Eskom	Report	Technology

Title: **TECHNICAL EVALUATION CRITERIA FOR MV PRIMARY INDOOR SWITCHGEAR**

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1. Introduction

This document has been developed to set the standard technical evaluation criteria to be used when performing MV indoor primary switchgear tender evaluations for both withdrawable air insulated type switchgear and fixed pattern type switchgear. It has annexures developed to address various aspects required to perform the technical evaluation per individual switchgear type and has been developed based on the Eskom MV Indoor Primary Switchgear specifications.

This document contains both the evaluation criteria used for the documentation evaluation and factory evaluation. In addition it contains the technical evaluation structure.

2. Supporting Clauses

2.1 Scope

The document covers the criteria for the evaluation of MV indoor primary switchgear within Eskom Holdings SOC Limited (Ltd).

2.1.1 Purpose

The document addresses the standard documented technical evaluation criteria to be used when evaluating the tender submissions for MV indoor primary switchgear in line with the Eskom Holdings SOC Limited (Ltd) requirements and it is applicable to all stages of the technical evaluations for the related tender submissions.

2.1.2 Applicability

This document is applicable to Eskom Holdings SOC Limited.

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] SANS 62271-100: High-voltage switchgear and control gear - Part 100: High voltage alternating-current circuit-breakers.

[2] SANS 62271-102: High-voltage switchgear and control gear - Part 102: High-voltage alternating current disconnectors and earthing switches.

[3] SANS 62271-200: High-voltage switchgear and control gear - Part 200: AC metal-enclosed switchgear and control gear for rated voltages above 1 kV and up to and including 52 kV.

[4] 240-56065131 Rev 3: The Dx and Tx specification for 11 kV, 22 kV and 33 kV withdrawable indoor metal enclosed switchgear.

[5] 240-56062704 Rev 3: The Dx and Tx specification for 11 kV, 22 kV and 33 kV fixed pattern metal enclosed indoor primary switchgear standard.

[6] 240-56063705: Requirements for the Wiring of Indoor Switchgear from 11kV up to and Including 33kV Standard.

[7] 240-56065202: Switchgear Training Requirements from Original Equipment Manufacturers standard.

[8] 240-75655504: Corrosion protection standard for new indoor and outdoor eskom equipment, components, materials and structures manufactured from steel standard

[9] D-DT-5408: Wiring of indoor switchgear.

[10] D-DT-5238: National standard combo control building detail plans (various types), sections & elevations.

[11] D-DT-8010: Surge arrester distribution class 6.6 kV, 11 kV, 22 kV and 33 kV polymer – indoor.

[12] D-DT-8019: Clamp, cable polypropylene.

[13] D-DT-8027: Grommet, cable rubber.

2.2.2 Informative

[14] 32-9: Definition of Eskom documents.

[15] 32-644: Eskom documentation management standard.

[16] 474-65: Operating manual of the Steering Committee of Technologies (SCOT).

[17] OHSA 85 of 1993: Occupational Health and Safety act No 85 of 1993

[18] NRS 040 – 3 2007: High Voltage Operating Regulations Part 3: Model regulations

[19] ISO 9001: Quality Management Systems.

2.3 Definitions

2.3.1 General

Definition	Description
Eskom evaluating representative(s):	The person(s) appointed by Eskom to perform the evaluation of tender submission(s) in line with the Eskom requirements.
Eskom self build projects	These are projects which are constracted by private companies in accordance with Eskom's requirements; and they are handed over to Eskom for operating and maintenance e.g developer projects, IPPs and etc.

2.3.2 Disclosure Classification

Confidential: the classification given to information that may be used by malicious/opposing/hostile elements to harm the objectives and functions of Eskom Holdings Limited.

2.4 Abbreviations

Abbreviation	Description
A-FLR	A-(operator safety), Front, Lateral, Rear
FAT	Factory Acceptance Tests
IAC	Internal Arc Classification
ILAC	International Laboratory Accreditation Cooperation
kV	Kilo Volt
MRA	Mutual Recognition Arrangement
MV	Medium Voltage
OEM	Original Equipment Manufacturer
TET	Technical Evaluation Team

2.5 Roles and Responsibilities

All Eskom employees and/or appointed bodies involved in the procurement of MV indoor primary switchgear shall ensure that the deliverables meet the requirements of these technical evaluation criteria.

