Eskom	Tender Technical Assessment	Engineering

Title: Corrosion protection of Fly ash silos and WTP vessels at Kriel Power Station for a period of three (3) years.

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1. INTRODUCTION

2. THE PROPOSED SCOPE OF WORK IS FOR THE CORROSION PROTECTION OF FLY ASH SILOS AND WTP VESSELS AT KRIEL POWER STATION FOR A PERIOD OF THREE (3) YEARS. SUPPORTING CLAUSES

2.1 SCOPE

The scope of the document defines the technical criteria that will be used to evaluate tenderers for the Corrosion protection of Fly ash silos and WTP vessels technical evaluation strategy as stipulated in the scope.

2.1.1 Purpose

The purpose of this tender technical evaluation strategy is to define the Mandatory Evaluation Criteria, Qualitative Evaluation Criteria, TET member responsibilities and identify acceptable/unacceptable risks for tender technical evaluation. The technical evaluation strategy serves as basis for the tender technical evaluation process.

2.1.2 Applicability

This strategy document shall apply to auxiliary maintenance of rubber lined surfaces at Kriel Power Station Eskom Holdings SOC Ltd.

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] 240-48929482: Tender Technical Evaluation Procedure

[2] ISO 9001 Quality Management System

2.2.2 Informative

[3] 240-160548357: Corrosion Protection of WTP vessels and lines and Fly Ash silos at Kriel Power station

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
ITM	Inspection, Testing and Preventative Maintenance
KPS	Kriel Power station
OHS	Occupational Health and Safety

Abbreviation	Description
SANS	South African National Standards
SOW	Scope of work
PPE	Personal protective equipment

2.5 ROLES AND RESPONSIBILITIES

As per 240-48929482: Tender Technical Evaluation Procedure

2.6 PROCESS FOR MONITORING

A maintenance program typically consists of four stages:

- Stage 1 – Inspection, testing and preventative maintenance activities. Schedules are used to ensure that key activities are performed at regular intervals. When an activity has been completed, the result is recorded, followed by whether the action resulted in a pass or fail.
- Stage 2 – Record keeping. Records are required to be kept for each functional activity and should include specific results (as appropriate), and the outcome of the activity through the use of ‘pass/fail’ or ‘yes/no’ criteria.
- Stage 3 – Reporting and rectification. Where failures have been identified, they should be reported to the relevant Eskom personnel and a defect generated (usually in SAP or FLIP) for the rectification works.
- Stage 4 – Updating of records on SAP PM System only. Following rectification of identified failures, functional testing should be undertaken to confirm that the system is operating as intended.

The Schedules in this standard are used to document Stages 1, 2 and 4.

2.7 RELATED/SUPPORTING DOCUMENTS

N/A

3. TENDER TECHNICAL EVALUATION 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%.

3.2 TET MEMBERS

Table1: TET Members

TET number	TET Member Name	Designation
TET 1	Mapula Sethosa	Advisor Technical Support BOP
TET 2	Jerushan Pillay	System Engineer Water Treatment Plant
TET 3	Sumayyah Sulliman	Chief Engineer Asset management
TET 4	Keith Northcott	Senior consultant - RTD
TET 5	Hassen Cassim	RT&D Snr Advisor Corrosion
TET 6	Noko Pheta	RT&D Snr Advisor Corrosion

3.3 TENDER RETURNABLES

See technical evaluations table 2 and 3 below.

3.4 SITE TECHNICAL EVALUATION CLARIFICATION

3.4.1 Not compulsory, however interested suppliers may arrange a site visit with an appointment prior.

3.5 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	EXPERIENCE OF CORROSION PROTECTION CONTRACTOR Provide verifiable references and sources of evidence that the product supplier and applicator have successfully applied internal corrosion protection system to plant with similar application as Eskom at least equal to the quantity of scope as defined in the enquiry and Scope of Work (SOW) documents within the last 5 years.	Contractor must provide a list of 5 previous completed similar projects. The list to include client name, work done, quality documents and release certificates, name and contact person preferably project engineer.	To ensure the applicator/ manufacture is sufficiently experienced in order to successfully execute this scope of work in accordance to standards, specs and all as pe enquiry documentation.

3.6 QUALITATIVE TECHNICAL EVALUATION CRITERIA

The tenders will be evaluated qualitatively on the documents submitted. The threshold of 70% has to be achieved for the tender documents (Table 3) to qualify.

