

STRATEGY

DUVHA POWER STATION

Title: TENDER TECHNICAL

EVALUATION FOR REPLACEMENT OF DUVHA POWER STATION DIESEL COMPRESSORS AND DRYERS Document Identifier: 559-557801804

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1. INTRODUCTION

This document outlines the technical evaluation strategy for appointing a contractor to replace diesel compressors and dryers 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 oil-free diesel compressor installations.
- Ensuring adherence to reliability targets (≥95% availability).
- Maintaining air quality standards (-40°C PDP, <0.1 mg/m³ oil content).

This project represents the minimum necessary action to safeguard the station's operations and improve the compressed air system's reliability, efficiency, and cost-effectiveness while maintaining the required redundancy for MUT prevention

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 shall apply throughout Duvha Power Station.

2.1.3 Effective date

From date of authorisation

2.2 NORMATIVE/INFORMATIVE REFERENCES

2.2.1 Normative

- [1] 240-48929482: Tender Technical Evaluation Procedure
- [2] 382-139556: Duvha Power Station U1 to U6 Diesel Generators, Station Diesel Generators, Fire Diesel Engines, Diesel Compressors, Maintenance Scope of Work

2.2.2 Informative

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

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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
ECSA	Engineering Council of South Africa

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 TECHNCIAL EVALAUTION 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.

The evaluation of tenders will be based on the tenderer's ability to meet the requirements specified in the technical specification report for replacement of Duvha power station diesel compressors and dryers. A weighted score card approach will be used to evaluate the tenders against the Employer's requirements. The following scoring method will be used in general. It will be specified where other scoring methods is used.

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		
		 Meet technical requirement(s)/AND; 		
		 No foreseen technical risk(s) in meeting technical requirements. 		
4	80	COMPLIANT WITH ASSOCIATED 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	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%.

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3.2 TET MEMBERS

Table 1: TET Members

TET number	TET Member Name	Designation
TET 1	Thabiso Masethe	System Engineer
TET 2	Sibonokuhle Tapala	Senior Engineer
TET 3	Gugulethu Khumalo	Mechanical Senior Technician Maintenance
TET 4	Nsizwa Mhlongo	C&I Engineer
TET 5	Vusi Chirwa	Civil Engineer
TET 6	Elliot Mamba	Electrical engineer

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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.	Project schedule detailing the sequencing of activities indicating the activities critical path (lead time of the components)		Demonstrates the contractor's ability to plan, resource, and execute all project phases—design, supply, installation, commissioning, and handover—within a contract duration. Ensures timely delivery and operational readiness to minimizing the delays
2.	ECSA professionally registered Civil & Mechanical Engineer/Technologist.	Tenderers shall attach a proof of ECSA registration for the professional Engineer/Technologist. Registration status shall be active. Suspended or inactive registration status will not be considered	

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3.4 QUALITATIVE TECHNICAL EVALUATION CRITERIA

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Table 3: Qualitative Technical Evaluation Criteria

	Qual	itative Technical Criteria Description	Reference to Technical Specification / Tender Returnable	Criteria Weighting (%)	Criteria Sub Weighting (%)
1.	Mecha	nanical Engineering Requirements Section 3.5, 3.6, 3.7	40		
1.1	Reference letter from the supply/ contractor indicating the lead time for delivery (OEM Confirmation Letter Required)		Signed letter from the OEM		50
	1.1.1	Lead time more than 4 months		0	0
	1.1.2	Lead time equal to 3 months		2	40
	1.1.3	Lead time less than 10 weeks (or exceeds requirements)		4	80
	1.1.4	Lead time equal to or less than 8 weeks		5	100
1.2	2 Experience in Design, Supply, and Installation of Diesel Compressors and Desiccant Dryers (≥52 m³/min)		Client Reference Letters or Completion Certificates		25
	1.2.1	No relevant projects completed	No attachment of reference letters or certificates meeting the above requirements	0	0
	1.2.2	One relevant project completed	One signed client reference letter or completion	2	40

