Eskom	Strategy	Grootvlei

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1. INTRODUCTION

Grootvlei Power station is a coal fired power station that uses instrumentation to effectively run all its plants which are the main plant (includes the units and the common plant), water treatment plant and the Vaal Dam Pumping Site. Instrumentation found in these plants includes but not limited to temperature switches and transmitters, pressure switches and transmitters, level switches and transmitters, analysers, flow switches and transmitters, solenoid coils, thermocouples, RTDs, gauges, speed sensors, etc... These instruments need to be maintained to ensure plant availability, and their maintenance is of paramount importance as it reduces downtime. The maintenance also needs to be done by trained and competent technicians to ensure good quality work, reliable and a safe plant for all stakeholders.

Trained technicians should have an understanding and knowledge on field maintenance of all instruments and analysers which are used in the power generation industry. This will include calibration/verification and stroke checking of control valves, calibration digital valve positioners, calibration of smart transmitters for measuring flow, level, temperature and pressure, pressure gauges, pressure switches. They should be able to make use of hand and power tools, such as pipe bender, pipe cutter, spanners, crimpers, etc. Ability to use instruments test equipment such as multi-meter, signal generators, temperature dry block, configuration tools with or without HART protocol etc, is also required. It is also of utmost importance that these technicians can perform calibration and maintenance of process equipment.

Understanding and application of flow measurements (Using differential pressure and orifice plate, magnetic flow, Coriolis flow, ultrasonic etc), pressure measurements (Guage, absolute pressure etc), level measurements (Using differential pressure, ultrasonic, radar, magnetic switch and buoyancy), temperature measurements (RTD, Thermocouple, Thermopiles etc), linear Variable Displacement and Eddy currents is also for this contract.

Reading and understanding of loops, schematic drawings and electrical interlock drawings is also required. The technicians must also understand basic concepts related to Distributed control system (DCS) – Experion Process Knowledge System, boiler protection systems, turbine Control and Protection systems and programmable logic controllers

2. SUPPORTING CLAUSES

2.1 SCOPE

This document discusses the different technical aspects that will be evaluated and scored by the Technical Evaluation team (TET) to complete the technical evaluation for the provision of C&I Maintenance scope of work at Grootvlei Power Station including Vaal Dam Pumping site for a period of 60 months and pulling of cables as and when required.

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 is applicable to both the C&I Engineering and Maintenance departments at Grootvlei 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] 240-168966153: Generation Tender Technical Evaluation Procedure

[2] 32-1033: Eskom Procurement and Supply Chain Management Policy

[3] ISO 9001: Quality Management Systems

[4] 32-1034: Eskom Procurement and Supply Management Procedure

[5] Occupational Health and Safety Act and Regulations (85 of 1993)

[6] ISO 14001: Safety Management System

[7] 240-106871290: Technical Team Member Appointment Letter Template

2.2.2 Informative

[8] 36-681 Generation Plant Safety Regulations

[9] 240-52844017: Eskom System Reliability, Availability and Maintainability Analysis Guideline

[10] ISO 10007: Guidelines for Configuration Management

[11] 240-105658000: Supplier Quality Management Specification

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
TET	Technical Evaluation Team

2.5 ROLES AND RESPONSIBILITIES

Engineering Manager: Grootvlei Engineering Manager shall ensure that all staff in his/her respective areas understand and adhere to the Generation Tender Technical Evaluation Procedure.

Maintenance Manager: Grootvlei Maintenance Manager shall ensure that all staff in his/her respective areas understand and adhere to the Generation Tender Technical Evaluation Procedure.

Technical Evaluation Team (TET) member: The delegated engineers and technical specialists are responsible for reviewing and evaluating the technical aspects of the tender documentation as per the Tender Technical Evaluation Strategy. The TET members need to comply with the requirements of the Technical Team Member Appointment Letter Template.

Accountable Manager: Responsible for the appointment of the TET members.

Responsible Person: Responsible for the technical evaluation process.

2.6 PROCESS FOR MONITORING

N/A

2.7 RELATED/SUPPORTING DOCUMENTS

[12] 240-53716746: Tender Technical Evaluation Report Template

[13] 240-53716712: Tender Technical Evaluation Results Form Template

[14] 240-53716726: Tender Technical Evaluation Scoring Form Template

[15] 240-53716769: Tender Technical Evaluation Strategy Template

3. TENDER TECHNICAL EVALUATION STRATEGY

Technical evaluations are a critical activity performed by Engineers and Technical Specialists in accordance with the Eskom Procurement and Supply Chain Management Policy and the Eskom Procurement and Supply Management Procedure during the tender process. This strategy shall ensure that a consistent, fair, transparent, impartial and auditable process is followed to identify the highest technically ranked tenderer.

