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Title: **TENDER EVALUATION CRITERIA
FOR SF6 GAS HANDLING PLANT
AND STORAGE EQUIPMENT**

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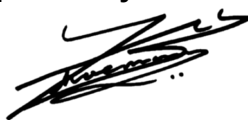
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1. Introduction

This document is aimed at setting the standard technical evaluation criteria to be used when evaluating the tender submissions. This covers the technical evaluation on all SF6 Gas handling plant and storage equipment to be used on High Voltage equipment within NTCSA inside the Gas Insulated Substation. Supporting clauses

1.1 Scope

1.1.1 Purpose

The report is produced to record the outcomes of the technical evaluation as well as to advise the cross functional team about the outcome of the technical evaluation.

1.1.2 Applicability

This document shall apply to NTCSA.

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] 240-50807380 – Specification for Gas Insulated Switchgear (GIS) and associated auxiliary equipment.
- [2] 32-1034, Eskom procurement and supply management procedure.
- [3] 240-48929482 – Tender Engineering Evaluation Procedure

1.2.2 Informative

None

1.3 Definitions

1.3.1 General

Definition	Description
Cross Functional Team	A team of experts who specialise in different fields, which is assembled to work towards achieving a goal.
Enquiry	A competitive or non-competitive request for information, interest, quotations, or proposals made to a supplier, a group of suppliers or the market at large.
Submission	The tender in accordance with the requirements of the enquiry.
Technical Evaluation Team (TET) Member	The delegated engineers / technical specialists who are responsible to review and evaluate technical aspects of the tender documentation as per the Tender Technical Evaluation Strategy.
Technical Evaluation	Tests or studies conducted to investigate and determine the technical suitability of equipment, material, product, process, or system for the intended objectives.

1.3.2 Disclosure classification

Controlled Disclosure

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1.4 Abbreviations

Abbreviation	Description
GIS	Gas Insulated Switchgear
SF6	Sulphur Hexafluoride
OEM	Original Equipment Manufacturer
TET	The delegated engineers / technical specialists who are responsible to review and evaluate technical aspects of the tender documentation as per the Tender Technical Evaluation Strategy.

1.5 Roles and responsibilities

The role of the technical team is to:

- Evaluate submissions as per the technical standard and the technical evaluation standard.
- Compile a technical evaluation report based on the outcomes of the technical evaluation.
- Communicate the outcomes of the technical evaluation to the cross functional team.

1.6 Process for monitoring

Not applicable.

1.7 Related/supporting documents.

Complete comprehensive specification sheet.

2. Evaluation Principal

The evaluation will be carried out on all submissions as per the guidelines. The exercise is purely a desktop exercise and evaluates the submitted documents to see if the offered product meets NTCSA's evaluation requirements.

The TET members will work through all submissions from prospective suppliers and evaluated each item to determine whether the stipulated requirements are met. The technical documents required to do the technical evaluation will consist out of a comprehensive specification sheet for the relevant tendered equipment.

The desktop evaluation has a maximum score of 100 percentage points. Out of the 100 percentage points, 100 percentage points are based on documentation.

Documentation scoring is based on information submitted in the tender schedules as well as other documents (drawings). Bidder must meet all the mandatory requirements in Phase I and then score a minimum of **90** points/percentage in Phase II.

3. Evaluation process

The criterion will be applied uniformly across all bidders and the outcomes of each supplier evaluation are given in subsequent sections. NB: Suppliers will be listed in alphabetic order.

4. Tender technical evaluation strategy

4.1 Technical evaluation threshold

Mandatory Technical Evaluation Criteria (gatekeepers) are 'must meet' criteria. These criteria shall not be weighted, or point scored but shall be assessed on a Yes/No basis as to whether the criteria are met. An

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assessment of 'No' against any criteria shall technically disqualify the tenderer and shall not be further evaluated against Qualitative Criteria.

