

Title: **Tender Technical Evaluation Strategy for Additional C&I Maintenance Services Contract on all plant areas at Tutuka Power Station**

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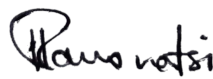
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1. INTRODUCTION

This document provides the technical mandatory and qualitative criteria on which to evaluate potential contractors for the maintenance of Instrumentation at Tutuka Power Station. This includes Turbine Centerline, Turbine Auxiliary, Boiler Feed Water Pumps and their Auxiliaries, Condensate Polishing Plant, Boiler and associated plant, Coal and Ash handling and Water Treatment plants.

2. SUPPORTING CLAUSES

2.1 SCOPE

This document will only cover the technical tender evaluation criteria for the Tutuka additional C&I maintenance personnel contract.

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

The document will apply to the Tutuka Turbine Centreline, Turbine Auxiliary, Boiler Feed Water Pumps and their Auxiliaries, Condensate Polishing Plant, Boiler and associated plant, Coal and Ash handling and Water Treatment plants additional C&I maintenance personnel contract only.

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] 240-53716726: Tender Technical Evaluation Scoring Form

2.2.2 Informative

- [1] N/A

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
CoE	Centre of Excellence
C&I	Control and Instrumentation
EDWL	Engineering Design Work Lead
ISO	International Standards Organisation
OHSA	Occupation Health and Safety Act
TET	Technical Evaluation Team

2.5 ROLES AND RESPONSIBILITIES

As per 240-48929482: Tender Technical Evaluation Procedure [1].

2.6 PROCESS FOR MONITORING

The Tutuka commercial department will monitor the evaluation process.

2.7 RELATED/SUPPORTING DOCUMENTS

N/A

3. TENDER TECHNICAL EVALUATION STRATEGY

3.1 TECHNICAL EVALUATION METHOD

The evaluation method will be based on similar projects done by the tenderers in the past. The tenderers will need to provide the necessary documentation proof of being able to perform the maintenance that is required on the Turbine Centreline, Turbine Auxiliaries, Boiler Feed Water Pumps and their Auxiliaries, Condensate Polishing Plant, Boiler and associated plant, Coal and Ash handling and Water Treatment plant instrumentation. The tendering contractors have to proof that the onsite technical team have been interviewed and passed the minimum requirements during tendering process. A weighted scorecard approach is used to evaluate the technical compliance of the tenders against the specifications and Employer's requirements. The score will be calculated as an average of the combined maintenance team members required for the different sections of the plant. Tenderers need to have a weighted score of 70% overall or more to technically qualify for further evaluation.

The technical criteria and weighting is broken down as follows:

- a) Combined technical team experience : 30%
- b) Individual technical team experience : 40%
- c) Qualitative technical criteria : 30%

The scoring method will be as follows:

Score	Points awarded
5	100
4	80
2	40
0	0

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3.2 TECHNICAL EVALUATION THRESHOLD

The minimum weighted final score (threshold) required for a tender to be considered from a technical perspective is **70%**.

3.3 TET MEMBERS

TET number	TET Member Name	Designation
TET 1	Nomkhosi Ramonotsi	C&I Maintenance Manager
TET 2	John Green	C&I Senior Advisor
TET 3	Nomsa Sithole	C&I Maintenance Supervisor
TET 4	Dulce Nxumalo	C&I Maintenance Supervisor
TET 5	Tshele Khomoatsane	C&I Maintenance Supervisor

3.4 MANADATORY TECHNICAL EVALUATION CRITERIA

Table 1: Mandatory Technical Evaluation Criteria

	Mandatory Technical Criteria Description	Reference to Technical Specification/ Tender Returnable	Motivation for use of Criteria	Compliant (Yes/No)
1.	<u>Mechanician Units & O/P x 13:</u> Trade test in Instrumentation with minimum 3 years related experience.	<u>Returnable:</u> Tenderer to supply verifiable CV's and references of personnel with certified proof of qualification	To ensure quality of workmanship and suitable experience for the maintenance of C&I instrumentation and protection systems.	

