

 Eskom	Report	Technology
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Title: **TECHNICAL EVALUATION
CRITERIA FOR MV AND LV
CABLES**

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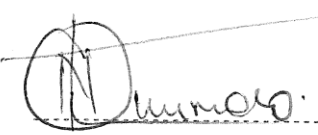


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1. Introduction

This document has been developed to set the standard technical evaluation criteria to be used when evaluating the tender submissions. This covers the technical evaluation on the medium voltage cables and low voltage cables for Eskom. It has clauses developed to address various aspects required to perform the technical evaluation. It has been developed based on the Eskom cable equipment specifications.

This document contains both the evaluation criteria used for the documentation evaluation and factory evaluation. In addition it contains the questions which are required for technical evaluation purposes.

2. Supporting clauses

2.1 Scope

The document covers the criteria for the evaluation of the medium voltage cables and low voltage cables within Eskom Holdings SOC (Ltd).

2.1.1 Purpose

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

2.1.2 Applicability

This document shall apply for Eskom Holdings Limited, Distribution, Transmission and Generation division wherein Eskom has a controlling interest.

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 National document(s)

- [1] SANS 97: Electric cables – Impregnated-paper insulated metal-sheathed cables for rated voltages 3,3/3,3 kV up to 19/33 kV.
- [2] SANS 1339: Cross-linked polyethylene (XLPE) – insulated cables for voltages from 3,8/6,6 kV to 19/33 kV.
- [3] SANS 1507-3: Electric cables with extruded solid dielectric insulation for fixed installations (300/500 V to 1900/3300 V).

2.2.2 Eskom document(s)

- [4] 240-56063792: Specification for medium voltage impregnated paper and XLPE –insulated cables.
- [5] 240-56063805: Specification for LV power and control cable with rated voltage 600/1000V.
- [6] D-DT-3128: CABLE, 1 kV 1C, 2C, 3C, 4C, 7C, 12C, 19C, CU LV cables.
- [7] D-DT-8000: Cable, 11 kV and 22 kV impregnated paper insulated.
- [8] D-DT-8001: Cable, 11 kV, 22 kV and 33kV XLPE-insulated.
- [9] D-DT-2801: Cable, 11 kV, 22 kV and 33kV XLPE-insulated.
- [10] D-DT-2800: Cable, 11 kV and 22 kV impregnated paper insulated.
- [11] D-DT-2128: CABLE, 1 kV, Cu and Al LV cables

2.2.3 Informative

- [12] 32-9: Definition of Eskom documents.
- [13] 32-644: Eskom documentation management standard.
- [14] 474-65: Operating manual of the Steering Committee of Technologies (SCOT).

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.

2.3.2 Disclosure classification

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

2.4 Abbreviations

Abbreviation	Description
LV	Low Voltage
MV	Medium Voltage
PILC	Paper Insulated Lead Covered
XLPE	Cross-Linked Polyethylene

2.5 Roles and responsibilities

All Eskom employees and/or appointed bodies involved in the procurement of the MV and LV cables shall ensure that the project deliverable meet the requirements of these technical evaluation criteria. Any deviation from these requirements shall constitute non-conformance, unless it was in advance agreed to by a delegated Cable Systems Specialist and is based on sound engineering judgement.

All suppliers (of the MV and LV Cables) to Eskom must be conversant with the requirements of this standard, and shall comply with the requirements. No deviations will be accepted and suppliers shall ensure that they obtain clarity where required and obtain all supporting information or documents necessary to comply with this document.

2.6 Process for monitoring

The MV and LV cables acceptance shall be based on fully compliant submission of documents, the factory testing of the cables, and proving manufacturing capability and capacity during factory evaluations.

2.7 Related/supporting documents

Refer to clause/ section 2.2.

3. Requirements

This document contains the technical evaluation criteria for MV and LV cables. The three phases of the technical evaluation criteria are specific to each of the cable equipment types evaluated. The evaluation methodology will include three main stages, namely the documentation evaluation, factory evaluations and factory sample evaluations.

3.1 Documentation Evaluation

The documentation evaluation exercise is performed by the Eskom evaluating representatives. This initial part of the evaluation starts when submissions are opened and assessed for the first time. The submitted documents will be evaluated against the evaluation criteria as stated in clause 3.4 to clause 3.6.

During the documentation evaluation; fully compliant type tested MV and LV cables in accordance with SANS 97 (for MV PILC), SANS 1339 (for MV XLPE) and SANS 1507-3 (for LV) will be required. Failure to submit and comply with the type test requirements specified in these documents will lead to immediate disqualification.

