

	STRATEGY	DUVHA POWER STATION
---	-----------------	----------------------------

Title: TENDER TECHNICAL EVALUATION STRATEGY FOR UPGRADE OF DUVHA ELECTRIC COMPRESSORS AND DRYERS

Document Identifier: 559-75077567

Alternative Reference Number: N/A

Area of Applicability: Duvha Power Station


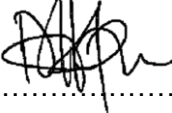

Functional Area: Engineering

Revision: 1

Total Pages: 15

Next Review Date: N/A

Disclosure Classification: CONTROLLED DISCLOSURE

Compiled by	Functional Responsibility	Authorised by
		
Thabiso Masethe System Engineer	Nelly Hlophe Auxiliary Engineering Manager	Maila Mamoleka Engineering Group Manager
Date: 2025/07/10	Date: 2025/07/11	Date: 2025-07-14

CONTENTS	PAGE
1. INTRODUCTION.....	3
2. SUPPORTING CLAUSES.....	3
2.1 Scope.....	3
2.1.1 Purpose	3
2.1.2 Applicability	3
2.2 Normative/Informative References.....	3
2.2.1 Normative.....	3
2.2.2 Informative	3
2.3 Definitions	4
2.3.1 Classification	4
2.4 Abbreviations	4
2.5 Roles and Responsibilities	4
2.6 Process for monitoring	4
2.7 Related/Supporting Documents	4
3. TENDER TECHNICAL EVALUATION STRATEGY	5
3.1 TECHNICAL EVALUATION THRESHOLD.....	5
3.2 TET Members	6
3.3 MANADATORY TECHNICAL EVALUATION CRITERIA.....	7
3.4 QUALITATIVE TECHNICAL EVALUATION CRITERIA.....	8
3.5 TET MEMBER RESPONSIBILITIES.....	13
3.6 FORESEEN ACCEPTABLE / UNACCEPTABLE QUALIFICATIONS.....	14
3.6.1 Risk.....	14
4. AUTHORISATION.....	15
5. REVISIONS.....	15
6. DEVELOPMENT TEAM	15
7. ACKNOWLEDGEMENT.....	15

TABLES

Table 1: TET Members.....	6
Table 2: Mandatory Technical Evaluation Criteria.....	7
Table 3: Qualitative Technical Evaluation Criteria	8
Table 4: TET Member Responsibilities.....	13
Table 5: Acceptable Technical Risks.....	14
Table 6: Unacceptable Technical Risks	14

1. INTRODUCTION

This document outlines the technical evaluation strategy for appointing a contractor to upgrade electric compressors, dryers, and PLC systems at Duvha Power Station. The strategy ensures compliance with technical specifications, prioritizes contractor competency, and mitigates project risks. Key objectives include:

- Selecting contractors with proven experience in heatless desiccant dryer installations and Siemens PLC integration.
- Ensuring adherence to air quality standards (-40°C PDP, <0.1 mg/m³ oil content).
- Validating redundancy and reliability targets (≥95% availability).

This project addresses operational challenges including air quality degradation, obsolete dryers, and PLC system upgrades to enhance system reliability and efficiency.

2. SUPPORTING CLAUSES

2.1 Scope

This document contains all the team's technical requirements that will be evaluated, the evaluation team members along with their responsibilities and describes the acceptable and unacceptable risks, qualifications and/or conditions.