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			certificate as specified		
	1.2.3	Three relevant projects completed	Three signed client reference letters or completion certificates as specified	4	80
	1.2.4	Four or more relevant projects completed (or exceeds requirements)	Four or more signed client reference letters or completion certificates as specified	5	100
1.3		therence to Technical Specification cope of Work (No Technical ions)	Submission of the data sheets as per Technical spec		25
	1.3.1	No compliance declaration or evidence; technical deviations present	No machine data sheet, no photographs of the machine, and no address provided for where the machine is kept.	0	0
	1.3.2	Full compliance and evidence exceed requirements (e.g., third-party validation, additional supporting documentation)	Machine data sheet (aligned with the scope of work), photographs of the machine, and the address where the machine is kept.	5	100
2.	Civil E	ngineering Requirements		20	
2.1	Civil T	echnician	Submit a CV and Qualification(s) for a Civil Technician with a minimum of 3 years' experience within the civil engineering industry.		50
	2.1.1	No CV or qualification submitted, or less than 3 years' relevant experience	No CV provided, or CV does not demonstrate the required experience; missing or invalid qualification documents.	0	0

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	2.1.2	CV and qualification(s) submitted, CV indicate 1-year relevant experience	CV and qualification(s) submitted, CV indicate 1- year relevant experience	2	40
	2.1.3	CV and qualification(s) submitted, CV indicate 2-year relevant experience	CV and qualification(s) submitted, CV indicate 2- year relevant experience	4	80
	2.1.4	CV and qualification(s) submitted, meets minimum 3 years' relevant experience	CV provided, demonstrating at least 3 years' civil engineering experience; certified qualification(s) included.	5	100
2.2		Tenderer's relevant experience in the construction of similar works including list of proposed subcontractors (concrete and steel structures of similar magnitude).			50

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Tenderer's relevant experience in the construction of similar works including list of proposed subcontractors (concrete and steel structures of similar magnitude). Provide at least three (3) verifiable references (completion certificates or reference letters demonstrating reinforced concrete and structural steel construction experience within the last eight (10) years must be provided for principal contractor and/or subcontractors proposed indicating the following:

- Project name
- Principal contractor
- Client
- Description of work performed (size of structures to be indicated)
- Project cost (only for scope performed)
- Project start and end date
- Name, designation and contact number of reference person

Letter of intent, signed by both parties,

0 = No completion certificate

2 = 1 Relevant completion certificate

4 = 2 Relevant completion certificates

5 = 3 or more relevant completion certificates

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required where subcontractor will be used for construction. Completion certificates shall be attached.		
certificates shall be attached.		

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3.	Electri	cal Engineering Requirements		20	
3.1	Company Registration and Experience		 Letter from Department of Labour (DOL) confirming registration as an electrical contractor. Company profile indicating years of relevant experience in hazardous locations. Verifiable appointment/completion letters for similar projects in the last ten years. 		12.5
	3.1.1	Company not registered with DOL or less than 2 years' experience	No DOL letter or company profile shows <2 years' experience.	0	0
	3.1.2	Company registered with DOL, 2–3 years' experience	DOL letter and profile show 2–3 years' experience.	2	40
	3.1.4	Company registered with DOL, >5 years' experience, and verifiable project evidence	DOL letter, profile, and verifiable project evidence for >5 years.	4	80
	3.1.5	Company registered with DOL, >5 years' experience, extensive verifiable project evidence	DOL letter, profile, and extensive verifiable project evidence for >5 years.	5	100
3.2	Projec	t Team Structure and Qualifications	- Organogram indicating key staff members CVs and certified qualifications for Master Installation Electrician (MIE), Supervisor, and Technician.		12.5

