



Technical Evaluation Strateg

Engineering

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1. INTRODUCTION

Duvha Power Station utilises SO3 injection to improve the efficiency of the electrostatic precipitators to contribute significantly to cleaner air, efficient power generation, and environmental sustainability at Duvha Power Station. Their proper implementation ensures a healthier environment and optimal plant performance.

The above-mentioned plants require internal and external maintenance to ensure compliance with emission standards, health risk is reduced for workers and nearby communities, prevent equipment fouling and maintains system efficiency all the time.

It is for the above-mentioned reason that a contract to conduct maintenance on those plants must be initiated.

2. SUPPORTING CLAUSES

2.1 Scope

The provision of maintenance service and refurbishment during outages on the SO3 plant unit 4, 5, 6 and outside plant.

2.1.1 Purpose

The purpose of this document is to describe the minimum requirements for to technically evaluate potential service provider for SO3 maintenance work at Duvha Power Station.

2.1.2 Applicability

This document is to apply to the Duvha Power Station's SO3 plant systems.

2.2 Normative/Informative References

Parties using this document are to apply the most recent edition of the documents listed in the following paragraphs.

2.2.1 Normative

- [1] Occupational Health and Safety Act No. 85 of 1993,
- [2] QM58 - Suppliers contract quality requirements specification

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- [3] SANS 1200 - Standardized specification for civil engineering construction
- [4] 240-106628253 - Standard for Welding Requirements on Eskom Plant
- [4] SANS 9096-1:1994: Testing of welders, where applicable to the type of welding required
- [5] SANS 1044-3: Welding Part 3: The fusion of steel (including stainless steel): Tests for the approval of welding procedures
- [6] SANS 10044-4: Welding Part 4: The fusion welding of steel (including austenitic stainless steel): Tests for the approval of welders working where weld procedure approval is not required.
- [7] SANS 10064: The preparation of steel surfaces for coating
- [8] SANS 10341: Installation and maintenance of bearings – General guidelines
- [9] SANS 1700-5-9: Fasteners Part 5: General requirements & material properties
- [10] Section 8: Corrosion resistant stainless steel fasteners-Bolts, Screws & Studs
- [11] SANS 1700-5-10: Fasteners Part 5: General requirements & material properties Section 8: Corrosion resistant stainless steel fasteners-Nuts
- [12] SANS 1123: Pipe Flanges

These documents are obligatory for the application of this document, i.e. documents to be used together with this document.

2.2.2 Informative

- [1] 240-53665024: Engineering Quality Manual
- [2] 240-53114186: Document and record Management Procedure
- [3] ISO 9001 Quality Management Systems.

2.3 Definitions

Definition	Description
Acceptance	The Employer accept the condition or design but does not take responsibility from the Contractor
Approval	Written agreement or authorization by Employer. All requests for approval must be submitted in writing and any proposed deviation from specified requirements must be fully justified and agreed by Employer.
Contractor	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

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Definition	Description
Interface	Interface in these document means either to hard wired or software interaction between the Contractors and/or other Works
Owners Engineer	Owners Engineer - When Eskom acts as the Owners Engineer on a project/package/plant/System/asset, the reviewer(s) are to review the design documentation issued by the Design Authority to ensure that: the design satisfies the stakeholder requirements (i.e. validation of design deliverables against stakeholder requirements). General technical oversight is provided over the design.
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
System	A set of things working together as parts of a mechanism or network in an organised manner or method such that the requirements of the System are achieved.
The Client	The end user will be Eskom who will be represented by Duvha Power Station throughout the duration of the Project.

2.3.1 Classification

Public domain: published in any public forum without constraints (either enforced by law, or discretionary).