Table 3: Qualitative technical evaluation criteria

	Functionality Criteria	**Total Weight (100%)**	**Floor 0 = 0%**	**Kick in 2 = 40%**	**Average 4 = 80%**	**Ceiling 5 = 100%**
1.	**Method Statement:** Company must provide a detailed methodology covering the following;		Method statement not received or	Three (3) or more steps missing.	One (1) to two (2) steps missing.	All application steps (a – h) provided.

	(a) Grease and/or soluble salts decontamination and washing. (b) surface preparation by blast cleaning, (c) The parameter setups for blasting techniques i.e. boom/lance. (d) Methods for dust and debris removal, maintaining and ensuring cleanliness between primer, adhesive and rubber sheet shall be described. (e) Flange arrangement. (f) Curing. (g) All test and inspection interventions. (h) specified/required environmental conditions.	35%	lacking details requested.			
2	PRODUCT DATA SHEETS Company must provide datasheets for all products as per the scope, i.e. (1) Blasting grit. (2) Rubber Lining (3) Primer (4) Adhesives (5) Coating material	25%	No data sheets are provided.	Data sheets provided only for Rubber Liner and (40%) information as per Corrosion protection specifications are provided	All data sheets provided and (80%) information as per Corrosion protection specifications are provided	All data sheets provided and all information as per Criteria were provided.
3	QUALITY CONTROL PLAN Contractor details all inspections and test as per method statement(s) with the listing of the relevant, local (SANS) or international standards, as well as the required acceptance criteria. The QCP shall align with all info as required in 1 and 3 above. Inspections during corrosion protection application shall at least cover; (a) surface preparation, (b) environmental parameters,	20%	Relevant QCP not provided.	High-level QCP missing three (3) or more: • Steps or tests i.e. (a – d) or • Standards or • Acceptance criteria.	QCP missing: One (1) to two (2) steps including • tests i.e. (a – d) or • Missing standards or • Acceptance criteria.	Detailed QCP indicating all steps, tests, standards, inspections criteria and interventions i.e. (a – d).

	(c) Products (coating and rubber properties/batch certificate i.e. tensile strength, thickness, hardness), (d) adhesion, continuity and visual tests.					
4	SCOPE OF WORK COMPLIANCE The contractor fully complies with the NEC3 ECC contract conditions and with the technical scope as set out in the enquiry document. If there are deviations, then a letter stating the list must be provided. The deviations will be evaluated to determine if it is a risk to the project.	20%	Detrimental, technically unacceptable Deviations or Exclusions.		No definitive statement that there are any Deviations or Exclusions OR Acceptable Deviations or Exclusions which may be mitigated by the contractor.	A definitive statement that there are no Deviations or Exclusions.

3.7 TET MEMBER RESPONSIBILITIES

Table 4: TET Member Responsibilities

Mandatory Criteria Number	TET 1	TET 2	TET 3	TET 4	TET 5	TET 6/7/8
1	X	X	X	X	X	X
Qualitative Criteria Number	**TET 1**	**TET 2**	**TET 3**	**TET 4**	**TET 5**	**TET 6/7/8**
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
5	X	X	X	X	X	X

3.8 FORESEEN ACCEPTABLE / UNACCEPTABLE QUALIFICATIONS

3.8.1 Risks

Table 5: Acceptable Technical Risks

Risk	Description
1.	Methodologies that are not according to the scope of work, but complies or SANS standards.
2.	Proposed QCP with the critical activities, without acceptance criteria or minor changes required that can be done after contract award.
3.	A detailed list of material data sheet, handling process and descriptions.

4. AUTHORISATION

This document has been seen and accepted by:

Name	Designation
Sibusiso Ngwenya	Auxiliary Maintenance Manager
Ethel Simelane	Chemical services Manager
Neo Muthavhine	Auxiliary Engineering Manager
Noko Pheta	Snr Advisor Corrosion RTD
Sumayyah Sulliman	Chief Engineer Asset management
Jerushan Pillay	WTP System Engineer

5. REVISIONS

Date	Rev.	Compiler	Remarks
March 2020	1	MM Sethosa	New document.
December 2020	2	MM Sethosa	Updated version.
June 2022	3	SS Sulliman	Updated with RTD specs

6. DEVELOPMENT TEAM

The following people were involved in the development of this document:

- MM Sethosa
- J Pillay
- M Mlaba
- S Masango

7. ACKNOWLEDGEMENTS

N/A