2.6 Process for monitoring

The acceptance of the MV indoor primary switchgear shall be based on the evaluation of the fully compliant documentation submission, factory evaluations and the exact replica factory sample evaluations for each MV indoor primary switchgear item offered.

2.7 Related/Supporting Documents

Refer to clause 2.2.

3. Requirements

This document contains the technical evaluation criteria for MV indoor primary switchgear to be used in Eskom Distribution and Transmission (where required). The evaluation methodology will include two main stages, namely the documentation evaluation and factory evaluations.

This document covers the different aspects that will be evaluated and scored by Technical Evaluation Team (TET) to complete the technical evaluation of the MV indoor primary switchgear enquiry. Tenderers who have successfully passed the Mandatory Evaluation Criteria will be notified to prepare for factory evaluation. The document also describes the acceptable and unacceptable risks and qualifications and /or conditions.

The Technical Evaluation Strategy will define the following technical evaluation criteria:

- Mandatory Evaluation Criteria,
- Qualitative Evaluation Criteria,
- OEM Factory Evaluation Criteria,
- Local Factory Evaluation Criteria, and
- Factory Sample Evaluation

3.1 Documentation

The documentation evaluation exercise is performed by the appointed Eskom Technical Evaluation Team (TET) members. This initial part of the evaluation starts when technical submissions are opened and assessed for the first time. The submitted documents will be evaluated against the evaluation criteria as stated in clause 3.2 of this document.

The documentation evaluation will consist of two phases: Mandatory Technical Evaluation Criteria and Qualitative Technical Evaluation Criteria. Failure to submit all mandatory documents required will lead to immediate disqualification. Tenderers who are successful on the Mandatory Technical Evaluation Criteria will proceed to the Qualitative Technical Evaluation Criteria where they will be required to score 70% threshold to proceed to OEM Factory and Local Factory Evaluation.

3.2 Technical Evaluation Criteria for the Documentation Evaluation Stage

This technical evaluation criteria shall be divided into two sections: Mandatory Technical Evaluation Criteria and Qualitative Technical Evaluation Criteria. The two types of indoor switchgear (Fixed pattern switchgear and Technical evaluation criteria for withdrawable switchgear) shall be evaluated on separate evaluation sheets by using the same technical evaluation clause as stated through this document.

3.2.1 Mandatory Technical Evaluation Criteria MV Indoor Primary Switchgear

Tenderers will be required to fully comply with all the requirements/ criteria as stated in table 1 below to proceed to Qualitative Technical Evaluation Criteria.

Table 1: Mandatory Technical Evaluation Criteria for MV indoor primary switchgear

Nr	Mandatory Technical Criteria Description	Clause For Fixed Pattern MV Indoor Switchgear	Clause For Withdrawable MV Indoor Switchgear	Motivation For Use Of Criteria	Acceptance (Yes/No)
1	Is a detailed covering letter containing a list of all MV indoor primary switchgear items (refer list submitted to tenderes) offered by tenderer submitted?	As per tender list of items.	As per tender list of items.	To identify all items offered by the tenderer	
2	Is a full list as well as complete English copies of all type test reports as per the specification requirements submitted?	SANS/IEC 62271-200 & 240-56062704 Rev 3	SANS/IEC 62271-200 & 240-56065131 Rev 3	Assurance of quality product. Verification of laboratory accreditation.	
3	Has proof of the tests laboratory's accreditation by an accreditation body that is a full ILAC member as well as proof that the accreditation body is an MRA signatory of ILAC been submitted?	SANS/IEC 62271-200& 240-56062704 Rev 3	SANS/IEC 62271-200 & 240-56065131 Rev 3	Verification of laboratory accreditation.	
4	Are the generic routine test certificates for each panel type submitted?	SANS/IEC 62271-200& 240-56062704 Rev 3	SANS/IEC 62271-200 & 240-56065131 Rev 3	Assurance of quality product.	
5	Are the MV indoor primary switchgear IAC-A-FLR Videos for the busbar, circuit breaker and cable compartments for each panel type and/or rating offered submitted?	SANS/IEC 62271-200& 240-56062704 Rev 3	SANS/IEC 62271-200 & 240-56065131 Rev 3	Assurance of quality product.	