Qualitative Evaluation Criteria are weighted evaluation criteria used to identify the highest ranked tenderer after determining that all the Mandatory Evaluation Criteria have been met. The Qualitative Evaluation Criteria are weighted to reflect the relevant importance of each criterion.

The minimum weighted final score (threshold) required for a tender to be considered from a complete perspective is 90%. The following scoring method will be used for Phase I and Phase II:

4.2 Phase I (Mandatory Evaluation Criteria)

LIST OF COMPULSORY REQUIREMENTS ON GAS HANDLING PLANT	YES	NO
1. Additional coupling must be included to allow for simultaneous gas recovery/filling and air evacuation processes.		
2. Independent pressure and vacuum unit adjustability.		
3. Local Service Support A South African-based service centre must be provided and will be responsible for the following support services:		
Stocking of spare parts for the supplied SF6 service unit.		
Full local servicing and repair capabilities, including pressure testing of tanks and recalibration of valves.		
Provision of technical field support (operational, electrical, and mechanical) for the supplied unit.		
Capability to provide certification training specific to the supplied unit.		

Based on the above outcome, only tenderers adhering to all mandatory fields will proceed to Phase II below.

The weight for the technical review in Phase II, will be 100 % with a minimum threshold of 90%.

4.3 Phase II (Qualitative Evaluation Criteria)

Point	Criteria	Weight
1.	Compressor and Pumping System	20
1.1	Oil-free compressor with a delivery rate exceeding 18 m ³ /h at 50 Hz.	7
1.2	Oil-free suction pump for SF6 gas recovery with a capacity exceeding 33 m ³ /h at 50 Hz, capable of achieving a final vacuum below 1 mbar.	7
1.3	Vacuum pump for air evacuation with a capacity greater than 60 m ³ /h at 50 Hz and capable of reaching a vacuum level of less than 1 mbar.	6

2.	Gas Handling and Filtration	15
2.1	Evaporator for SF6 gas filling with a maximum flow rate exceeding 180 kg/h	5
2.2	Integrated dry filter with a water absorption capacity greater than 170 g at a dew point of -36°C or better.	5
2.3	In-line particle filter with filtration capacity of 1 µm	5
3.	Weighing System	5
3.1	Digital weighing scales for SF6 cylinders, range: 0 – 120 kg, with automatic function switching and tare functionality. Accuracy of ± 20 g is required	5
4.	Couplings and Hoses	10
4.1	Parallel-connected couplings: DN20 and DN40.	5
4.2	5-meter storage connecting hose DN8, fitted with DN20 tongue part coupling and five (5) different cylinder connection types.	5
5.	Control and Indication	20
5.1	Touch panel interface of at least 10" in size	5
5.2	Tiltable screen for height adjustment	5
5.3	Lockable protective cover to shield against sunlight and physical damage	5
5.4	Vacuum indication range from 0 to 100 mbar, with a minimum resolution of 0.1 mbar.	5
6.	Mechanical and Handling Features	25
6.1	Forklift-compatible design provisions.	5
6.2	Crane lifting eyelets integrated into the frame.	5
6.3	Fixing and steerable rollers to facilitate easy mobility and stable operation	5
6.4	Lockable drawer for secure storage of tools, adapters, and hoses.	5
6.5	Supplied with necessary wrenches for couplings and filters.	5
7.	Finishing and Coating	5
7.1	Unit to be powder-coated for protection against corrosion and wear	5
Possible Score		100

5. Evaluators Information

Name	Signature	Date

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6. Conclusion

On completion of the prescribed tender evaluation, a complete registered report will be compiled to indicate to the Procurement department of the outcome.

7. Authorization

This document has been seen and accepted by:

Name and surname	Designation
B Ntshangase	Senior Manager - AM
F Schoeman	Senior Consultant - AM SE&D HVP GIS
T Njoti	Snr Advisor – Southern Grid

8. Revisions

Date	Rev	Compiler	Remarks
October 2025	1	T Njoti	New document

9. Development team

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

- F Schoeman (SE&D)
- T Njoti (Southern Grid)

10. Acknowledgements

N/A