The technical evaluation requirements consist of the following criteria:

- Mandatory Evaluation Criteria
- Qualitative Evaluation Criteria
- Acceptable / Unacceptable Qualifications

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 Duvha Power Station

2.2 Normative/Informative References

2.2.1 Normative

- [1] 240-48929482: Tender Technical Evaluation Procedure
- [2] 382-ECM-AABZ28-SP0004-4: Technical Specification for Upgrade of Duvha Electric Compressors and Dryers

2.2.2 Informative

- [3] 240-53113685: Design Review Procedure
- [4] 240-53114026: Project Engineering Change Management Procedure

CONTROLLED DISCLOSURE

2.3 Definitions

Definition	Description
Contractor/Tenderer	Refers to the corporation appointed to perform the engineering, procurement, and construction works required for the project.
Employer	Refers to Eskom Holdings State Owned Company
Eskom Plant Engineering	Refers to the Eskom Engineering team who will perform the reviews and provide technical assistance for the work performed by the appointed Contractor.
Specification	The document/s forming part of the contract in which the methods of executing the various items of work to be done is described, as well as the nature and quality of the materials to be supplied and it includes technical schedules and drawings attached thereto as well as all samples and patterns
The Client	The end user will be Eskom who will be represented by Kendal Power Station throughout the duration of the Project.

2.3.1 Classification

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

2.4 Abbreviations

Abbreviation	Description
ECSA	Engineering Council of South Africa
EDWL	Engineering Design Work Lead
KWS	Komati Water Scheme
LDE	Lead Design Engineer
SOW	Scope of Work.
TET	Technical Evaluation Team
WTP	Water Treatment Plant

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

CONTROLLED DISCLOSURE

3. TENDER TECHNICAL EVALUATION STRATEGY

A two stage Technical Evaluation Strategy is set out.

Stage 1: Mandatory Technical Evaluation Criteria (gatekeepers) are ‘must meet’ criteria. These criteria are not weighted, or points scored but, are assessed on a Yes/No basis to ascertain whether or not the criteria are met. An assessment of ‘No’ against any mandatory criterion will disqualify the tenderer and the tenderer will not be evaluated against Qualitative Criteria.

Stage 2: Qualitative Technical Evaluation Criteria are weighted evaluation criteria used to identify the highest technically ranked tenderer. The Qualitative Evaluation Criteria are weighted to reflect the relevant importance of each criterion. The minimum weighted final score (threshold) required for a tender to be considered from a technical perspective is 70%.

In order to be eligible for evaluation, the tenderer shall meet all the mandatory requirements and the Qualitative Evaluation Criteria requirements.

3.1 TECHNICAL EVALUATION THRESHOLD

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

SCORE	PERCENTAGE	DESCRIPTION
5	100	COMPLIANT <ul style="list-style-type: none"> • Meet technical requirement(s)/AND; • No foreseen technical risk(s) in meeting technical requirements.
4	80	COMPLIANT WITH ASSOCIATED QUALIFICATIONS <ul style="list-style-type: none"> • Meet technical requirement(s) with; • Acceptable technical risk(s) AND/OR; • Acceptable exceptions AND/OR; • Acceptable conditions.
2	40	NON-COMPLIANT <ul style="list-style-type: none"> • Does not meet technical requirement(s) AND/OR; Unacceptable technical risk(s) AND/OR; • Unacceptable exceptions AND/OR; • Unacceptable conditions.
0	0	TOTALLY DEFICIENT OR NON-RESPONSIVE

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

CONTROLLED DISCLOSURE

3.2 TET Members

Table 1: TET Members

TET number	TET Member Name	Designation
TET 1	Thabiso Masethe	System Engineer
TET 2	Nsizwa Mhlongo	C&I System Engineer
TET 3	Sibonokuhle Tapala	Senior Engineer
TET 4	Gugulethu Khumalo	Mechanical Senior Technician Maintenance

CONTROLLED DISCLOSURE

3.3 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.	The design of all pressure vessels for the electric compressor dryers must be performed, signed, and certified by a Professional Engineer (Pr Eng)/ Professional Technologist (Pr Tech Eng) registered with the Engineering Council of South Africa (ECSA), who has proven experience in pressure vessel design to PD5500 or an equivalent international code.	Copy of current certified ECSA certificate indicating active professional status of mechanical, Civil and C&I Engineering.	Ensures all pressure vessels and PLC are designed and certified by a suitably qualified professional, guaranteeing compliance with statutory and international standards for structural integrity, legal compliance, and operational safety.