The documentation evaluations are meant for establishing if all the key tender deliverables are met with regard to the cables offered. The documentation evaluation will be performed in two levels: 1) the mandatory technical evaluation requirements and deliverables (Level 1: mandatory gate-keeper), and 2) the scoring phase (level 2: submission requirements).

The Level 1 mandatory gate-keeper constitute a total of 80% of the technical evaluation documentation score, while the level 2 submission requirements constitute 20% of the technical evaluation documentation score. If all stages of the complete technical evaluation (i.e. documentation, factory and factory sample evaluations) were successfully completed and found compliant per product range offered, the technical evaluation documentation score achieved will by default be the final technical evaluation score outcome.

The documentation tender submission must meet all the level 1 gate-keeper mandatory technical evaluation requirements. Failure to meet all the mandatory requirements will result to a score of 0% achieved for the 80% scoring weight allowed and immediate disqualification; thus a tenderer can only obtain 0% or 80%, and nothing in between for level 1 mandatory gate-keeper requirements. Equation 1 shows how the technical evaluation score will be calculated.

Technical evaluation score = 80% (level 1 mandatory gate-keeper requirements) + 20% (level 2 submission requirements) (1)

Immediate disqualification during the level 1 gate-keepers mandatory technical evaluation stage will mean that Eskom will be allowed to stop the technical evaluations without concluding the review of all the level 1 gate-keeper mandatory technical evaluation requirements not yet reviewed. Any further review of the level 1 gate-keeper mandatory technical evaluation requirements will be at the discretion of Eskom.

Note: Only a 100% combined score achieved for the level 1 mandatory gate-keeper requirements and the level 2 scoring phase will proof 100% product compliance. If all level 1 requirements are met and a final combined score lower than 100% is achieved. The tenderer will be required to ensure all non-compliant aspects are met as part of possible contract award.

3.2 Factory Evaluation

The factory evaluations are only performed on the submissions that have met all the mandatory technical evaluation requirements in level 1: mandatory gate-keeper requirements as stated in this document. Eskom Commercial shall make the arrangements for factory visits and ensure the technical representatives are invited on time.

At the factory; the Eskom evaluating representative(s) conducts the evaluation through the use of checklists. The checklists are used to verify factory capability and manufacturing method compliance to the type tested cables offered.

The factory evaluation will consists of the cable manufacturing plant evaluation (i.e design capability, type tested compounds, extrusion lines, manufacturing plant, processes, sample and routine testing, etc).

The following areas shall be assessed during the manufacturing evaluation:

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- a) Machinery capability.
- b) Plant setup.
- c) Raw material and compounds type tested.
- d) Extrusion lines type tested.
- e) Production process and critical check points.
- f) Design and software design capability.
- g) Material handling and storage.
- h) Testing facilities including certification and calibration of testing equipment.
- i) Sample testing and procedures.
- j) Routine testing procedures.
- k) Packaging of materials and cable drums.

At the end of this exercise, the Eskom evaluating representative(s) lists all the deviations and identified risks if any. The representative conducts a formal discussion of the deviations and risks in line with Eskom's requirements. If major discrepancies and risks are identified the supplier may be disqualified. For minor discrepancies and risks the Tenderer will be given an opportunity to decide whether they agree or disagree to meet Eskom's requirements upon possible contract award. The action plans for resolving the discrepancies and risks will be agreed between Eskom representative(s) and the supplier/ manufacturer.

3.3 Factory Sample Evaluation

The factory sample evaluations will be the evaluation of the exact replica product that is offered to Eskom during tender. A product sample will be required; whereby each tenderer is required to prepare only one exact replica sample per cable type offered for factory sample evaluations.

The factory sample evaluations are only performed on the submissions that have met all the documentation mandatory technical evaluation requirements in level 1 and were found compliant for the factory evaluations concluded, in accordance with this document.

It is required that the tenderer ensure that the required exact replica samples in accordance with the Eskom specifications and technical evaluation criteria are manufactured, tested and ready for evaluation within two months after Eskom notified the tenderer that Eskom will proceed with factory evaluations and factory sample evaluations. The Eskom notification will include a list of the product ranges that was successful to advance to the factory evaluations and factory sample evaluations stages.

Eskom Commercial shall make the necessary arrangements for the exact replica factory sample evaluations, by ensuring the companies are notified and the technical representatives are invited on time.

The factory sample evaluations shall be performed at the cable manufacturing plant in South Africa.

