oil Pressure Control Valves and Actuators. The team members are listed along with their designation and responsibilities.

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 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 applies to the tender evaluation team for the Duvha Replacement of Fuel Oil Pressure Control Valves and Actuators project.

2.2 NORMATIVE/INFORMATIVE REFERENCES

2.2.1 Normative

- [1] 240-48929482: Tender Technical Evaluation Procedure
- [2] 382-ECM-BEEC-D00035-27 Rev 1: Replacement of Fuel Oil Pressure Control Valves and Actuators Scope Of Work

2.2.2 Informative

None

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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
C&I	Control and Instrumentation
CV	Curriculum Vitae
ECSA	Engineering Council of South Africa
TET	Technical Evaluation Team

2.5 ROLES AND RESPONSIBILITIES

N/A 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 mandatory technical evaluation criteria are “must meet” criteria. These criteria shall not be weighed, but shall be assessed on a Yes/No basis as to whether the criteria are met or not. An assessment of “No” against any criterion shall technically disqualify the tenderer and shall not be further evaluated against qualitative criteria.

Qualitative technical evaluation criteria are weighted criteria used to identify the highest technically ranked tenderer after determining that all the mandatory evaluation criteria have been met. The qualitative evaluation criteria are weighed to reflect relevant importance of each criterion.

The minimum weighted final score (threshold) required for a tender to be considered from a technical perspective is 70%.

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3.2 TET MEMBERS

Table 1: TET Members

TET number	TET Member Name	Designation
TET 1	Ivan Hartman	Chief Technologist – Asset management
TET 2	Sinki Seloana	Senior technologist- Asset management
TET 3	Mxolisi Nhlengethwa	Technologist- Electrical engineering
TET 4	Alex Zikalala	Senior technologist – C&I engineering
TET 5	Thembeke Ziqubu	Engineer – Boiler engineering
TET 6	Tobie Strohmenger	Senior Advisor- C&I engineering

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3.3 MANDATORY 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.	Demonstrate that the company is able to design and supply the hydraulic actuator and valve combination.	Provide concept design of the hydraulic actuator power pack, positioner and valve combination sought.	Required to ensure that the company has design ability to perform works.
2.	Abridged CV of the professionally registered Valves Designer.	Abridged CV and professional registration as a valve designer.	Required to ensure that the company has design ability to perform works and sign off designs.

3.4 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.	At least one example of valves data sheet for valves manufactured and supplied for similar application.	240-128557196: Procurement Standard of High Pressure and High Temperature Valves in Coal Fired Power Stations, Section 3.2.1	25	N/A
2.	At least one example of previously installed similar solution with traceable references.	382-ECM-BEEC-D00035-27 Replacement of Fuel Oil Pressure Control Valves and Actuators Scope Of Work	25	N/A
3.	Conformity assessment by the South African supplier (importer) in accordance to the PER and PED if its internationally supplied.	240-128557196: Procurement Standard of High Pressure and High Temperature Valves in Coal Fired Power Stations, Section 3.2.1	25	N/A
4.	Technical exclusions. If there are no technical exclusions, this must be clearly stated.	240-128557196: Procurement Standard of High Pressure and High Temperature Valves in Coal Fired Power Stations	25	N/A
		Total	100	N/A

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

3.6 FORESEEN ACCEPTABLE / UNACCEPTABLE QUALIFICATIONS

3.6.1 Risks

Table 5: Acceptable Technical Risks

Risk	Description
1.	None

Table 6: Unacceptable Technical Risks

Risk	Description
1.	None

3.6.2 Exceptions / Conditions

Table 7: Acceptable Technical Exceptions / Conditions



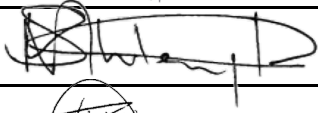

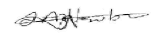

Risk	Description
1.	None.

Table 8: Unacceptable Technical Exceptions / Conditions

Risk	Description
1.	None

4. AUTHORISATION

This document has been seen and accepted by:

Name	Designation	Signature
Ivan Hartman	Chief Technologist – Asset management	
Sinki Seloana	Senior technologist- Asset management	
Mxolisi Nhlengethwa	Technologist- Electrical engineering	
Alex Zikalala	Senior technologist – C&I engineering	
Thembeka Ziqubu	Engineer – Boiler engineering	
Tobie Strohmenger	Senior advisor-C&I engineering	

5. REVISIONS

Date	Rev.	Compiler	Remarks
August 2022	1	Thembeka Ziqubu	First Draft
March 2023	2	Thembeka Ziqubu	Revised to fine tune tender returnables.

6. DEVELOPMENT TEAM

Ivan Hartman

Sinki Seloana

Mxolisi Nhlengethwa

Alex Zikalala

Thembeka Ziqubu

Tobie Strohmenger

7. ACKNOWLEDGEMENTS

N/A

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