Nr	Mandatory Technical Criteria Description	Clause For Fixed Pattern MV Indoor Switchgear	Clause For Withdrawable MV Indoor Switchgear	Motivation For Use Of Criteria	Acceptance (Yes/No)
6	Are the completed excel summary of the type test schedules submitted per panel type offered?	Tools, spares, drawing and Type Test schedule (provided in an excel format)	Tools, spares, drawing and Type Test schedule (provided in an excel	Assurance of quality product.	
7	Is the completed pdf summary of the type test schedules submitted per panel type offered?	Test schedules (provided in an excel format)	Test schedules (provided in an excel format)	Assurance of quality product.	
8	Is the completed excel summary of drawings and part number schedule submitted per panel type offered?	Test schedules (provided in an excel format)	Test schedules (provided in an excel format)	Assurance of quality product.	
9	Is the completed pdf summary of drawings and part number schedule submitted per panel type offered?	Tools, spares, drawing and Type Test schedule (provided in an excel format)	Tools, spares, drawing and Type Test schedule (provided in an excel format)	Assurance of quality product.	
10	Are the completed excel technical schedules A&B for each panel type and rating submitted?	Technical Schedule A&B (provided in an excel format)	Technical Schedule A&B (provided in an excel format)	Assurance of quality product.	
11	Are the completed pdf technical schedules A&B for each panel type and rating submitted?	Technical Schedule A&B (provided in an excel format)	Technical Schedule A&B (provided in an excel format)	Assurance of quality product.	
12	Is a full list of operating tools submitted with the related drawings per panel type?	Tools, spares, drawing and Type Test schedule (provided in an excel format)	Tools, spares, drawing and Type Test schedule (provided in an excel format)	Assurance of operability.	
13	Is a full list of spares required for maintenance submitted with the related drawings per panel type?	Tools, spares, drawing and Type Test schedule (provided in an excel format)	Tools, spares, drawing and Type Test schedule (provided in an excel format)	Assurance of implementation of maintenance.	
14	Is a detailed list of additional specialised tools for major (specialised) maintenance submitted with the related drawings per panel type?	Tools, spares, drawing and Type Test schedule (provided in an excel format)	Tools, spares, drawing and Type Test schedule (provided in an excel format)	Assurance of implementation of maintenance.	
15	Are the unique manufacturing product code, voltage ratings and current withstand ratings for each panel type and main component offered submitted?	Tools, spares, drawing and Type Test schedule (provided in an excel format)	Tools, spares, drawing and Type Test schedule (provided in an excel format)	Assurance of procurement of OEM spares required for the switchgear.	