3.4 Technical Evaluation Gate Keepers for MV XLPE Cables

3.4.1 Technical Evaluation Criteria MV XLPE Cables: Mandatory Technical Evaluation Requirements

MV XLPE Cable technical evaluation criteria for the documentation exercise		
Level 1 Gatekeeper		
TASK / MEASURE		
Criteria	Clause	Acceptance: Yes/ No
Is a full list as well as complete English copies of type test reports as per the specification requirements submitted?	240-56063792 Clause 3.3 & 3.3.1.3	

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MV XLPE Cable technical evaluation criteria for the documentation exercise		
Level 1 Gatekeeper		
TASK / MEASURE		
Criteria	Clause	Acceptance: Yes/ No
Is summary of tests schedule submitted in the provided excel format?	240-56063792 Clause 3.3.1.1	
Is summary of tests schedule signed and submitted (pdf format)?	240-56063792 Clause 3.3.1.1	
Are completed technical schedules B submitted in the provided excel format?	Technical Schedules A and B	
Are completed technical schedules B submitted and signed (pdf format)?	Technical Schedules A and B	
Are cable construction drawings submitted?	240-56063792 Clause 3.3.1.2	
Are cable dimensional data drawings submitted?	240-56063792 Clause 3.3.1.2	
Are cables rating data and calculations submitted for current rating and fault current ratings?	240-56063792 Clause 3.3.1.3	
Has type testing been performed at an accredited Test facility?	240-56063792 Clause 3.3	
Are Type testing requirements met in accordance with Eskom requirements?	240-56063792 Clause 3.3	
Is the cable conductor marking method provided?	240-56063792 Clause 3.2.2	
Is the cable marking method provided?	240-56063792 Clause 3.2.3	
Is the longitudinal water blocking method provided?	240-56063792 Clause 3.1.4.7	
Does the materials and construction of cable meet the Eskom requirements?	240-56063792 Clause 3.3	
Do cable ratings meet Eskom requirements?	240-56063792, Table 1 (for relevant sizes)	
Is the marking of cable outer sheath provided?	240-56063792 Clause 3.2.4	
Are the type tested raw material and extrusion line information submitted?	SANS 1339	
Does schedule B meet Eskom's schedule A requirement.	240-56063792 Clause 3.3.1.1	
<p>Any "NO" on the above scores the supplier will be disqualified.</p> <p>The Type testing should fully comply with the requirements of SANS 1339 in order to obtain YES under testing requirements.</p> <p>The MV XLPE cable should fully comply with Eskom specifications where applicable to obtain a YES on cable materials and construction.</p>		

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3.4.2 Technical evaluation criteria MV XLPE Cables – Level 2 Scoring

MV XLPE Cable technical evaluation for the documentation exercise			
Level 2 scoring/rating - (only submission that passes Level 1 gatekeepers)			
Routine testing and type testing Weight: 4			
Criteria	Clause	Weight	Score
Were type tests performed in the last 10 years?	240-56063792 Clause 3.3 & 3.3.1.3	1	
Generic routine test certificate & reports submitted?	240-56063792 Clause 3.3 & 3.3.1.3	1	
Factory routine tests failure rate (Number of cables tested and failed per annum/number of cables tested per annum). Figures must be auditable for the last 2 years.	Ratio	1	
Was the water blocking method type tested?	240-56063792 Clause 3.1.4.7	1	
<ul style="list-style-type: none"> For Type testing performed within the last 10 Years supplier gets 100% and loses 20 % for each additional year. For the routine test certificate or report supplier gets 100 % if all requirements are met as per SANS 1339, and loses 20% for each missing requirement. A factory routine test failure rate < 5% the supplier gets 100%, and loses 100% for a factory failure rate > than 5%. If water blocking testing was done supplier gets 100 %, and if not 0%. 		Total	/4
Technical schedules Weight: 5 Total			
Criteria	Clause	Weight	Score
Correctness of completion i.e. no "TBA, Comply, Noted, supplied later, noted, acceptable only when Eskom informs"	Technical schedules A & B	2.5	
No technical deviations on technical schedules.	Technical schedules A & B	2.5	
NB: The technical schedules B are provided on the Annexures of the MV cable specifications. <ul style="list-style-type: none"> Negative marking is done and a penalty of 2 % is applicable for each incorrect completion deviation. Negative marking is done and a penalty of 10 % is applicable for each deviation from meeting Eskom specification and deviations. 		Total	/5
Drawings Weight: 6			
Criteria	Clause	Weight	Score
Drawing number shown on drawing?		0.3	
Revision number shown on drawing?		0.3	
Dimensions shown on drawing?		0.3	
Detailed description provided in "Title"?		0.3	
Approval date shown on drawing?		0.3	

