

DEPARTMENT OF TRADE AND INDUSTRY

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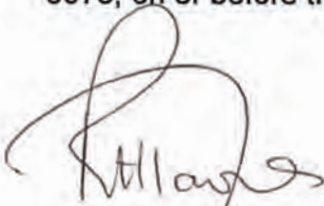
**NATIONAL REGULATOR FOR COMPULSORY SPECIFICATIONS ACT
(Act No. 5 of 2008), AS AMENDED THROUGH LEGAL METROLOGY ACT (Act No.
9 of 2014)**

**AMENDMENTS TO THE COMPULSORY SPECIFICATION FOR THE SAFETY OF
MEDIUM-VOLTAGE ELECTRIC CABLES**

(VC 8077)

It is hereby made known under section 13(4) of the National Regulator for Compulsory Specifications Act, (Act 5 of 2008) as amended, that I, Dr Rob Davies, Minister of Trade and Industry, on the recommendation of the NRCS, intends to declare the Compulsory Specification for the safety of medium-voltage electric cables as set out in the attached schedule.

Any person, who wishes to comment on the intention to amend the Compulsory Specification concerned, may submit their comments in writing to the Chief Executive Officer, National Regulator for Compulsory Specifications, Private Bag X 25, Brooklyn, 0075, on or before the date two (2) months after the publication of this notice.



**Dr Rob Davies, MP
Minister of Trade and Industry**

SCHEDULE

COMPULSORY SPECIFICATION FOR SAFETY OF MEDIUM-VOLTAGE ELECTRIC CABLES

(VC 8077)

1. SCOPE

1.1 This compulsory specification covers safety of single core and three-core cross-linked polyethylene (XLPE) insulated cables for rated voltages 3,8/6,6 kV to 19/33 kV, and impregnated paper-insulated metal-sheathed cables for rated voltages 3,3/3,3 kV to 19/33 kV (excluding pressure assisted cables).

2. DEFINITIONS

2.1 For the purposes of this document, the definitions in SANS (South African National Standard) 1339 and SANS 97 standards apply.

2.2 In addition, the following definitions shall apply:

2.2.1 **Applicant:** The manufacturer or importer seeking approval for *medium voltage electric cable*. The applicant shall be an existing legal entity within the Republic of South Africa.

2.2.2 **Proof of approval:** Confirmation by the NRCS that a particular *medium voltage electric cable* type satisfies the requirements of this compulsory specification.

2.2.3 **Declaration report:** a report that is issued by an accredited conformity assessment body, indicating the equivalence of products and/or standards.

2.2.4 **NRCS:** The National Regulator for Compulsory Specifications as established by the National Regulator for Compulsory Specifications Act, 2008 (Act No. 5 of 2008).

2.2.5 **Proof of conformity:** documented evidence of conformity with the requirements of this compulsory specification.

- 2.2.6 Proof of approval:** proof that *medium voltage electric cable(s)* have been approved by the NRCS.
- 2.2.7 Full test report:** a test report that covers the full testing of a product, issued less than 36 months before the date of submission to the NRCS for approval.
- 2.2.8 Valid test report:** a test report that covers partial or full testing of a product, issued less than 36 months before the date of submission to the NRCS for approval.
- 2.2.9 Product Certificate:** A document (a certificate or a permit or a license) issued by a body operating a product certification system described in 7.2 of this compulsory specification and accredited to SANS ISO/IEC 17065 standard.
- 2.2.10 Conformity of Production:** Proof (issued less than 12 months before the date of submission to the NRCS for approval) that medium voltage electric cables offered for sale have been manufactured to the approved design and continue to comply with the requirements of this compulsory specification.

3. GENERAL REQUIREMENTS

- 3.1** The applicant shall ensure that each type of *medium voltage electric cable* has been approved by the NRCS before offering it for sale, in accordance with the requirements of Annex A.
- 3.2** The applicant shall inform the NRCS of any change in design or materials affecting any mandatory requirement in terms of this compulsory specification. In the event of such change(s) the NRCS may, at its discretion, demand that the applicant submit a new application for approval.
- 3.3** The applicant shall, on request, provide the NRCS, within five (5) working days, with satisfactory proof of approval in respect of any type of *medium voltage electric cable* included in the scope of this compulsory specification.
- 3.4** The applicant shall on request provide the NRCS, within five (5) working days, with satisfactory proof of conformity of production.
- 3.5** Failure to provide such proof shall constitute reasonable grounds for suspicion of non-compliance with the requirements of this compulsory specification.

4. SPECIFIC REQUIREMENTS

Medium voltage cross-linked polyethylene (XLPE) electric cable *insulated cables* shall comply with the requirements of SANS 1339, *Electric cables- for rated voltage 3,8/6,6 kV to 19/33 kV*.

Medium voltage paper-insulated electric cables shall comply with the requirements of SANS 97, *electric cables-Impregnated paper-insulated metal-sheathed cables for rated voltages 3,3/3,3 kV to 19/33kV*.