3.1 TECHNICAL EVALUATION THRESHOLD

The minimum weighted final score (threshold) required for a tender to be considered from a technical perspective is 70%. There are also other mandatory technical evaluation criteria (gatekeepers) which must be met (Yes/No) and are not weighted. An assessment of No on these gatekeepers will render the tenderer

as technically not suitable and as a result the tenderer will be disqualified, and no further evaluation will be carried out for that tenderer on the qualitative criteria.

Qualitative technical evaluation criteria are weighted evaluation criteria used to identify the highest technically ranked tenderer provided all the mandatory evaluation criteria have been assessed with a Yes. Qualitative evaluation criteria are weighted to reflect the relevant importance of each criterion.

Table 1: Overall Weighted Score Breakdown per Qualitative Criteria

Discipline	Overall Weighted Score (%)
NUMBER OF SIMILAR SERVICES	20
SKILLS ASSESSMENT	25
RESOURCE DATABASE	55
Total Score	**100**

3.2 TET MEMBERS

Table 2: TET Members

TET number	Designation
TET 1	System Engineer – Senior Advisor C & I Engineering
TET 2	System Engineer - C & I Engineering
TET 3	Senior Supervisor - C & I Maintenance
TET 4	Senior Supervisor – C & I Maintenance

3.3 MANDATORY TECHNICAL EVALUATION CRITERIA

Table 3: Mandatory Technical Evaluation Criteria

	Mandatory Technical Criteria Description	Reference to Technical Specification / Tender Returnable	Motivation for use of Criteria
1.	All potential bidders are invited to a site clarification prior to submitting bidding documentation	Signed attendance register which can be requested from the TET members.	This is to ensure that suppliers understand the types of systems used in Grootvlei and Vaal Dam. Failure to come for site clarification, tender documents will be disqualified

3.4 QUALITATIVE TECHNICAL EVALUATION CRITERIA

Table 4: Qualitative Technical Evaluation Criteria

SCORE	PERCENTAGE	DESCRIPTION
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**

	Qualitative Technical Criteria Description		Reference to Technical Specification / Tender Returnable	Criteria Weighting (%)	Criteria Sub Weighting (%)	Score Qualification
1.	**Number of similar services**		**Tender Returnable: Contractor Experience and References.**	**15**	**100**	
	1.1	The tenderer shall provide verifiable documentation proving previous similar works.	The tenderer must provide a list of verifiable relevant references, purchase orders or contracts with at least the following details per reference: • Client / site / project name where similar work was done • Brief description of scope • Contract/order number and dates • Value or approximate scope size (optional but helpful) • Contact person name, role, email and telephone number	**15**	**100**	Let **x** = number of previous and current contracts submitted and verified to be acceptable: **5** = **Compliant**. **x** ≥ **5** previous and current contracts submitted and verified to be acceptable. **4** = **Compliant with associated qualifications**. x = 3–4 previous and current contracts submitted and verified to be acceptable. **2** = **non-compliant.** x = 1–2 previous and current contracts

			• Confirmation that work was of acceptable standard. **Note**: Only references that are verifiable (contactable) and demonstrably similar will be scored.			submitted and verified to be acceptable. **0** = **Totally deficient or non-responsive**. x = 0 previous and current contracts submitted and verified to be acceptable, and/or references not provided, not verifiable, or not relevant.
2.	**Skills assessment process**		**Tender Returnable: Contractor's employee skills database and continual improvement process.**	**25**	**100**	
	2.1	The *Tenderer* details the skills for each C&I resource that can be provided by completing the form 2_T in appendix A to show if the resource has the required skills.	The *Tenderer* submits documents (training certificates, in-house signed off training and competency assessment for each criterion on form 2_T) as proof that skills assessment is taking place regularly to confirm competency with training program to address competency levels/gaps including when the resource is hired.	**25**	**100**	**5** = **Compliant**. Submitted a completely filled in Form 2_T from annexure A with a total score of more than 80% and confirmation that skills assessment regularly takes place to confirm competency with training programmes that will address