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Completed legend?		0.3	
Marking of conductor drawing submitted?		1.0	
Marking of cable drawing submitted?		0.6	
Marking of outer sheath drawing submitted?		0.6	
All cable layers indicated on drawing?		1.0	
Complete labelling of all cable layers?		1.0	
Negative marking and supplier loses the applicable weighting per deviation.		Total	/6
Packaging Weight: 5			
Criteria	Clause	Weight	Score
Are cable drums manufactured in accordance with Eskom specification?	240-56063792 Clause 3.2.5	3	
Is Marking of cable drum done in accordance with Eskom specification?	240-56063792 Clause 3.2.5	2	
Negative marking is applied, and supplier loses 10% for each deviation from Eskom specification.		Total	/5

3.5 Technical Evaluation Gate Keepers for MV Paper Insulated Cables

3.5.1 Technical Evaluation Criteria MV PILC Cables: Mandatory Technical Evaluation Requirements

MV PILC Cable technical evaluation criteria for the documentation exercise		
Level 1 Gatekeeper		
TASK / MEASURE		
Criteria	Clause	Acceptance: Yes/ No
Is a full list as well as complete English copies of type test reports as per the specification requirements submitted?	240-56063792 Clause 3.3 & 3.3.1.3	
Is summary of tests schedule submitted in the provided excel format?	240-56063792 Clause 3.3.1.1	
Is summary of tests schedule signed and submitted (pdf format)?	240-56063792 Clause 3.3.1.1	
Are completed technical schedules B submitted in the provided excel format?	Technical Schedules A and B	
Are completed technical schedules B submitted and signed (pdf format)?	Technical Schedules A and B	
Are cable construction drawings submitted?	240-56063792 Clause 3.3.1.2	
Are cable dimensional data drawings submitted?	240-56063792 Clause 3.3.1.2	
Are cable rating data and calculations submitted for current rating and fault current ratings?	240-56063792 Clause 3.3.1.3	
Has type testing been performed at an accredited Test facility?	240-56063792 Clause 3.3	

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MV PILC Cable technical evaluation criteria for the documentation exercise		
Level 1 Gatekeeper		
TASK / MEASURE		
Criteria	Clause	Acceptance: Yes/ No
Are Type testing requirements met in accordance with Eskom requirements?	240-56063792 Clause 3.3	
Is the cable conductor marking method provided?	240-56063792 Clause 3.2.2	
Is the cable marking method provided?	240-56063792 Clause 3.2.3	
Are the type tested raw material, paper lapping machines and impregnation plant information submitted?	SANS 97	
Does the materials and construction of cable meet the Eskom requirements?	240-56063792 Clause 3.3	
Do cable ratings meet Eskom requirements?	240-56063792, Table 1 (for relevant sizes)	
Is the marking of cable outer sheath provided?	240-56063792 Clause 3.2.4	
Are the type tested raw material and extrusion line information submitted?	SANS 97	
Does schedule B meet Eskom's schedule A requirement?	240-56063792 Clause 3.3.1.1	
Any "NO" on the above scores the supplier will be disqualified. The Type testing should fully comply with the requirements of SANS 97 in order to obtain YES under testing requirements.		

3.5.2 Technical Evaluation Criteria for MV PILC Cables – Level 2 Scoring

MV PILC Cable technical evaluation for the documentation exercise			
Level 2 scoring/rating - (only submission that passes Level 1 gatekeepers)			
Routine testing and type testing Weight: 4			
Criteria	Clause	Weight	Score
Were type tests performed in the last 10 years?	240-56063792 Clause 3.3 & 3.3.1.3	1	
Generic routine test certificate & reports submitted?	240-56063792 Clause 3.3 & 3.3.1.3	1	
Factory routine tests failure rate. (Number of cables tested and failed per annum/number of cables tested per annum). Figures must be auditable for the last 2 years. Suppliers with greater than 5% failure rates will be excluded.	Ratio	1	