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			- Evidence of Hazloc and lighting system experience.		
	3.2.1	No organogram or key staff qualifications submitted	No organogram or CVs/certificates provided.	0	0
	3.2.2	Organogram with missing skills, partial qualifications	Organogram submitted, but missing key roles or incomplete qualifications.	2	40
	3.2.4	Organogram with all required skills, all qualifications provided	Organogram and CVs/certificates for all key staff, including Hazloc and lighting experience.	4	80
	3.2.5	Organogram and qualifications exceed requirements	Organogram and CVs/certificates for all staff, with additional specialized training or experience.	5	100
3.3	in Sup	um of Five Years' Related Experience plying, Delivering, and/or Installing ts for Hazardous Locations	 Company profile clearly indicating a minimum of five years' relevant experience. Verifiable appointment or completion letters for projects in hazardous locations completed within the last ten years. 		12.5
	3.3.1	Less than 2 years' experience	Company profile and evidence show less than 2 years' experience in hazardous locations.	0	0
	3.3.2	2–3 years' experience	Company profile and evidence show 2–3 years' experience.	2	40
	3.3.4	More than 5 years' experience, with verifiable project evidence	Company profile and evidence show more than 5 years' experience and verifiable project evidence.	4	80

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		ant Project and Maintenance ence	- List of at least five (5) completed projects or maintenance contracts related to LPS control systems, with reference persons.		12.5
4	C&I Engineering Requirements				20
	3.4.5	All required certificates and CVs submitted, with additional relevant training or certifications	Complete documentation for all roles, plus evidence of further specialized training or certifications relevant to hazardous locations or lighting systems.	5	100
	3.4.4	All required certificates and CVs submitted	Complete set of certificates and CVs for all roles, meeting Hazloc and lighting system experience requirements.	4	80
	3.4.2	25% of required certificates and CVs submitted	Only a quarter of required documents provided; significant gaps in qualifications or experience.	2	40
	3.4.1	No certificates or CVs submitted	No certificates or CVs for MIE, Supervisor, or Technician provided.	0	0
3.4	Electrical and Quality Qualifications for MIE(s), Supervisor, and Technician		 Certified copies of qualifications and detailed CVs for: Master Installation Electrician (MIE) with Hazloc (hazardous location) experience Quality Management Technician or Electrical Technician with lighting system experience 		12.5
	3.3.5	More than 5 years' experience, with extensive verifiable project evidence	Company profile and evidence show more than 5 years' experience and extensive verifiable project evidence.	5	100

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	4.1.1	1 Relevant project	Evidence of 1 completed project or contract.	0	0
	4.1.2	2 Relevant projects	Evidence of 2 completed projects or contracts.	2	40
	4.1.4	4 Relevant projects	Evidence of 4 completed projects or contracts.	4	80
	4.1.5	5 or more relevant projects	Evidence of 5 or more completed projects or contracts.	5	100
4.2	4.2 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. 		25
	4.2.1	No proof of Siemens PLC experience	No certificates or reference letters attached.	0	0
	4.2.2	Valid proof of Siemens PLC experience attached	Certificates or reference letters confirming Siemens PLC experience attached.	5	100
4.3	Method Statement for C&I Scope		Detailed method statement or activity schedule for C&I of Diesel compressors		12.5
	4.1.1	No method statement submitted	No method statement or activity schedule provided.	0	0
	4.1.2	Method statement covers full scope	Method statement/activity schedule covers 100% of required scope.	2	100

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		TOTAL: 100	
	!		

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

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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
1.	Х	Х	Х			
2	X	X	X		X	
3	X	X	X		X	
Qualitative Criteria Number	TET 1	TET 2	TET 3			
1.1	X	X	X			
1.2	X	X	X			
2.1					X	
2.2					X	
3.1						Х
3.2						X
3.3						X
3.4						X
4.1				X		
4.2				X		
4.3				X		

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3.6 FORESEEN ACCEPTABLE / UNACCEPTABLE QUALIFICATIONS

3.6.1 Risks

Table 5: Acceptable Technical Risks

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

Table 6: Unacceptable Technical Risks

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

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4. AUTHORISATION

DRYERS

This document has been seen and accepted by:

Name	Designation	Signature
Mary Maunye	Senior Technologist Engineer	~ \ 1 \ \ ()
Silaoyn Wkaulinhey Tapala	Senior Professional Engineer	→ PP
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Elliot Mamba	Electrical engineer	

5. REVISIONS

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

6. DEVELOPMENT TEAM

- Vusi Chirwa
- Elliot Mamba
- Nsizwa Mhlongo

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- Mary Maunye
- Silanyntokuhlæ Tapala