2.4 Abbreviations

Abbreviation	Description
SANS	South African National Standards
SE	System Engineer
SHEQ	Eskom Safety, Health, Environment and Quality
QA	Quality Assurance
QM	Quality Manual
QCP	Quality Control Plan
NDT	Non Destructive Testing
WPS	Welding Procedure Specification
WPQR	Welding Procedure Qualification Record
WQR	Welder qualification record
WRT	Weir Reduction Technology

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2.5 Roles And Responsibilities

- Compiler : The document compiler is responsible for ensuring that this document is up-to-date and that this document is not a duplication of an existing documentation, regarding the document's objectives and content.
- Functional Responsibility : The Functional Responsible Person is to determine if the document is fit for purpose, before the document is submitted for authorisation.
- Authoriser : The document authoriser is a duly delegated person with the responsibility to review the document for alignment to business strategy, policy, objectives and requirements. He/she are to authorise the release and application of the document.

2.6 Process For Monitoring

The primary process for monitoring will be governed by the NEC clause attached to this tender any changes to this document will be performed as per Project Engineering Change Management Procedure (240-53114026).

2.7 Related/Supporting Documents

N/A

3. TENDER TECHNICAL EVALAUTION STRATEGY

3.1 Technical Evaluation Threshold

The minimum weighted final score (threshold) required for a tender to be considered from a technical perspective is 70%. Should suppliers not meet the minimum threshold of 70%, Eskom reserves the right to consider and or negotiation with suppliers that scored between 60% and 69%.

SCORE	PERCENTAGE (%)	DESCRIPTION
5	100	COMPLIANT <ul style="list-style-type: none">• Meet the technical requirement(s) AND,• No foreseen technical risk(s) in meeting technical requirements

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4	80	COMPLIANT WITH ASSOCIATED QUALIFICATIONS <ul style="list-style-type: none"> • Meet the technical requirement(s) with, • Acceptable technical risks AND/OR; • Acceptable exceptions AND/OR; • Acceptable conditions
2	40	NON-COMPLIANT <ul style="list-style-type: none"> • Does not meet the technical requirement(s) AND/OR Unacceptable technical risk(s) AND/OR; • Unacceptable exceptions AND/OR; • Unacceptable conditions
0	0	TOTALLY DEFICIENT/NON-RESPONSIVE

3.2 TET Members

Table 1: TET Members

TET number	TET Member Name	Designation
TET 1	N. Tootla	System Engineer – Boiler Engineering
TET 2	V. Thubakgale	Supervisor – HMD Emissions
TET 3	M. Mabena	Outage Coordinator

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

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1.	Welding Procedure Specification (WPS) and Welding Procedure Qualification Record (WPQR) for stainless 304 and 316 materials or valid ISO 3834-2-2005 certification	Provide Company certified copies of both the WPS and WPQR valid documents or a certified copy of the certificate from an authorised accreditation body	This is to ensure that all welding procedure make reference of the national standards to which it is drawn up from and that the contractor is authorised by an accredited body to do hot work
2.	The service provider must have quality management system (QMS) in accordance with 240-105658000 supplier quality management specification	Valid ISO 90001:registration certificate	To ensure conformity to Eskom specified QMS requirements

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.	Mechanical Engineering Criteria			
1.1	<p>SITE ORGANOGRAM Proposed SIGNED organograms of core crew key personnel for this project which must include as a minimum the following skill:</p> <ul style="list-style-type: none"> Signed site organogram showing project specific structure Supervisor (CV and qualification to be provided as per the 3.4.1 of this criteria) Core Crew Artisan x 2 (CV and qualification to be provided as per the 3.4.1 of this criteria) Trade Assistant x2 (CV and qualification to be provided as per the 3.4.1 of this criteria) <p>A second signed organogram should be provided showing a proposed structure during outage</p>	Organogram, CV and certified certificates	100	50