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MV PILC Cable technical evaluation for the documentation exercise			
Level 2 scoring/rating - (only submission that passes Level 1 gatekeepers)			
Routine testing and type testing Weight: 4			
Criteria	Clause	Weight	Score
Test report for impregnation compound submitted	240-56063792 Clause	1	
<ul style="list-style-type: none"> For Type testing performed within the last 10 Years supplier gets 100% and loses 20 % for each additional year. For the routine test certificate or report supplier gets 100 % if all requirements as per SANS included, and loses 20% for each missing requirement. A factory routine test failure rate < 0.05% the supplier gets 100%, and loses 100% for a factory failure rate > than 0.05. If test reports for impregnation compound is submitted supplier gets 100 %, and if not 0%. 		Total	/4
Technical schedules Weight: 5 Total			
Criteria	Clause	Weight	Score
Correctness of completion i.e. no "TBA, comply, noted, supplied later, noted, acceptable only when Eskom informs"	Technical schedules A & B	2.5	
No technical deviations on technical schedules.	Technical schedules A & B	2.5	
NB: The technical schedules B are provided on the Annexures of the MV cable specifications. <ul style="list-style-type: none"> Negative marking is done and a penalty of 2 % is applicable for each incorrect completion deviation. Negative marking is done and a penalty of 10 % is applicable for each deviation from meeting Eskom specification and deviations. 		Total	/5
Drawings Weight: 6			
Criteria	Clause	Weight	Score
Drawing number shown on drawing?	240-56063792 Clause 3.3.1.2	0.3	
Revision number shown on drawing?	240-56063792 Clause 3.3.1.2	0.3	
Dimensions shown on drawing?	240-56063792 Clause 3.3.1.2	0.3	
Detailed description provided in "Title"?	240-56063792 Clause 3.3.1.2	0.3	
Approval date shown on drawing?	240-56063792 Clause 3.3.1.2	0.3	
Completed legend?	240-56063792 Clause 3.3.1.2	0.3	
Marking of conductor drawing submitted?	240-56063792 Clause 3.3.1.2	1.0	
Marking of cable drawing submitted?	240-56063792 Clause 3.3.1.2	0.6	
Marking of outer sheath drawing submitted?	240-56063792 Clause 3.3.1.2	0.6	
All cable layers indicated on drawing?	240-56063792 Clause 3.3.1.2	1.0	
Complete labelling of all cable layers?	240-56063792 Clause 3.3.1.2	1.0	
Negative marking and supplier loses the applicable weighting per deviation.		Total	/6

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MV PILC Cable technical evaluation for the documentation exercise			
Level 2 scoring/rating - (only submission that passes Level 1 gatekeepers)			
Routine testing and type testing Weight: 4			
Criteria	Clause	Weight	Score
Packaging Weight: 5			
Criteria	Clause	Weight	Score
Are cable drums manufactured in accordance with Eskom specification	240-56063792 Clause 3.2.5	3	
Is Marking of cable drum done in accordance with Eskom specification	240-56063792 Clause 3.2.5	2	
Negative marking is applied, and supplier loses 10% for each deviation from Eskom specification.		Total	/5

3.6 Technical Evaluation Criteria for LV Cables

3.6.1 Technical Evaluation Criteria LV Power and Control Cables: Mandatory Technical Evaluation Requirements

LV Power and Control Cable technical evaluation criteria for the documentation exercise		
Level 1 Gatekeeper		
TASK / MEASURE		
Criteria	Clause	Acceptance: Yes/ No
Is a full list as well as complete English copies of type test reports as per the specification requirements submitted?	240-56063805 Clause 3.8.4	
Is summary of tests schedule submitted in the provided excel format?	240-56063805 Clause 3.8.3	
Is summary of tests schedule signed and submitted (pdf format)?	240-56063805 Clause 3.8.3	
Are completed technical schedules B submitted in the provided excel format?	Technical Schedules A and B	
Are completed technical schedules B submitted and signed (pdf format)?	Technical Schedules A and B	
Are cable construction drawings submitted?	240-56063805 Clause 3.8.1	
Are cable dimensional data drawings submitted?	240-56063805 Clause 3.8.1	
Are cable rating data and calculations submitted for current rating and fault current ratings?	240-56063805 Clause 3.8.2	
Has type testing been performed at an accredited Test facility?	240-56063805 Clause 3.8.4	
Are Type testing requirements met in accordance with Eskom requirements?	240-56063805 Clause 3.8.4	

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LV Power and Control Cable technical evaluation criteria for the documentation exercise		
Level 1 Gatekeeper		
TASK / MEASURE		
Criteria	Clause	Acceptance: Yes/ No
Is the cable conductor marking method provided?	240-56063805 Clause 3.4	
Is the cable marking method provided?	240-56063805 Clause 3.8.4	
Does the materials and construction of cable meet the Eskom requirements?	240-56063805 & SANS 1507-3	
Does cable core colouring meet Eskom requirements?	240-56063805, Table 1 (for relevant number of cores)	
Is the marking of cable outer sheath provided?	240-56063805 Clause 3.8.6	
Are the type tested raw material and extrusion line information submitted?	SANS 1507-3	
Does schedule B meet Eskom schedule A requirement.	240-56063805 Clause 3.8.3	
Any "NO" on the above scores the supplier will be disqualified. The Type testing should fully comply with the requirements of SANS 1507-3.		