Nr	Mandatory Technical Criteria Description	Clause For Fixed Pattern MV Indoor Switchgear	Clause For Withdrawable MV Indoor Switchgear	Motivation For Use Of Criteria	Acceptance (Yes/No)
16	Are a full set of the MV indoor primary switchgear general arrangement (GA) drawings submitted per panel type offered?	240-56062704 Rev 3 Clause 3.19	240-56065131 Rev 3 Clause 3.21b)	Assurance of quality product.	
17	Are details of drawings showing the generic layout of all the nameplates submitted per panel type?	240-56062704 Rev 3 clause 3.19 d)	240-56065131 Rev 3 Clause 3.21c)	Assurance of quality product.	
18	Are generic auxiliary and control circuit schematic wiring diagrams for each panel type and rating submitted?	240-56062704 Rev 3 clause 3.15 and 3.19 e) & 240-56063705	240-56065131 Rev 3 Clause 3.15, 3.16 and 3.21c) & 240-56063705	Assurance of quality product.	
19	Are the transport manuals in English submitted?	240-56062704 Rev 3 clause 3.22.1	240-56065131 Rev 3 Clause 3.24	Assurance of proper transportation.	
20	Are the storage manuals in English submitted?	240-56062704 Rev 3 clause 3.22.1 b)	240-56065131 Rev 3 Clause 3.24b)	House keeping requirements.	
21	Are the installation manuals in English submitted?	240-56062704 Rev 3 clause 3.22.1 b)	240-56065131 Rev 3 Clause 3.24b)	Assurance of proper instalation.	
22	Are the operating manuals in English submitted?	240-56062704 Rev 3 clause 3.22.1 b)	240-56065131 Rev 3 Clause 3.24b)	Assurance of proper operating.	
23	Are the maintenance manuals in English submitted?	240-56062704 Rev 3 clause 3.26	240-56065131 Rev 3 Clause 3.24b)	Assurance of implementation of maintenance.	
24	Is the manufacturing address, country and company name for all main components offered submitted?	Tools, spares, drawing and Type Test schedule (provided in an excel format)	Tools, spares, drawing and Type Test schedule (provided in an excel format)	Evidence of existence of manufacturing plant.	
25	Is the manufacturing address, country and company name for the final panel assembly offered and routine testing location submitted?	Tools, spares, drawing and Type Test schedule (provided in an excel format)	Tools, spares, drawing and Type Test schedule (provided in an excel format)	Evidence of existence of manufacturing plant.	

Nr	Mandatory Technical Criteria Description	Clause For Fixed Pattern MV Indoor Switchgear	Clause For Withdrawable MV Indoor Switchgear	Motivation For Use Of Criteria	Acceptance (Yes/No)
26	Is a drawing for a customised steel support frame/base provided? The purpose of the steel support frame/base is to allow the switchgear panels to be supported and be level over the entire width of the cable trench?	240-56062704 Rev 3 clause 3.7.1e)	240-56065131 Rev 3 Clause 3.7.1c) and clause 3.21	Steel base frame assist switchgear panels to be aligned and level even if the floor is not level. And this will ensure quality installation.	
27	Is a proposal for MV primary indoor switchgear training submitted?	240-56062704 Rev 3 clause 3.19n), 3.19o), 3.32 and 240-56065202	240-56065131 Rev 3 Clause 3.34 and 240-56065202	To ensure implementation of training to the Eskom personnel.	
28	Is a written commitment submitted? The commitment to indicate that the required maintenance training will be recorded and provided to Eskom in a VIDEO format for record and future use purposes (refer to 3.29).	240-56062704 Rev 3 Clause 3.19o) and and 240-56065202	240-56065131 Rev 3 Clause 3.21n) and 240-56065202	To ensure future training.	
29	Any “NO” on the above shall lead to immediate disqualification.				

3.2.2 Qualitative Technical Evaluation Criteria MV indoor primary switchgear

Tenderers will be required to score a minimum of 70% from table 2 to proceed to factory evaluation.

Table 2: QualitativeTechnical Evaluation Criteria

QualitativeTechnical Evaluation Criteria for MV Primary indoor switchgear: only submissions that passed the mandatory technical evaluation criteria for MV Primary Indoor switchgear				
1	**Type Test and Routine test reports. Weight: 40**			
Nr	**Criteria**	**Clause**	**Weight**	**Score**
1.1	Were type tests performed in the last 10 years? Note: For Type testing performed within the last 10 Years supplier gets full points, and loses 0.5 point for each additional year (for the respective question above). The oldest submitted type test report shall be used for negative marking.	SANS/IEC 62271-200 and 240-56062704 Rev 3 or 240-56065131 Rev 3	3	

