

Title: **Tender Technical Evaluation
Strategy For Demin Resin
Replacement**

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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	3
2.3.1 Classification	3
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	4
3.1 TECHNICAL EVALUATION THRESHOLD	4
3.2 TET MEMBERS	4
3.3 MANDATORY TECHNICAL EVALUATION CRITERIA	5
3.4 TABLE 3: QUALITATIVE TECHNICAL EVALUATION CRITERIA	5
3.4.1 DEFINED	5
3.4.2 QUALITATIVE TECHNICAL EVALUATION SCORING CRITERIA	7
3.4.3 TET MEMBER RESPONSIBILITIES	9
3.5 FORESEEN ACCEPTABLE / UNACCEPTABLE QUALIFICATIONS	10
3.5.1 Risks	10
3.5.2 Exceptions / Conditions	10
4. AUTHORISATION	11
5. REVISIONS	11
6. DEVELOPMENT TEAM	11
7. ACKNOWLEDGEMENTS	11

TABLES

Table 1: TET Members	4
Table 2: Mandatory Technical Evaluation Criteria	5
Table 3: Qualitative Technical Evaluation Criteria	6
Table 4: Demin (Cation and Anion) Resin Qualitative Technical Evaluation Criteria	7
Table 5: Mixed Bed Resin Qualitative Technical Evaluation Criteria	8
Table 6: TET Member Responsibilities	9
Table 7: Acceptable Technical Risks	10
Table 8: Unacceptable Technical Risks	10
Table 9: Acceptable Technical Exceptions / Conditions	10
Table 10: Unacceptable Technical Exceptions / Conditions	10

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1. INTRODUCTION

This document is aimed at setting the standard technical evaluation criteria to be used when evaluating the tender submissions for Matla Power Station Demin resin replacement. Matla Power station uses resin on the Demineralisation plant, Condensate polishing and the stator cooling water system.

2. SUPPORTING CLAUSES

2.1 SCOPE

Supply and delivery of Demin resins for trains 1, 2 and 3.

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 Matla Power Station.

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] 32-1034 – Eskom procurement and supply chain management
- [2] 240-48929482: Tender Technical Evaluation Procedure
- [3] 240-53716712: Tender Technical Evaluation Results Form Template
- [4] 240-53716726: Tender Technical Evaluation Scoring Form Template

2.2.2 Informative

- [5] ISO 9001 Quality Management Systems
- [6] MEP-051313: Demin Train Resin Replacement

2.3 DEFINITIONS

2.3.1 Classification

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

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2.4 ABBREVIATIONS

Abbreviation	Description
TET	Technical Evaluation team

2.5 ROLES AND RESPONSIBILITIES

As per 240-48929482: Tender Technical Evaluation Procedure

2.6 PROCESS FOR MONITORING

Two of the mandatory technical criteria are linked to qualitative requirements. Non submission of any mandatory requirements will automatically disqualify the tenders and therefore all technical mandatory requirements need to be submitted. The following two **mandatory criteria will be evaluated qualitatively upon submission for scoring purposes based on Eskom evaluation sheet program.**

- Complete electronic simulation output of the demineralization process (**cation and anion**) showing calculated throughput and leakages for demineralization plant at Matla, based on the water qualities and plant data provided.
- Complete electronic simulation output of the demineralization **Mixed Bed** showing calculated throughput and leakages for demineralization plant at Matla, based on the water qualities and plant data provided.

Two Tables for Demin and mixed bed are listed separately and will be evaluated individually, and the scores obtained from these Tables shall be averaged out for total overall scoring.

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

Table 1: TET Members

TET number	TET Member Name	Designation
TET 1		
TET 2		
TET 3		

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3.3 MANADATORY TECHNICAL EVALUATION CRITERIA

Table 2: Mandatory Technical Evaluation Criteria

Item	Mandatory Technical Criteria Description	Reference to Technical specification/Tender Returnable	Motivation for use of criteria
1	Submit a Complete electronic simulation output of the demineralization process (cation and anion) showing calculated throughput and leakages for demineralization plant at Matla, based on the water qualities and plant data provided	Demin Train Resin Replacement-MEP-051313 (7,8,9,10)	To ensure that the correct ion exchange resins have been selected and will be delivered to the Power Station.
2	Submit a Complete electronic simulation output of mixed bed showing calculated throughput and leakages for the demineralization plant at Matla based on the water qualities and plant data provided.	Demin Train Resin Replacement-MEP-051313 (5)	To ensure that the correct ion exchange resins have been selected and will be delivered to the Power Station.
3	Submit Kilograms of regenerant per regeneration and regenerant level in g/L resin (as per the Technical Data Sheet or Engineering Data Sheet/Bulletin or Separate Bed Operating Conditions) for the Demin products offered.	Demin Train Resin Replacement-MEP-051313	To estimate the required regenerate volumes of both sulfuric acid and sodium hydroxide
4	Product/Technical Data Sheets for all resins recommended.	DEMIN TRAIN RESIN REPLACEMENT-MEP-051313(1-10)	To verify that the product supplied complies to the required technical specification
5	Provide evidence that the Demineralisation and Mixed Bed Resins are designed to operate as pairs, which assumes good resin separation and minimize resin cross contamination.	Official OEM technical data sheets to be supplied to Eskom for approval at tender phase.	To ensure that the correct ion exchange resins have been selected and will be delivered to Matla

During the tender evaluations the following table shall be used by the TET members to score each criterion on a scale of 0 to 5 as per Table 3 below.