			The Tenderer must complete and submit Form 2_T in appendix A.			competency levels/gaps including when the resource is hired. **4** = **Compliant with associated qualifications**. Submitted a partially filled in Form 2_T from annexure A with a total score between 70% and 80% and confirmation that skills assessment regularly takes place to confirm competency with training programmes that will address competency levels/gaps including when the resource is hired. **2** = **non-compliant**. Submitted a partially filled in Form 2_T from annexure A with a total score between 50% and 69% and

						confirmation that skills assessment regularly takes place to confirm competency with training programmes that will address competency levels/gaps including when the resource is hired. **0** = **Totally deficient or non-responsive**. No documented skills management process is provided, or the submission is vague/generic with no defined controls, and/or required tender returnables are not submitted.
3.	**Resource database**		**Tender Returnable: Contractor's employee qualifications and work experience.**	**60**	**100**	

	3.1	The Tenderer to provide the qualifications and work experience details of the supervisor in his service.	The tenderer must provide the following as evidence: • Verifiable qualifications. • Verifiable work experience. • Verifiable trainings. The trainings, work experience and qualifications should be in the maintenance, implementation, and commissioning of control and instrumentation systems. The summary can be provided in the form of a CV.	15	100	**5 = Compliant.** Submitted a supervisor profile with the following qualifications and work experience: • National Diploma/N6 in Mechatronics engineering/Electrical engineering (Light Current/C&I) with relevant experience >4 years **OR** • N5 in Mechatronics Engineering/Electrical Engineering (Light Current/C&I) with relevant experience >=7 years **OR** • N4 in Mechatronics Engineering/Electrical

						Engineering (Light Current/C&I) with relevant experience >= 8 years **4** = **Compliant with associated qualifications**. Submitted a supervisor profile with the following qualifications and work experience: • National Diploma/N6 in Mechatronics engineering/Electrical engineering (Light Current/C&I) with relevant experience >2 years and <=4 years **OR** • N5 in Mechatronics Engineering/Electrical Engineering (Light

						Current/C&I) with relevant experience >=5 years and <7 years **OR** • N4 in Mechatronics Engineering/Electrical Engineering (Light Current/C&I) with relevant experience > 5 year and < 7 years **2** = **Non-compliant.** Submitted a supervisor profile with the following qualifications and work experience: • National Diploma/N6 in Mechatronics engineering/Electrical engineering (Light Current/C&I) with relevant

						experience >1 year and <=2 years **OR** • N4 in Mechatronics Engineering/Electrical Engineering (Light Current/C&I) with relevant experience >= 4 year and < 6 years **0 = Totally deficient or non-responsive.** No qualification and work experience submitted
	3.2	The Tenderer to provide the qualifications and work experience details of two senior technicians in his service.	The tenderer must provide the following as evidence: • Verifiable qualifications. • Verifiable work experience. • Verifiable trainings.	15	100	**5 = Compliant.** Submitted 2 senior technicians' profiles with the following qualifications and work experience: • National Diploma/N6 in Mechatronics

			The trainings, work experience and qualifications should be in the maintenance, implementation, and commissioning of control and instrumentation systems. The summary can be provided in the form of a CV.			engineering/Electrical engineering (Light Current/C&I) with relevant experience > 4 years **OR** • N5 in Mechatronics Engineering/Electrical Engineering (Light Current/C&I) with relevant experience > 6 years **OR** • N4 in Mechatronics Engineering/Electrical Engineering (Light Current/C&I) with relevant experience >7 years

						4 = **Compliant with associated qualifications**. Submitted 2 senior technicians' profiles with the following qualifications and work experience: • National Diploma/N6 in Mechatronics engineering/Electrical engineering (Light Current/C&I) with relevant experience > 2 years and <= 4 years **OR** • N5 in Mechatronics Engineering/Electrical Engineering (Light Current/C&I) with relevant experience > 4 years and <= 6 years **OR**

						• N4 in Mechatronics Engineering/Electrical Engineering (Light Current/C&I) with relevant experience >5 years and <=7 years **2** = **Non-compliant.** Submitted 2 senior technicians' profiles with the following qualifications and work experience: • National Diploma/N6 in Mechatronics engineering/Electrical engineering (Light Current/C&I) with relevant experience >1 year and <= 2 years **OR**

						• N5 in Mechatronics Engineering/Electrical Engineering (Light Current/C&I) with relevant experience >= 2 year and < 4 years **OR** • N4 in Mechatronics Engineering/Electrical Engineering (Light Current/C&I) with relevant experience >=3 year and <=5 years **0 = Totally deficient or non-responsive.** No qualifications and work experience submitted

