

Title: **Tender Technical Evaluation
Strategy to Design, Supply,
Install and Commission Fire
Protection System to Address
Worst Case**

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CONTENTS

	Page
1. INTRODUCTION	3
1.1 SCOPE	3
1.1.1 Purpose	3
1.1.2 Applicability.....	3
1.2 NORMATIVE/INFORMATIVE REFERENCES.....	3
1.2.1 Normative	3
1.2.2 Informative	3
1.3 DEFINITIONS.....	3
1.3.1 Classification	3
1.4 ABBREVIATIONS.....	4
1.5 ROLES AND RESPONSIBILITIES.....	4
1.6 PROCESS FOR MONITORING.....	4
1.7 RELATED/SUPPORTING DOCUMENTS.....	4
2. TENDER TECHNICAL EVALUATION STRATEGY	4
2.1 TECHNICAL EVALUATION THRESHOLD	4
2.2 TET MEMBERS.....	4
2.3 MANDATORY TECHNICAL EVALUATION CRITERIA.....	5
2.4 QUALITATIVE TECHNICAL EVALUATION CRITERIA.....	6
2.5 TET MEMBER RESPONSIBILITIES.....	10
2.6 FORESEEN ACCEPTABLE / UNACCEPTABLE QUALIFICATIONS.....	12
2.6.1 Risks.....	12
2.6.2 Exceptions / Conditions	13
3. AUTHORISATION.....	14
4. REVISIONS	14
5. DEVELOPMENT TEAM	14
6. ACKNOWLEDGEMENTS	14

TABLES

Table 1: TET Members	4
Table 2: Mandatory Technical Evaluation Criteria.....	5
Table 3: Qualitative Technical Evaluation Criteria.....	6
Table 4: TET Member Responsibilities.....	10
Table 5: Acceptable Technical Risks.....	12
Table 6: Unacceptable Technical Risks	12
Table 7: Acceptable Technical Exceptions / Conditions.....	13
Table 8: Unacceptable Technical Exceptions / Conditions	13

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1. INTRODUCTION

In 2012 the contract for the upgrade of Hendrina Power Station (PS) Fire System Upgrade commenced. Due to various delays that include access for installation, design review delays and site stakeholder concerns about installations, the contract scope was not completed.

1.1 SCOPE

The contract scope for worst-case fire scenario consist of mechanical scope, which interfaces with the following disciplines, i.e.:

- Civil i.e. civil structure for pipe supports, emulsifier storage tank and pump house.
- Electrical i.e. new electrical supply to emulsifier water pumps and pump house. This would include both electrical pumps and diesel pumps.
- C&I i.e. creating an interface to existing fire detection system to flag at SOR a system activation whenever the emulsifier water pumps run.

Thus, the scope of the contract includes the fire water supply system (water supply, pumping system and pipes) upgrade to ensure the fire system can support the station in event of worst-case fire scenario and to ensure that Hendrina Power Station fire system complies with Eskom (*Employer*) standards.

1.1.1 Purpose

The purpose of this tender technical evaluation strategy is to highlight the required tender returnable for technical evaluation. The technical evaluation strategy serves as basis for the tender technical evaluation process.

1.1.2 Applicability

This document is applicable to Hendrina Power Station.

1.2 NORMATIVE/INFORMATIVE REFERENCES

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

1.2.1 Normative

- [1] 240-48929482: Tender Technical Evaluation Procedure
- [2] 32-1034 Eskom Procurement and Supply Chain Management Procedure

1.2.2 Informative

- [3] None

1.3 DEFINITIONS

1.3.1 Classification

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

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1.4 ABBREVIATIONS

Abbreviation	Description
SANS	South African National Standards
TET	Technical Evaluation Team
PS	Power Station
ECA	Electrical Contractor Association
DoL	Department of labour
CoC	Certificate of compliance

1.5 ROLES AND RESPONSIBILITIES

As per 32-1034 Eskom Procurement and Supply Chain Management Procedure

1.6 PROCESS FOR MONITORING

N/A

1.7 RELATED/SUPPORTING DOCUMENTS

Detailed design Scope of Work

2. TENDER TECHNICAL EVALUATION STRATEGY

2.1 TECHNICAL EVALUATION THRESHOLD

The minimum weighted final score (threshold) required for a tender to be considered from a technical perspective is 75%.