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3.5 QUALITATIVE TECHNICAL EVALUATION CRITERIA

Table 2: Qualitative Technical Evaluation Criteria

	Qualitative Technical Criteria Description		Tender Returnable	Criteria Weighting (%)	Score	Sub Criteria Weighting (%)
1.	Combined Technical Team Experience			30%		
	1.1	(The score will be calculated as an average of the combined maintenance team members) Years C&I maintenance experience on Power Stations or Production plants.	CV's with references clearly detailing knowledge and experience, including competency certificates and qualifications. Reference list must contain name and contact numbers.	>5 Years	5	50%
				3-4 Years	4	
				1-2 Years	2	
				No Experience	0	
				Sub score:		
	1.2	(The score will be calculated as an average of the Four of the Mechanics allocated to the Outside Plant as indicated in your organogram) Years C&I maintenance experience on Chemical Water Treatment Plant	CV's with references clearly detailing knowledge and experience, including competency certificates and qualifications. Reference list must contain name and contact numbers.	>5 Years	5	50%
				3-4 Years	4	
				1-2 Years	2	
				No Experience	0	
				Sub score:		
Section 1 Score: 100						
2.	Individual Technical Team Members Experience			40%		
	2.1	Mechanician x13: Years' experience in fault-finding, maintenance and stroking of the following pneumatic positioners: <ul style="list-style-type: none">Fischer Pneumatic positioners.<ul style="list-style-type: none">ABB TZID.Siemens SIPART.Metso	Competency certificate and/or CV with references clearly indicating required knowledge and experience.	>3 Years on all four systems	5	15%
				>3Years on ¾ systems	4	
				>3 Years on 2/4 systems	2	
				>3 Years on ¼ systems	0	
				Sub score:		

2.2	Mechanician x13: Years' experience in fault-finding and maintenance on Smart/HART field instrumentation.	Competency certificate and reference able CV clearly indicating knowledge and experience.	>4 Years	5	15%	
			3-4 Years	4		
			1-2 Years	2		
			No Experience	0		
			Sub score:			
2.3	Mechanician x4 (O/Plant): Years' experience in fault-finding and maintenance on Water Treatment Plant (Chemical plant)	Competency certificate and reference able CV clearly indicating knowledge and experience.	>4 Years	5	20%	
			3-4 Years	4		
			1-2 Years	2		
			No Experience	0		
2.4	Mechanician x 8 (Units): Years' experience in fault-finding and maintenance of hydraulic powered valves and drives. (HP By-pass, LP By-pass and Electro Hydraulic Governor valves and Hagglund drives).	Competency certificate and reference able CV clearly indicating knowledge and experience.	>3 Years on all four systems	5	25%	
			>3Years on ¾ systems	4		
			>3 Years on 2/4 systems	2		
			>3 Years on ¼ systems	0		
			Sub score:			
2.5	Mechanician x 5 (Units): Years' experience in fault-finding and maintenance on Peabody Oil Burners	Competency certificate and reference able CV clearly indicating knowledge and experience.	>4 Years	5	25%	
			>3 Years	4		
			>2 Years	2		
			>1 Years	0		
			Sub score:			
Section 2 Score: 100						

3.	Qualitative Technical Criteria Description			Criteria Weighting	Score	Sub Criteria Weighting (%)
	Method Statement.		Tender Returnable	30%		
	3.1	Organogram: Detailed organogram indicating each role of the maintenance team related to this contract: Must clearly indicate qualifications and experience of the individual's for the dedicated plant areas (Units – consisting of Turbine & Boiler, and Outside Plant) within the organogram.	Organogram to be supplied	Organogram supplied with all team members with their respective qualifications and roles shown in organogram. Representing an experienced supplier confirming skilled and qualified resources as required within power industry.	5	15%
				Organogram supplied with limited team members or roles which indicate risk or lack of experience and knowledge	2	
				No organogram supplied	0	
				Sub score:		
	3.2	Work force selection: Detailed method statement indicating how the company ensure a qualified, competent team selection for the required scope of work on the different plant areas for this contract.(Required qualifications, Courses, Plant related experience, interview questionnaire – HR and Technical as well as scoring system used to determine best candidates)	Method statement	Method statement clearly indicating internal processes and company requirements for required positions	5	40%
				Method statement supplied, but no clear processes and requirements supplied.	2	
				Method statement not supplied	0	
				Sub score:		