	3.3	The Tenderer to provide the qualifications and work experience details of technicians in his service.	The tenderer must provide the following as evidence: • Verifiable qualifications. • Verifiable work experience. • Verifiable trainings. The trainings, work experience and qualifications should be in the maintenance, implementation, and commissioning of control and instrumentation systems. The summary can be provided in the form of a CV.	15	100	**5 = Compliant.** Submitted technicians' profiles with the following qualifications and work experience: • National Diploma/N6 in Mechatronics engineering/Electrical engineering (Light Current/C&I) with relevant experience > 3 years **OR** • N5 in Mechatronics Engineering/Electrical Engineering (Light Current/C&I) with relevant experience > 5 years **OR** • N4 in Mechatronics Engineering/Electrical

						Engineering (Light Current/C&I) with relevant experience >6 years **4** = **Compliant with associated qualifications**. Submitted technicians' profiles with the following qualifications and work experience: • National Diploma/N6 in Mechatronics engineering/Electrical engineering (Light Current/C&I) with relevant experience > 1 years and <= 3 years **OR** • N5 in Mechatronics Engineering/Electrical Engineering (Light

						Current/C&I) with relevant experience > 3 years and <= 5 years **OR** • N4 in Mechatronics Engineering/Electrical Engineering (Light Current/C&I) with relevant experience >4 years and <=6 years **2** = **Non-compliant.** Submitted technicians' profiles with the following qualifications and work experience: • National Diploma/N6 in Mechatronics engineering/Electrical engineering (Light Current/C&I) with relevant

						experience >0 years and <= 1 years **OR** • N5 in Mechatronics Engineering/Electrical Engineering (Light Current/C&I) with relevant experience >= 1 year and < 3 years **OR** • N4 in Mechatronics Engineering/Electrical Engineering (Light Current/C&I) with relevant experience >=2 year and <=4 years

						0 = Totally deficient or non-responsive. No qualifications and work experience submitted
	3.4	The Tenderer to provide the qualifications and work experience details of an administrator in his service.	The tenderer must provide the following as evidence: • Verifiable qualifications. • Verifiable work experience. • Verifiable trainings. The trainings, work experience and qualifications should be in the maintenance, implementation, and commissioning of control and instrumentation systems. The summary can be provided in the form of a CV.	5	100	**5 = Compliant.** Submitted administrator profile with the following qualifications and work experience: • National Diploma/Higher Certificate in Administration with experience >=3 years **4** = **Compliant with associated qualifications**. Submitted administrator profile with the following qualifications and work experience: • National Diploma/Higher Certificate in

						Administration with experience >=1 year and <3 years **2** = **Non-compliant.** Submitted technicians' profiles with the following qualifications and work experience: • Matric with Computer studies with experience >1 year **0 = Totally deficient or non-responsive.** Matric with no experience.
	3.5	The Tenderer to provide the qualifications and work experience details of a safety officer in his service.	The tenderer must provide the following as evidence: • Verifiable qualifications.	5	100	**5 = Compliant.** Submitted safety officer profile with the following qualifications and work experience:

			• Verifiable work experience. • Verifiable trainings. The trainings, work experience and qualifications should be in the maintenance, implementation, and commissioning of control and instrumentation systems. The summary can be provided in the form of a CV.			• National Diploma in Safety Management with experience >=3 years **4** = **Compliant with associated qualifications**. Submitted safety officer profile with the following qualifications and work experience: • National Diploma in Safety Management with experience >=1 year and <3 years **2** = **Non-compliant.** Submitted technicians' profiles with the following qualifications and work experience:

						• National Diploma in Safety Management with experience <1 year **0 = Totally deficient or non-responsive.** No qualification submitted.
	3.6	The Tenderer to provide the qualifications and work experience details of the Project manager in his service.	The tenderer must provide the following as evidence: • Verifiable qualifications. • Verifiable work experience. • Verifiable trainings. The trainings, work experience and qualifications should be in the maintenance, implementation, and commissioning of control and instrumentation systems. The summary can be provided in the form of a CV.	5	100	**5 = Compliant.** Submitted a Project Manager profile with the following qualifications and work experience: • Degree/B-Tech in Project Management and at least 3 years experience in Maintenance industry. **OR** • National Diploma in Project Management and at least 5 years or more

						experience in Maintenance industry. **OR** • Technical qualification (N6, N-Dip, B-Tech, Beng) in Electrical Engineering(Light Current)/ Electronic Engineering/ Mechatronics, and Professionally registered with SACPCMP or PMP and at least 7 years experience in Maintenance industry. **4** = **Compliant with associated qualifications**. Submitted a Project Manager profile with the

						following qualifications and work experience: • N6 in Project Management and at least 7 years experience in Maintenance industry. **OR** • Technical qualification (N6, N-Dip, B-Tech, Beng) in Electrical Engineering (Light Current)/ Electronic Engineering/ Mechatronics, and Professionally registered with SACPCMP or PMP and at least 5 years experience in Maintenance industry.