Table 3: Qualitative Technical Evaluation Criteria

Score	(%)	Definition
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

Note 1: The scoring table does not allow for scoring of 1 and 3.

Note 2: Foreseen acceptable and unacceptable risk(s), exceptions and conditions shall be unambiguously defined in the relevant Tender Technical Evaluation Strategy.

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3.4 QUALITATIVE TECHNICAL EVALUATION SCORING CRITERIA

Table 4: Demin (Cation and Anion) Resin Qualitative Technical Evaluation Criteria

Ar	Qualitative Technical Criteria Description	Reference to Technical Specification / Tender Returnable	Criteria Weighting	Evaluation Scoring Breakdown			
	Process Requirements		(%)	0	2	4	5
1	Evaluation of Complete electronic simulation output of the demineralisation process (for cation and anion) showing calculated throughput and leakages for the demineralisation plant based on the water qualities and plant data provided.	Technical Specification Throughput	60	No submission	Scoring criteria as per Eskom Demin Cation and Anion resin technical evaluation acceptable <70%	Scoring criteria as per Eskom Demin Cation and Anion resin technical evaluation acceptable (70-89%)	Scoring criteria as per Eskom Demin Cation and Anion resin technical evaluation acceptable (>90%)
2	Industrial references where the products are of use in similar application to Power Station. Plants designed for above 50 m ³ /hr demin production. Reference detail is to include: - Name of project/site - Details of the work (i.e size of plant, throughput etc.) - Contact details of reference.	Technical Specification	10	No submission	1 verifiable reference submitted of Demineralisation system	2-3 verifiable references submitted	4 or more verifiable references submitted
3	List of services included in the price: a. Annual resin testing at their expense. b. General training for personal once a year c. Technical support.	Technical Specification	15	No submission	1 of the specified service included (Annual analysis minimum)	2 services included (Annual analysis minimum + 1 of the other)	All 3 or service included in the tender price
4	Resins lead times.	Technical Specification	15	No submission	Submission of more than 25 weeks (175 days) lead time	Submits the lead times between 20 and 25 weeks (141-174 days) for all the resins specified in the tender.	Submits the lead times <=20 weeks (140 Days and less) for all the resins specified in the tender

Table 5: Mixed Bed Resin Qualitative Technical Evaluation Criteria

No.	Qualitative Technical Criteria Description	Reference to Technical Specification / Tender Returnable	Criteria Weighting	Evaluation Scoring Breakdown			
	Process Requirements		(%)	0	2	4	5
1	Evaluation of Complete electronic simulation output of the Mixed Bed system showing calculated throughput and leakages for the demineralisation plant based on the water qualities and plant data provided.	Technical Specification Throughput	60	No submission	Scoring criteria as per Eskom Demin Cation and Anion resin technical evaluation acceptable <70%	Scoring criteria as per Eskom Demin Cation and Anion resin technical evaluation acceptable (70-89%)	Scoring criteria as per Eskom Demin Cation and Anion resin technical evaluation acceptable (>90%)
2	Industrial references where the products are of use in similar application to Power Station. Plants designed for above 50 m ³ /hr Demin production. Reference detail is to include: - Name of project/site - Details of the work (i.e. size of plant, throughput etc.) - Contact details of reference.	Technical Specification	10	No submission	1 verifiable reference submitted of Demineralisation system	2-3 verifiable references submitted	4 or more verifiable references submitted
3	List of services included in the price: a. Annual resin testing at their expense. b. General training for personal once a year c. Technical support.	Technical Specification	15	No submission	1 of the specified service included (Annual analysis minimum)	2 services included (Annual analysis minimum + 1 of the other)	All 3 or service included in the tender price
4	Resins lead times.	Technical Specification	15	No submission	Submission of more than 25 weeks (175 days) lead time	Submits the lead times between 20 and 25 weeks (141-174 days) for all the resins specified in the tender.	Submits the lead times <=20 weeks (140 Days and less) for all the resins specified in the tender

TET MEMBER RESPONSIBILITIES

In Table 4 identify the TET members allocated to review/evaluate each Qualitative criterion (minimum 2 evaluators per criteria / sub-criteria)

Table 6: TET Member Responsibilities

Mandatory Criteria Number	TET 1	TET 2	TET 3	TET 4	TET 5
1	X	X	X	N/A	N/A
2	X	X	X	N/A	N/A
3	X	X	X	N/A	N/A
4	X	X	X	N/A	N/A
5	X	X	X	N/A	N/A

3.4 FORESEEN ACCEPTABLE / UNACCEPTABLE QUALIFICATIONS**3.4.1 Risks****Table 7: Acceptable Technical Risks**

Risk	Description
1.	Delays in delivery of the resins of more than 25 weeks

Table 8: Unacceptable Technical Risks

Risk	Description
1.	The supplier may deliver a product that does not meet Eskom specifications.

3.4.2 Exceptions / Conditions**Table 9: Acceptable Technical Exceptions / Conditions**

Risk	Description
1.	Delays in delivery of the resins of more than 25 weeks, however, the supplier will have to demonstrate that every measure had been and is being taken to expedite the delivery.

Table 10: Unacceptable Technical Exceptions / Conditions

Risk	Description
1.	Non-compliance to Eskom specification/requirements

4. AUTHORISATION

This document has been seen and accepted by:

Name	Designation	Signature
Solly Sikwa	Senior Advisor Chemical Engineering	

5. REVISIONS

Date	Rev.	Compiler	Remarks
16 Jan 2025	0	Sikwa SS	Original Document

6. DEVELOPMENT TEAM

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

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7. ACKNOWLEDGEMENTS

N/A

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