Nr	Criteria	Clause	Weight	Score
1.2	Factory routine tests failure rate. (Number of MV indoor primary switchgear panel routine tests failed per year/number of MV indoor primary switchgear panels tested per year) – Figures must be auditable for the last 5 years. Note: Tenderer will get full points for failure rate < 5%, and loses 0.5 points for each additional percent.	SANS/IEC 62271-200 and 240-56062704 Rev 3 or 240-56065131 Rev 3	4	
1.3	Are the submitted type test reports complete and compliant in accordance with SANS/IEC 62271-200 and 240-56062704 rev 3 or 240-56065131 ? Note: Tenderer will get full points for complete and compliant type test reports; otherwise will loose all points.	SANS/IEC 62271-200 and 240-56062704 Rev 3 or 240-56065131 Rev 3	30	
1.4	Compliance to material, surface and adhesion test as specified in 240-75655504.	SANS/IEC 62271-200 and 240-56062704 Rev 3 or 240-56065131 Rev 3	3	
Total for Type Test and Routine test reports			/40	
2.	Technical Schedules. Weight 20			
Nr	**Criteria**	**Clause**	**Weight**	**Score**
2.1	Correctness of completion of technical schedule A&B i.e. no “TBA”, “Comply”, “Noted”, “supplied later” (“Noted” acceptable only when Eskom informs). Note: Negative marking is done and a penalty of 2 % for each correctness of completion deviation.	Technical schedules	5	
2.1	Does schedule B meet Eskom requirements. Note: Negative marking shall be applicable. Tenderer will loose 0.2 points for each deviation from Eskom schedule A requirements.	Technical schedules	10	
2.2	Completed technical deviations (Where applicable – 100 % score is obtained where there are no deviations). Note: Negative marking shall be applicable. Tenderer will loose 0.2 points for each documented deviation which will require additional evaluation.	Technical schedules	2	
2.3	Correctness of completion of tools, spares, drawing and type test schedule. Note: All or nothing. Tenderer will loose full points for incomplete and incorrect completion of the tools, spares, drawing and type test schedule.	Technical schedules	3	
Total technical Schedules			/20	

Nr	Criteria	Clause	Weight	Score
3	Technical drawings and diagrams. Weight 20			
3.1	Drawing number	240-56062704 Rev 3 or 240-56065131 Rev 3	0.5	
3.2	Revision number	240-56062704 Rev 3 or 240-56065131 Rev 3	0.5	
3.3	Detailed description provided in “Title”.	240-56062704 Rev 3 or 240-56065131 Rev 3	0.5	
3.4	Approved & date drawings	240-56062704 Rev 3 or 240-56065131 Rev 3	0.5	
3.5	Complete legend	240-56062704 Rev 3 or 240-56065131 Rev 3	0.5	
3.6	Busbar and main circuit rated current	240-56062704 Rev 3 or 240-56065131 Rev 3	0.5	
3.7	Critical dimensions/information including the following: • overall panel dimensions (0.5), • location and overall dimensions of various compartments as defined in this specification (0.5), • location of internal arc pressure relief flaps (0.5),, • position of earth terminals or bars (0.5), • location of compartment heaters (0.5), and • minimum design creepage distance for all components in panels (indicating whether specific creepage distance or unified specific creepage distance) (0.5).	240-56062704 Rev 3 or 240-56065131 Rev 3	3	
3.8	Incomer panel drawings shall show the following additional information: • cable compartment overall dimensions (0.2), • position of vermin proof plates, cable support clamps and rubber grommets (0.4), • distance from cable support clamps to terminal fixing centre line (0.2), • spacing between cable terminal fixing points (phase to phase and phase to earth) (0.2), • number of cable terminal fixing points (busbar flags) per phase (0.2), • location of surge arresters and dedicated fixing points (busbar flags) (0.5), • location of CTs (0.2), • location of cable termination earth terminals or bars (0.2), • cable trench overhang dimensions (0.2),	240-56062704 Rev 3 or 240-56065131 Rev 3	3.5	