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 Weighting (%)	Sub
1.	General Requirements		25		
1.1	Project/Site Manager	<ul style="list-style-type: none"> - Detailed CV outlining experience in managing both mechanical (electrical compressors) and C&I (PLC/control systems) projects. - Certified copies of relevant academic and professional qualifications. - Evidence of managing multidisciplinary teams on similar projects. - Proof of registration with a recognized engineering or project management body. 	10	40	
	1.1.1 No CV or qualifications submitted, or less than 1 year's relevant experience	No CV provided, or CV does not demonstrate the required experience; missing or invalid qualification documents.	0	0	
	1.1.2 CV and qualifications submitted, 1–2 years' relevant experience	CV provided, demonstrating 1–2 years' experience in similar mechanical and C&I projects; certified qualification(s) included.	2	40	
	1.1.3 CV and qualifications submitted, 4 years' experience, strong multidisciplinary track record	CV provided, demonstrating 4 years' experience, including successful management of both mechanical and C&I scopes; certified qualification(s) and professional registration included.	4	80	
	1.1.4 CV and qualifications submitted, 5 years' experience, verifiable project evidence, and advanced	CV provided, 5 years' experience, verifiable evidence of managing both mechanical and C&I projects, advanced certifications (e.g., PMP, Pr	5	100	

		certifications	Eng), and evidence of stakeholder engagement and successful project delivery.		
1.2	Site Organogram of Key Personnel		- Proposed and signed site organogram clearly showing all key personnel and reporting lines for this project. - CVs and certified qualifications for each key person included in the organogram.		20
	1.2.1	No organogram submitted, or organogram missing key roles/skills	No signed organogram provided or does not include all required skills and roles; missing CVs or qualifications.	0	0
	1.2.2	Organogram submitted, some key roles/skills missing or incomplete	Organogram provided but missing one or more required roles/skills; incomplete CVs or qualifications for some personnel.	2	40
	1.2.3	Organogram submitted, all key roles/skills included, fully compliant	Organogram and all CVs/qualifications provided for each key person; clear evidence of relevant experience for all roles.	4	80
	1.2.4	Organogram submitted, all key roles/skills included, exceeds requirements	Organogram and all documentation provided; team includes additional relevant expertise or advanced certifications; strong evidence of multidisciplinary project delivery.	5	100
1.3	Company Experience & Profile		- At least 4 years in business - 60%+ of activities in air compressor/control systems - Company profile, establishment date, specialist fields		40
	1.3.1	<2 years, <36% relevant	Company profile shows <2 years or <36% relevant activity	0	0
	1.3.2	2–3 years, 36–54%	2–3 years, 36–54% relevant	2	40

**TENDER TECHNICAL EVALUATION STRATEGY FOR
UPGRADE OF DUVHA ELECTRIC COMPRESSORS AND
DRYERS**

Unique Identifier: **559-75077567**

Revision: **1**

Page: **10 of 15**

	1.3.3	>5 years, 72–90%	>5 years, 72–90% relevant	4	80
	1.3.4	>5 years, >90%	>5 years, >90% relevant	5	100
2.	Mechanical Engineering Requirements			30	
2.1	Experience in Design, Supply, Installation and commissioning of Compressors Desiccant Dryers (52 m³/min)		Client Reference Letters or Completion Certificates	20	67
	2.1.1	No relevant projects completed	No attachment of reference letters or certificates meeting the above requirements	0	0
	2.1.2	One relevant project completed	One signed client reference letter or completion certificate as specified	2	40
	2.1.3	Three relevant projects completed	Three signed client reference letters or completion certificates as specified	4	80
	2.1.4	Four or more relevant projects completed (or exceeds requirements)	Four or more signed client reference letters or completion certificates as specified	5	100
2.2	Reference letter from the supply/contractor indicating the lead time for delivery (OEM Confirmation Letter Required)		Signed letter from the OEM		33
	2.2.1	Lead time more than 4 months		0	0
	2.2.2	Lead time equal to 3 months		2	40
	2.2.3	Lead time less than 6 weeks (or exceeds requirements)		4	80
	2.2.4	Lead time equal to or less than 4 weeks		5	100