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		<p>work. It should include as minimum in addition to the above personnel</p> <ul style="list-style-type: none"> • QC/Welding Inspector x 1 (CV and qualification to be provided as per the 3.4.1 of this criteria) • A class Welder x1 (CV and qualification to be provided as per the 3.4.1 of this criteria) 			
	1.2	<p>Company History Proof must be provided that company must have been in business for at least 5 years performing maintenance at industrial plant such as power stations, refineries, mines, etc. Company in business for 5 years but performing activities other than mechanical maintenance will not be considered.</p> <p>COMPLETED SIMILAR PROJECTS This covers the experience of the company. The company must have completed at-least 4 outages or 4 years of day to day maintenance ensure competency because of the criticality of the scope. The previous completed projects must entail maintenance SO3 plant. For evaluation of this criteria a project shall be defined as either the execution of a full outage scope of work on an SO3 system or 1 year of day to day normal maintenance. A completion certificates or reference letter must be submitted which reflects Client name,</p> <ul style="list-style-type: none"> • Order number • Project description, (details scope of work if description not clear) • Project cost, • Project start & end date • Project location 	Company Profile, Signed Completion Certificates		50

	<ul style="list-style-type: none"> Name, designation and contact number of reference person (contactable) <p>In an event where the completion certificated does not have all the above details, the supplier can attached any other supporting document that might contain the information to support the completion certificate (e.g. signed contract or detailed orders)</p>			
				TOTAL: 100

3.4.1 Qualitative Technical Evaluation Scoring Criteria

Organogram	Points	Score
No Signed site organogram	0	5
Only 1 of 2 requested organograms	2	
2 Signed site organograms	5	
SUPERVISOR	Points	Score
Mechanical Trade Test and supervisory certificate		
No formal trade test and supervisory certificate	0	5
Formal trade test and supervisory certificate	5	
Working years on mechanical works post trade test		
2 year	2	5
3years	4	
4years and more	5	
2 Fitters	Points	Score
Mechanical Trade Test		
No formal trade test	0	7.5
Trade Test from accredited institution	5	
Working years on mechanical maintenance post trade test qualification		
Less than 2 years	2	7.5
2 years	4	

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3years and more	5	
QC personnel	Points	Score
Minimum Mechanical Trade Test/ QC or other mechanical qualification.		
No formal trade test QC or other mechanical qualification.	0	2.5
Trade Test from accredited institution/QC or other mechanical qualification.	5	
Working years as a QC on mechanical works post qualification		
1 year	2	2.5
2 years	4	
3years and more	5	
1 A class Welder for outages	Points	Score
Mechanical Trade Test		
No formal trade test	0	2.5
Trade Test from accredited institution	5	
Working years on mechanical maintenance post trade test qualification		
1 year	2	2.5
2 years	4	
3 years and more	5	
COMPANY ESTABLISHMENT	Points	Score
Less than 2 years in business	0	10
At least 2 years in business	2	
3-4 years in business	4	
5 or more years in business	5	
COMPLETED SIMILAR PROJECTS		Score
Number of similar projects = 0	0	50
Number of similar projects = 2	2	
Number of similar projects = 4	4	
Number of similar projects > 4	5	

3.5 TET Member Responsibilities

Table 4: TET Member Responsibilities

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Mandatory Criteria Number	TET 1	TET 2	TET 3	TET 4	TET 5	TET 6	TET 7	TET n
All	X	X	X	N/A	N/A	N/A	N/A	N/A
Qualitative Criteria Number	TET 1	TET 2	TET 3	TET 4	TET 5	TET 6	TET 7	TET n
All	X	X	X	N/A	N/A	N/A	N/A	N/A

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.	

Table 8: Unacceptable Technical Exceptions / Conditions

Risk	Description
1.	None

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4. AUTHORISATION

This document has been seen and accepted by:

Name	Designation
Augustine Letlolwane	Mechanical technician
Martin Mabena	Outage Coordinator

5. REVISIONS

Date	Rev.	Compiler	Remarks
June 2025	0	N Tootla	New document

6. DEVELOPMENT TEAM

Victor Thubakgale

7. ACKNOWLEDGEMENTS

N/A

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