Nr	Criteria	Clause	Weight	Score
	• minimum width of cable trench required (0.2), • minimum distance required from the rear of the panel to rear switch room wall (0.5), and • location of cable earthing switch (0.5).			
3.9	Feeder panel drawings shall show the following additional information: • cable compartment overall dimensions (0.25), • position of vermin proof plates, cable support clamps and rubber grommets (0.25), • distance from cable support clamps to terminal fixing centre line (0.25), • spacing between cable terminal fixing points (phase to phase and phase to earth) (0.25), • number of cable terminal fixing points (busbar flags) per phase (0.25), • location of surge arresters and dedicated fixing points (busbar flags) (0.25), • location of CTs (0.25), • location of cable termination earth terminals or bars (0.25), • cable trench overhang dimensions (0.25), • minimum width of cable trench required (0.25), • minimum distance required from the rear of the panel to rear switch room wall (0.25), and • location of cable earthing switch (0.25).	240-56062704 Rev 3 or 240-56065131 Rev 3	3.0	
3.10	Circuit-breaker panel drawings shall show the following additional information: • location of circuit-breaker and operating mechanism (0.25), • location of mechanical trip button (0.25), • location of status indication on circuit-breakers and earthing switches (0.25), and • location of the orifice shutters (0.25).	240-56062704 Rev 3 or 240-56065131 Rev 3	1.0	
3.11	VT and CPAT panel drawings shall show the following additional information: • location of VT and CPAT (where applicable) (0.5); and • location of busbar earthing switch (VT panel or with integral earthing switch) (0.5).	240-56062704 Rev 3 or 240-56065131 Rev 3	1.0	
3.12	Location of all mechanical operating tool insertion positions (as applicable for each panel type)	240-56062704 Rev 3 or 240-56065131 Rev 3	1.0	

Nr	Criteria	Clause	Weight	Score
3.13	Pannel colour coding.	240-56062704 Rev 3 or 240-56065131 Rev 3	0.5	
3.14	Location and layout of LV control cable gland plates	240-56062704 Rev 3 or 240-56065131 Rev 3	0.5	
3.15	Lifting eyes and transportation details - including required clearance above panel if lifted with crane.	240-56062704 Rev 3 or 240-56065131 Rev 3	0.5	
3.16	Mass of switchgear panel	240-56062704 Rev 3 or 240-56065131 Rev 3	0.5	
3.17	Location of panel nameplate; and	240-56062704 Rev 3 or 240-56065131 Rev 3	0.5	
3.18	Foundation / holding down bolt fixing details	240-56062704 Rev 3 or 240-56065131 Rev 3	0.5	
3.19	Drawings showing the generic layout of all the nameplates: • Panels (0.2), • Circuit-breakers (0.2), • CTs (0.2), • VTs (0.2), and • CPATs (0.2).	240-56062704 Rev 3 or 240-56065131 Rev 3	1.0	
3.20	Generic auxiliary and control circuit schematic wiring diagrams for each panel type and rating in accordance with 240-56063705. • Incomer panel (1.0), • Bus-section panel (1.0), • Feeder panel (1.0), • VT panel (where applicable) (1.0), and • CPT panel (where applicable) (1.0). **Note:** Full points will be awarded for panels not applicable for OEM's design.		5.0	
Note tenderer will get full points per clause above; or will loose full points for not meeting the respective clause.		Total technical drawings and diagrams	/20	
4	Manuals. Weight 10			
4.1	Transport manual	240-56062704 Rev 3 or 240-56065131 Rev 3		
4.2	Storage manual	240-56062704 Rev 3 or 240-56065131 Rev 3		