2.2 TET MEMBERS

Table 1: TET Members

TET number	TET Member Name	Designation
TET 1	Fanyane Kubeka	Fire System Engineer
TET 2	Kabelo Malebana	Electrical Engineer
TET 3	Simphiwe Kubheka	C&I Engineer
TET 4	Lilly Baloyi	Civil Engineer

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2.3 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.	<p>The contractor must be registers with the Electrical Contractors Association – ECA</p> <p>The contractor must be registered with DoL –department of labour as an Electrical Installation contractor and must produce a certificate to prove it. The certificate must have IE registration number to show that they are able to issue CoCs</p> <p>Note: A Certificate of a Sub-contractor will be accepted provided it's submitted with a contract agreement stating that all electrical works will be done by the holder of the ECA certificate.</p>	<p>Returnable: Certified copy of specified company certificate.</p> <p>Or</p> <p>Certified copy of official letter from notifying body stating that assessment has passed. Copy certification must not be older than 3 months from date of submission.</p> <p>Eskom will contact the notifying body to confirm authenticity of letter. Notifying must confirm letter is accurate and correct.</p>	<p>Eskom requirement.</p>

2.4 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	Proof of company experience on the following disciplines:			10	
	1.1	No information provided			0
	1.2	Mechanical installation work of pipes, motors, pumps etc.	Provide proof in the form of a signed stamped written letter with reference number, a contract or Purchase order number if work was done at Eskom.		4
	1.3	Installations of control and instrumentation systems	Provide proof in the form of a signed stamped written letter with reference number, a contract or Purchase order number if work was done at Eskom.		2
	1.4	Electrical installation of panels, motors and cables.	Provide proof in the form of a signed stamped written letter with reference number, a contract or Purchase order number if work was done at Eskom.		2
	1.5	Civil structures pertain to building work	Provide proof in the form of a signed stamped written letter with reference number, a contract or Purchase order number if work was done at Eskom.		2
2	Site Manager/ Supervisor CV: Relevant Qualifications and mechanical experience is a must.			4	
	2.1	No CV or formal qualification		-	0
	2.2	Certified copies of site manager and supervisor CV that stipulate the experience on mechanical related work.	Provide a detailed CV		2

	2.3	Certified copy of N6 certificate or higher with trade test certificate.	Provide certified qualification copies	-	1
	2.4	Certified copy of leadership course as a minimum.	Provide certified qualification copies	-	1
3	Key Personnel Qualifications and CVs. Indicate Experience on CVs			24	
	3.1	No CV or formal Qualification			0
	3.2	Safety Officer (Safety cert/qualification and experience >1yr)	Provide a detailed CV and certified qualification copies		2
	3.3	Welder (N3 cert with trade test and experience >3yrs)	Provide a detailed CV and certified qualification copies		2
	3.4	Boiler Maker (N3 cert with trade test and experience >3yrs)	Provide a detailed CV and certified qualification copies		2
	3.5	Fitter (N3 cert with trade test and experience >3yrs)	Provide a detailed CV and certified qualification copies		3
	3.6	Electrician (N3 cert with trade test and experience >3yrs)	Provide a detailed CV and certified qualification copies		3
	3.6	C&I Technician or higher with the knowledge of Siemens S7 system and registered with ECSA	Provide a detailed CV and certified qualification copies.		3
	3.7	Profession Mechanical Technologist or higher with ECSA registration	Provide a detailed CV and certified qualification copies.		3
	3.8	Professional Civil Technologist or higher with ECSA registration	Provide a detailed CV and certified qualification copies.		3
	3.9	Professional Electrical Technologist or higher with ECSA registration	Provide a detailed CV and certified qualification copies.		3
4	Detail Method statement covering the entire scope provided and demonstrate how each disciplines interface with each other in the following aspects:			45	