						2 = **Non-compliant.** Submitted a Project Manager profile with the following qualifications and work experience: • Matric certificate and at least 7 years experience in Maintenance industry. **0 = Totally deficient or non-responsive.** No qualification and work experience submitted
				TOTAL: 100		

3.5 TET MEMBER RESPONSIBILITIES

Table 5: TET Member Responsibilities

Mandatory Criteria Number	TET 1	TET 2
1	X	X
2	X	X
3	X	X
4	X	X
Qualitative Criteria Number	**TET 1**	**TET 2**
1	X	X
2	X	X
3	X	X
4	X	X

3.7 FORESEEN ACCEPTABLE / UNACCEPTABLE QUALIFICATIONS

3.7.1 Risks

Table 6: Acceptable Technical Risks

Risk	Description
1.	Employment of new technicians who might lack the experience once the contract has been awarded.
2.	Resignation of current technicians after the contract has been awarded.

Table 7: Unacceptable Technical Risks

Risk	Description
1.	Resignation of the supervisor without an immediate suitable replacement after the contract has been awarded.
2.	Resignation of senior technicians without an immediate suitable replacement after the contract has been awarded.

3.7.2 Exceptions / Conditions

N/A

4. AUTHORISATION

This document has been seen and accepted by:

Designation
System Engineer
Senior Supervisor
C&I Engineering Manager
C&I Maintenance Manager
Engineering Manager

5. REVISIONS

Date	Rev.	Remarks
February 2026	1	Maintenance contract placement for C&I field instrumentation.
April 2026	2	Added a Project Manager requirement

6. DEVELOPMENT TEAM

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

C&I Engineering Team

7. ACKNOWLEDGEMENTS

N/A

8. APPENDIX A

	Requirement	*To be completed by the Tenderer*		(For use by the Evaluation Team only)
		Is this requirement met? Yes/No	**Tenderer's technical substantiation or references to technical substantiation**	
	FORM 2_T: Skills Assessment			
i.	Use of hand and power tools, such as pipe bender, pipe cutter, spanners, crimpers, etc.			
ii.	Use of instruments test equipment such as multi-meter, signal generators, temperature dry block, configuration tools with or without HART protocol etc.			
iii.	Calibration/verification and maintenance of process instruments using process test equipment dry block and signal generators etc.			
iv.	Knowledge, understanding and application of: -			

	• Flow measurements (Using differential pressure and orifice plate, magnetic flow, Coriolis flow, ultrasonic etc).			
v.	Knowledge, understanding and application of: - • Pressure measurements (Guage, absolute pressure etc).			
vi.	Knowledge, understanding and application of: - • Level measurements (Using differential pressure, ultrasonic, radar, magnetic switch and buoyancy).			
vii.	Knowledge, understanding and application of: - • Temperature measurements devices (RTD, Thermocouple, Thermopiles etc).			
viii.	Knowledge, understanding and application of Pneumatic valves functionality (including electro-pneumatic positioners)			
ix.	Knowledge, understanding and application of electrically driven actuators.			
x.	Knowledge, understanding and application of: -			

	• Linear Variable Displacement instruments principle of operation.			
xi.	Knowledge, understanding and application of: - • Eddy current instruments principle of operation.			
xii.	Knowledge, understanding and application of: - • Weighing systems to measure force or weight (load cells).			
xiii.	Knowledge, understanding and application of: - • Reading and understanding of loop and schematic drawings (a simplified normal loop from the field up to the DCS I/O and back to the final control element.). • 4-20 analog signal used in industrial process control to transmit data from sensors to control systems and from the control system to the final control element.			

	• Different types of I/O's (analog input, analog output, digital input and digital output).			
xiv.	Knowledge, understanding and application of: - • Reading and understanding electrical interlock drawings (interface with electrical devices from DCS to switchgear and vice versa).			
xv.	Knowledge, understanding and application of: - • Distributed control system (DCS), (basic components used to complete the DCS).			
xvi.	Knowledge, understanding and application of: - • Boiler protection systems, (basic components used on the system and how it differs from the DCS).			
xvii.	Knowledge, understanding and application of: - • Turbine Control and Protection systems (basic components used on the system and how it differs from the DCS).			

xviii.	Knowledge, understanding and application of: - • Programmable logic controller (basic components used on the PLC system).			
xix.	Knowledge of conveyer belts protection system.			