	3.3	Workweek Management: Method statement indicating the process to be used by the Supervisor to control the workload within the section as to comply with Eskom's workweek management requirements.	Method statement	Method statement clearly indicating internal processes ensuring compliance to Eskom requirements.	5	15%
				Method statement supplied, but no clear processes and requirements supplied.	2	
				Method statement not supplied	0	
				Sub score:		
	3.4	Transportation: Method statement indicating internal processes to safely transporting workforce to Tutuka site during normal working hours and after hours during Standby, ensuring compliance to National and Eskom specific vehicle safety.	Method statement	Method statement clearly indicating internal processes ensuring compliance to Eskom requirements.	5	15%
				Method statement supplied, but no clear processes and requirements supplied.	2	
				Method statement not supplied	0	
				Sub score:		
	3.5	Field Instrumentation: Method statement for maintenance, inspection & testing of the following instrumentation: Thermocouple loops & Controllers.	Method statement	Method statement for all maintenance and inspection/testing supplied	5	5%
				Method statement not supplied for all maintenance inspection/testing supplied	2	
				Method statement not supplied	0	
				Sub score:		

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	3.6	Field Instrumentation: Method statement for maintenance, inspection & testing of the following instrumentation: Pressure transmitters; Flow transmitters; DP Transmitters.	Method statement	Method statement for all maintenance and inspection/testing supplied	5	5%	
				Method statement not supplied for all maintenance inspection/testing supplied	2		
				Method statement not supplied	0		
				Sub score:			
	3.7	Field Instrumentation: Method statement for maintenance, inspection & testing of the following instrumentation: Positioners (Electronic & pneumatic)	Method statement	Method statement for all maintenance and inspection/testing supplied	5	5%	
				Method statement not supplied for all maintenance inspection/testing supplied	2		
				Method statement not supplied	0		
				Sub score:			
	Section 3 Score: 100						

3.6 TET MEMBER RESPONSIBILITIES

Table 3: TET Member Responsibilities

Mandatory Criteria Number	TET 1	TET 2	TET 3	TET 4	TET 5
1	X	X	X	X	X
Qualitative Criteria Number	TET 1	TET 2	TET 3	TET 4	TET 5
1.1	X	X	X	X	X
1.2	X	X	X	X	X
2.1	X	X	X	X	X
2.2	X	X	X	X	X
2.3	X	X	X	X	X
2.4	X	X	X	X	X
2.5	X	X	X	X	X
3.1	X	X	X	X	X
3.2	X	X	X	X	X
3.3	X	X	X	X	X
3.4	X	X	X	X	X
3.5	X	X	X	X	X
3.6	X	X	X	X	X
3.7	X	X	X	X	X

3.7 FORESEEN ACCEPTABLE / UNACCEPTABLE QUALIFICATIONS

3.7.1 Risks

Table 4: Acceptable Technical Risks

Risk	Description
1.	20% of Mechanician not meeting all the requirements.
2.	Contractor meeting 70% or more for all criteria.

Table 5: Unacceptable Technical Risks

Risk	Description
1.	Contractor not having technical qualifications
2.	Contractor not having required experience in instrumentation and control field

3.7.2 Exceptions / Conditions

Table 6: Acceptable Technical Exceptions / Conditions

Risk	Description
1.	None

Table 7: Unacceptable Technical Exceptions / Conditions

Risk	Description
1.	Material not meeting Eskom standards
2.	Unsafe work practices

4. AUTHORISATION

This document has been seen and accepted by:

Name	Designation	Signature
[REDACTED]	C&I Engineering Manager	
[REDACTED]	C&I Maintenance Manager	
[REDACTED]	C&I Senior Advisor	
[REDACTED]	C&I Senior Advisor	

5. REVISIONS

Date	Rev.	Compiler	Remarks
February 2022	2	J Green	To define the Mandatory Evaluation Criteria, Qualitative Evaluation Criteria and TET member responsibilities for tender technical evaluation

6. DEVELOPMENT TEAM

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

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

7. ACKNOWLEDGEMENTS

NA

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