	4.1	No method statement or A method statement that is not relevant to the scope and lack technical details.			0
	4.2	Installation of pumping system	Provide a method statement		5
	4.3	Installation of containerised pump house	Provide a method statement		5
	4.4	Extension of existing pump house	Provide a method statement		5
	4.5	Installation of additional pump house	Provide a method statement		5
	4.6	Installation of control and instrumentation system	Provide a method statement		5
	4.7	Electrical installations and cabling	Provide a method statement		5
	4.8	Upgrade of fire protection mains to respective 200 and 250 mm nominal bores	Provide a method statement		5
	4.9	Refurbishment of existing water storage tank	Provide a method statement		5
	4.10	Installation of additional water storage tank	Provide a method statement		5
5	Detailed Quality Control Plan (QCP) documentation must be submitted according to the Scope.			6	
	5.1	QCP/QIP that is not according to scope.			0
	5.2	QCP/QIP that is according to scope but doesn't have intervention points such as Hold, etc.	Provide a QCP		3
	5.3	Comprehensive QCP/QIP that is according to scope but with intervention points such as Hold, etc	Provide a QCP		6
6	Provide detailed programme to illustrating how to execute technical scope of works within the specified project duration.			9	
	6.1	No program submitted or the programme is not relevant.			0
	6.2	The programme has summarized major work activities	Summarized activities provided		3

**Tender Technical Evaluation Strategy to Design, Supply,
Install and Commission Fire Protection System to
Address Worst Case.**

Unique Identifier:
Revision: **0**
Page: **9 of 14**

	6.3	The programme has estimated durations	Estimated duration provided		3
	6.4	The programme has demonstrated practical and quick approach to execute the whole scope of work taking into consideration how each activity relate to others.	Relationships between activities demonstrated in the programme.		3
7	Registered with National Home Builders Registration Council (NHBRC)		Provide proof of accreditation	2	
				TOTAL: 100	
				THRESHOLD: 75	

2.5 TET MEMBER RESPONSIBILITIES

Table 4: TET Member Responsibilities

Mandatory Criteria Number	TET 1	TET 2	TET 3	TET 4	TET 5	TET 6
The contractor must be registers with the Electrical Contractors Association – ECA	X	X				
The contractor must be registered with DoL –department of labour as an Electrical Installation contractor and must produce a certificate to prove it. The certificate must have IE registration number to show that they are able to issue CoCs	X	X				
Note: A Certificate of a Sub-contractor will be accepted provided it's submitted with a contract agreement stating that all electrical works will be done by the holder of the ECA certificate.	X	X				
Qualitative Criteria Number	TET 1	TET 2	TET 3	TET 4	TET 5	TET 6
Proof of company experience on all disciplines	X	X	X	X		
Site Manager/ Supervisor CV: Relevant Qualifications and mechanical experience	X	X	X	X		
Key Personnel Qualifications and CVs. Indicate Experience on CVs	X	X	X	X		

**Tender Technical Evaluation Strategy to Design, Supply,
Install and Commission Fire Protection System to
Address Worst Case.**

Unique Identifier:

Revision: **0**

Page: **11 of 14**

Detail Method statement covering the entire scope provided and demonstrate how each disciplines interface with each other.	X	X	X	X		
Detailed Quality Control Plan (QCP) documentation must be submitted according to the Scope.	X	X	X	X		
Provide detailed programme to illustrating how to execute technical scope of works within the specified project duration.	X	X	X	X		
Registered with National Home Builders Registration Council (NHBRC)	X	X	X	X		

2.6 FORESEEN ACCEPTABLE / UNACCEPTABLE QUALIFICATIONS

2.6.1 Risks

Table 5: Acceptable Technical Risks

Risk	Description
1.	None
2.	
3.	
4.	
5.	
6.	
7.	

Table 6: Unacceptable Technical Risks

Risk	Description
1.	Professional engineer/technicians required
2.	
3.	
4.	
5.	
6.	
7.	

2.6.2 Exceptions / Conditions

Table 7: Acceptable Technical Exceptions / Conditions


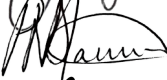


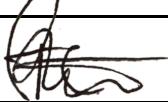
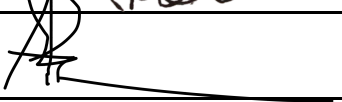

Risk	Description
1.	Service level agreement with regard to insourced services
1.	
2.	
3.	
4.	
5.	
6.	

Table 8: Unacceptable Technical Exceptions / Conditions

Risk	Description
1.	No service level agreement if service is insourced
2.	
3.	
4.	
5.	
6.	
7.	

3. AUTHORISATION

This document has been seen and accepted by:

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Khutsiso Khuloane	Project Leader - Project Management	
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4. REVISIONS

Date	Rev.	Compiler	Remarks
N/A			

5. DEVELOPMENT TEAM

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

Fanyane Kubeka

Simphiwe Kubheka

Lilly Baloyi

Kabelo Malebana

Khutsiso Khuloane

6. ACKNOWLEDGEMENTS

None

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