Nr	Criteria	Clause	Weight	Score
4.3	Installation manual	240-56062704 Rev 3 or 240-56065131 Rev 3		
4.4	Operating manual	240-56062704 Rev 3 or 240-56065131 Rev 3		
4.5	Maintenance manual	240-56062704 Rev 3 or 240-56065131 Rev 3		
4.6	Training material	240-56062704 Rev 3 or 240-56065131 Rev 3		
Note: Negative marking and supplier loses 5 % for each deviation from Eskom specification.		Total for manuals	/10	
5	Other technical requirements and information. Weight 10			
5.1	If applicable details regarding the procedure for the on-site replacement of a damaged/faulted panel in a switchboard, including the necessary in-situ gas-work,	240-56062704 Rev 3 or 240-56065131 Rev 3	1.0	
5.2	Details of internal arc pressure relief / absorption / cooling devices and ducting – where applicable,	240-56062704 Rev 3 or 240-56065131 Rev 3	1.0	
5.3	Details of steel support frame / base for installation of panels over the cable trench,	240-56062704 Rev 3 or 240-56065131 Rev 3	1.0	
5.4	Auxiliary wiring diagrams indicating all required wiring circuits (RTU circuit),	240-56062704 Rev 3 or 240-56065131 Rev 3	0.5	
5.5	Details regarding the VT protection offered to prevent ferro-resonance,	240-56062704 Rev 3 or 240-56065131 Rev 3	0.5	
5.6	If applicable details of the means offered to disconnect the VT from the busbar,	240-56062704 Rev 3 or 240-56065131 Rev 3	1.0	
5.7	Quality control plans indicating all inspection hold points,	240-56062704 Rev 3 or 240-56065131 Rev 3	1.0	
5.8	Details of equipment requiring maintenance during storage,	240-56062704 Rev 3 or 240-56065131 Rev 3	0.5	
5.9	A written commitment from the supplier regarding the submission of the maintenance DVD,	240-56062704 Rev 3 or 240-56065131 Rev 3	2.0	
5.10	Spares availability philosophy, and	240-56062704 Rev 3 or 240-56065131 Rev 3	1.0	
5.11	Data sheet for the surge arresters offered where applicable.	240-56062704 Rev 3 or 240-56065131 Rev 3	0.5	
Note: tenderer will get full points per clause above; or will loose full points for not meeting the respective clause. **Note**: Clause will be waivered if requirements are not applicable to the offered switchgear type; thus applicable full points will be awarded.		Total for other technical requirements and information	/10	
Tenderers will be required to score a minimum of 70% to proceed to factory and factory sample evaluation.		Grand total for QualitativeTechnical Evaluation Criteria		Total/100

3.3 Factory Evaluation

The factory evaluations shall only be performed on the submissions that have achieved a minimum score of 70% Qualitative Technical Evaluation Criteria. Eskom Commercial shall make the arrangements for factory visits and ensure the companies are notified and the TET members are invited in time. Factory evaluation shall consist of two phases ie: OEM Factory evaluation and Local factory evaluation.

3.3.1 OEM Factory evaluation

The OEM factory evaluation shall be perfomed at main components manufacturing locations (i.e busbar, switch-disconnectors, vacuum circuit breaker, gas or air insulated compartments, SF6 filling if applicable, etc) and also the assembly manufacturing evaluation (i.e. Metal work, labelling, wiring, painting, etc) as indicated by the tenderer during tender submission.

The following areas shall be assessed during the main components manufacturing evaluation:

a) Research, test and development: the OEM Engineering department where the design of the switchgear is performed.

b) Production process and critical check points.

c) Material handling and storage.

d) Machinery capability.

e) Testing facilities including certification and calibration of testing equipment.

f) Routine testing procedures.

g) Packaging of materials.

h) Components sample evaluation used for manufacturing both withdrawable and fixed pattern units where applicable. Exact records and replica on what the supplier shall be supplying if awarded the tender is required for the evaluation.

At the end of this exercise, the Eskom evaluating representative(s) list all the deviations, if any. The representative conducts a formal discussion of the deviations in line with Eskom's requirements. If major discrepancies are identified the supplier will be disqualified. For minor discrepancies, the Tenderer and their OEM are given opportunity to decide whether they agree or disagree to meet Eskom requirements upon contract award. The action plans for resolving the discrepancies will be agreed between Eskom representative(s) and the supplier. At the end, the Eskom, Tenderer/Vendor and OEM representatives sign the evaluation document which continues to be used for concluding the Technical Evaluation report. Where the Tenderer and OEM agreed to meet Eskom requirements, all of these form part of the contract and verification afterwards.

3.3.2 Local Factory evaluation

The local factory evaluations will only be performed on the submissions that have achieved a minimum score of 70% Qualitative Technical Evaluation Criteria and have concluded the OEM Factory evaluation. Eskom Commercial shall make the arrangements for local factory visits and ensure the companies are notified and the TET members are invited in time.