3	C&I Engineering Requirements			45	
3.1	Technical Staff Minimum Qualifications		- CVs/certificates for Technician and Artisan. - Minimum N3 + trade test + 2 years' C&I experience		15
	3.1.1	N3, <4 months experience	N3 with <4 months' experience	0	0
	3.1.2	N3, 4–8 months	N3 with 4–8 months' experience	2	40
	3.1.3	N3, 12–18 months	N3 with 12–18 months' experience	4	80
	3.1.4	N3, 2 years	N3 with at least 2 years' experience	5	100
3.2	Relevant Project or Maintenance Experience		- List of at least five (5) completed projects or maintenance contracts related to LPS control systems, with reference persons.		30
	3.2.1	1 Relevant project	Evidence of 1 completed project or contract.	0	0
	3.2.2	2 Relevant projects	Evidence of 2 completed projects or contracts.	2	40
	3.2.3	4 Relevant projects	Evidence of 4 completed projects or contracts.	4	80
	3.2.4	5 or more relevant projects	Evidence of 5 or more completed projects or contracts.	5	100
3.3	Siemens PLC Experience		- Proof of company experience with Siemens PLC systems. - Attach copies of relevant project certificates or signed client reference letters confirming successful implementation or maintenance of Siemens.		30
	3.3.1	No proof of Siemens PLC experience	No certificates or reference letters attached.	0	0
	3.3.2	Valid proof of Siemens PLC experience attached	Certificates or reference letters confirming Siemens PLC experience attached.	5	100

3.4	Method Statement for C&I Scope		Comprehensive C&I method statement aligned with the project Scope of Work (SOW)		25
	3.4.1	No method statement submitted	No method statement provided.	0	0
	3.4.2	Method statement covers full scope	Method statement covers 100% of required scope.	5	100
				TOTAL: 100	

NB: A minimum total of 70% is required in this section for further consideration

3.5 TET MEMBER RESPONSIBILITIES

Table 4: TET Member Responsibilities

Mandatory Criteria Number	TET 1	TET 2	TET 3	TET 4
1.	X	X	X	X
Qualitative Criteria Number	TET 1	TET 2	TET 3	TET 4
1.1	X	X	X	X
1.2	X	X	X	X
1.3	X	X	X	X
2.1	X		X	X
2.2	X		X	X
3.1		X		
3.2		X		
3.3		X		
3.4		X		

CONTROLLED DISCLOSURE

3.6 FORESEEN ACCEPTABLE / UNACCEPTABLE QUALIFICATIONS

3.6.1 Risk

Table 5: Acceptable Technical Risks





Risk	Description
1.	Section 3 of Duvha Power Station technical specifications for the Upgrade of Duvha Electric Compressors and Dryers

Table 6: Unacceptable Technical Risks

Risk	Description
1.	Section 3 of Duvha Power Station technical specifications for the Upgrade of Duvha Electric Compressors and Dryers

4. AUTHORISATION

This document has been seen and accepted by:

Name	Designation	Signature
Mary Maunye	Senior Technologist Engineer	
Sibonokuhle Tapala	Senior Professional Engineer	
Nsizwa Mhlongo	C&I System Engineer	
Gugulethu Khumalo	Mechanical Senior Technician Maintenance	

5. REVISIONS

Date	Rev.	Compiler	Remarks
July 2025	1	Thabiso Masethe	First draft

6. DEVELOPMENT TEAM

N/A
● Nsizwa Mhlongo

7. ACKNOWLEDGEMENT

N/A

CONTROLLED DISCLOSURE