3.6.2 Technical evaluation criteria LV Power and Control Cables – Level 2 Scoring

LV Power and Control Cable technical evaluation for the documentation exercise			
Level 2 scoring/rating - (only submission that passes Level 1 gatekeepers)			
Routine testing and type testing Weight: 4			
Criteria	Clause	Weight	Score
Were type tests performed in the last 10 years?	240-56063805 Clause 3.8.4	1	
Generic routine test certificate & reports submitted?	240-56063805 Clause 3.8.4	1	
Factory routine tests failure rate. (Number of cables tested and failed per annum/number of cables tested per annum). Figures must be auditable for the last 2 years. Suppliers with greater than 5% failure rates will be excluded.	Ratio	1	
Does cable core colouring meet Eskom requirements?	240-56063805 Table 1	1	
<ul style="list-style-type: none"> For Type testing performed within the last 10 Years supplier gets 100% and loses 20 % for each additional year. For the routine test certificate or report supplier gets 100 % if all requirements as per SANS included, and loses 20% for each missing requirement. A factory routine test failure rate < 0.05% the supplier gets 100%, and loses 100% for a factory failure rate > than 0.05. Is cable core colouring document submitted and meets Eskom requirements? If yes supplier gets 100 %, and if not 0%. 		Total	/4

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Technical schedules Weight: 5 Total			
Criteria	Clause	Weight	Score
Correctness of completion i.e. no "TBA, comply, noted, supplied later, noted, acceptable only when Eskom informs"	Technical schedules A & B	2.5	
No technical deviations on technical schedules.	Technical schedules A & B	2.5	
NB: The technical schedules B are provided on the Annexures of the LV Power and Control Cable Specification. <ul style="list-style-type: none"> Negative marking is done and a penalty of 2 % is applicable for each incorrect completion deviation. Negative marking is done and a penalty of 10 % is applicable for each deviation from meeting Eskom specification and deviations. 		Total	/5
Drawings Weight: 6			
Criteria	Clause	Weight	Score
Drawing number shown on drawing?		0.3	
Revision number shown on drawing?		0.3	
Dimensions shown on drawing?		0.3	
Detailed description provided in "Title"?		0.3	
Approval date shown on drawing?		0.3	
Completed legend?		0.3	
Marking of conductor drawing submitted?		1.0	
Marking of cable drawing submitted?		0.6	
Marking of outer sheath drawing submitted?		0.6	
All cable layers indicated on drawing?		1.0	
Complete labelling of all cable layers?		1.0	
Negative marking and supplier loses the applicable weighting per deviation.		Total	/6
Packaging Weight: 5			
Criteria	Clause	Weight	Score
Are cable drums manufactured in accordance with Eskom specification?	240-56063805 Clause 3.7	3	
Is Marking of cable drum done in accordance with Eskom specification?	240-56063805 Clause 3.7	2	
Negative marking is applied, and supplier loses 10% for each deviation from Eskom specification.		Total	/5

3.7 Conclusion

This report is effective to specify the technical evaluation criteria for MV and LV cables to be used in Eskom. The cable suppliers are to complete technical schedule B in accordance with 240-56063792, 240-56063805, SANS 1339, SANS 97 and SANS 1507-3 as part of the tender deliverables.

The technical evaluation criteria for this project are specified in clause 3.4 to clause 3.6 of this document.

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4. Authorization

This document has been seen and accepted by:

Name and surname	Designation
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5. Revisions

Date	Rev.	Compiler	Remarks
Sept 2017	2	Q. Khumalo	Revised to align with the latest revision of the cable standards (240-56063792 & 240-56063805). Included the buyer's guides for Aluminium cables. Added the requirements for factory sample evaluation.
Oct 2014	1	T. Du Plessis, & Q. Khumalo	New document.

6. Development team

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

- Thinus du Plessis: Chief Engineer HV Plant, Group Technology
- Queeneth Khumalo: Chief Engineer HV Plant, Group Technology

7. Acknowledgements

Not applicable.