5. EQUIVALENCE OF STANDARDS

Standards issued by different standardization bodies such as ISO (International standards organisation), EN (European standard), UL (Underwrite Laboratories), AUS/NZ (Australian/New Zealand standards) etc., will only be accepted if it is proven, in the form of a declaration report from an accredited conformity assessment body, that they are technically equivalent in all respects to the relevant South African National Standard. The applicant shall be responsible for obtaining such a declaration report. Proof of conformity with such a standard shall be accepted as conformity with the corresponding South African National Standard (SANS).

6. CONFORMITY TO REFERENCED STANDARDS

- 6.1 For the purposes of this compulsory specification, a new edition of a referenced standard shall become effective twelve (12) months from the date of publication as a South African National Standard.
- 6.2 New products, or products resubmitted for approval because of a change in design or materials, shall in all cases be evaluated against the requirements of the latest edition of any referenced standard.
- 6.3 When a new edition of a referenced standard is published, products originally approved in accordance with the previous edition of that standard may have their approval extended for up to five (5) years from the effective date of the new standard, subject to the requirements of Annex A, unless declared otherwise by the Minister.

7. EVIDENCE OF CONFORMITY

One of the following options of evidence shall be submitted to the NRCS as proof of conformity with the requirements of this compulsory specification:

7.1 Option 1, for *medium voltage electric cables* **without a product certification**:

7.1.1 Full test report(s) in IEC/EN format or any equivalent format acceptable to the NRCS and issued by an appropriately accredited and internationally recognized body being a member of an IAF/ILAC/IECEE mutual recognition scheme in accordance with the NRCS's conformity assessment policy.

7.1.2 The test report(s) shall prove conformity with all the applicable mandatory requirements.

7.1.3 Evidence of conformity shall be traceable to the specific *medium voltage electric cables* type(s).

7.2 Option 2, *medium voltage electric cables* **with product certification**:

7.2.1 A product certificate and a valid test report issued by an appropriately accredited and internationally recognized body being a member of an IAF/ILAC/IECEE mutual recognition scheme in accordance with the NRCS's conformity assessment policy.

7.2.2 The certification system administered by the product certification body in 7.2.1 shall include testing of the products and assessment of the quality system of the manufacturer. Surveillance of the quality system shall be conducted and representative samples of *medium voltage electric cables* of each type or representative of the family of *medium voltage electric cables* of generically the same design in respect of components wiring methods, intended to comply with the requirements of this compulsory specification, shall be taken from the point of production and shall be assessed through inspection and/or testing for on-going conformity.

The certification system shall include the following:

- samples from the point of production requested by the certification body;
- determination of the characteristics of the samples by testing;
- initial assessment of the production process and quality system;
- evaluation of the test reports;
- decision on certification of the manufacturer;
- granting certification to the manufacturer;
- surveillance of the production process and quality system, and
- surveillance by testing of samples from the factory or the market.

A system 5 certification contemplated in ISO/IEC 17067 (Conformity assessment: fundamentals of product certification and guidelines for product certification schemes) which covers the requirements of this clause shall be deemed to comply with these requirements.

ANNEX A - APPROVAL OF MEDIUM VOLTAGE ELECTRIC CABLE

A.1 APPLICATION FOR APPROVAL

An application for approval of each type *medium voltage electric cable* intended for sale shall include:

- A.1.1 Details of the type of *medium voltage electric cable* for which approval is sought and the standard(s) to which it is claimed to conform;
- A.1.2 Details of the manufacturing plant/s in which the *medium voltage electric cable* type is produced;
- A.1.3 For new applications, proof of conformity, with all the requirements of this compulsory specification, issued less than 36 months before the date of submission to the NRCS;

A.1.4 For *medium voltage electric cables* without a product certificate:

On expiry of the approval (LOA), an application for an extension may be granted, provided that all the conditions of the previous approval were met. In this case, proof of compliance, with all the requirements of the relevant compulsory specification, issued less than 60 months before the date of submission to the NRCS, shall be required;

A1.5 For *medium voltage electric cables* with a product certificate:

On expiry of the approval (LOA), an application for an extension may be granted, provided that a valid (as determined by the conformity assessment body) product certification and conformity of production are submitted to the NRCS.

A.1.6 Identification markings and other information appearing on the product; and**A.1.7 Any reasonable additional information in order to clarify the above that may be requested by the NRCS.****A.2 APPROVAL**

A.2.1 The NRCS shall assess the evidence of conformity supplied by the applicant and shall decide to grant approval or not, at its sole discretion.

A.2.2 The NRCS shall assign a unique number to each approval.

A.2.3 The NRCS shall issue a letter of authority certificate (LOA) for each successful application, to the applicant, when all the requirements have been met.

A.2.4 The approval granted with respect to each type of *medium voltage electric cable* that is pursuant to this compulsory specification may be withdrawn at any time, after the manufacturer has been notified in writing, if the requirements have not been met or maintained.