The following areas shall be assessed during the local factory evaluation:

a) Research, test and development: the Local Engineering department where the design of the switchgear is performed.

b) Production process, assembling and critical check points.

c) Material handling and storage.

d) Machinery capability.

e) Testing facilities including certification and calibration of testing equipment.

f) Routine testing procedures.

g) Packaging of materials.

h) Components sample evaluation used for manufacturing both withdrawable and fixed pattern units where applicable. Exact records and replica on what the supplier shall be supplying if awarded the tender is required for the evaluation.

At the end of this exercise, the Eskom evaluating representative(s) list all the deviations, if any. The representative conducts a formal discussion of the deviations in line with Eskom's requirements. If major discrepancies are identified the supplier will be disqualified. For minor discrepancies, the Tenderer and their OEM are given opportunity to decide whether they agree or disagree to meet Eskom requirements upon contract award. The action plans for resolving the discrepancies will be agreed between Eskom representative(s) and the supplier. At the end, the Eskom, Tenderer/Vendor and OEM representatives sign the evaluation document which continues to be used for concluding the Technical Evaluation report. Where the Tenderer and OEM agreed to meet Eskom requirements, all of these form part of the contract and verification afterwards.

3.4 Factory Sample Evaluation

Factory Sample Evaluation shall be performed on the submissions that have achieved a minimum score of 70% Qualitative Technical Evaluation Criteria, have concluded the OEM Factory evaluation and have successfully concluded the Local Factory evaluation. The Factory Sample evaluations shall be the evaluation of the exact replica product that is offered to Eskom during tender.

A product range sample quantity allowance will be made by Eskom whereby each tenderer shall be required to prepare only one exact replica sample per product range type offered for Factory Sample Evaluations. It is required that the tenderer ensure that the required exact replica sample/s is/are in accordance with the Eskom aplicable indoor switchgear standard (240-56062704 Rev 3 or 240-56065131 Rev 3), are manufactured, assembled, functionally tested and ready for evaluation after Eskom has notified the tenderer that Eskom will proceed with Factory Evaluations and Factory Sample Evaluations. The Factory Sample Evaluation shall be performed at the respective supplier's final assembly of the MV primary indoor switchgear facilities in RSA.

The following areas shall be assessed during the Factory Sample Evaluation with the use of specific inspection check sheets:

a) Compliance to Eskom's standard,

b) Technical schedule compliance,

c) Drawing compliance,

d) Quality checks of assembled switchgear,

e) Functionality test of interlocks,

f) Witnessing and acceptance of all applicable sample tests,

At the end of this exercise, the Eskom evaluating representative(s) list all the deviations, if any. The representative conducts a formal discussion of the deviations in line with Eskom's requirements. If major discrepancies are identified the supplier may be disqualified. For minor discrepancies, the Tenderer and their OEM shall be given an opportunity to decide whether they agree or disagree to meet Eskom requirements upon contract award.

The action plans for resolving the discrepancies shall be agreed between Eskom representative(s) and the supplier. Where the Tenderer and OEM agreed to meet Eskom requirements, all of these shall form part of the contract and verification afterwards.

Note: The total cost for the manufacturing and preparation of the sample/s for Factoy Sample shall be for the tenderer.

3.5 Conclusion

This report is effective to specify the technical evaluation criteria for MV primary indoor switchgear to be used in Eskom. The tenderers are to comply with all the references stipulated in 2.2 of this document.

4. Authorisation

This document has been seen and accepted by:

Name and surname	Designation
Alex Ndlela	Senior Manager: Engineering
Mabatana Mariri	Senior Buyer: Commercial
Simphiwe Mbonambi	Senior Manager: Commercial

5. Revisions

Date	Rev	Compiler	Remarks
April 2021	1	Q Khumalo	New document

6. Development team

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

- Queeneth Khumalo
- Dyke Monyane

7. Acknowledgements

Not applicable