

DEPARTMENT OF TRADE AND INDUSTRY

NO. 284

31 MARCH 2017

**NATIONAL REGULATOR FOR COMPULSORY SPECIFICATIONS ACT
(Act No. 5 of 2008), AS AMENDED THROUGH THE LEGAL METROLOGY
ACT (Act No. 9 of 2014)****AMENDMENT TO THE COMPULSORY SPECIFICATION FOR SAFETY OF
MEDIUM-VOLTAGE ELECTRIC CABLES (VC 8077)**

I, Dr Rob Davies, Minister of Trade and Industry, hereby under Section 13(1) of the National Regulator for Compulsory Specifications Act (Act 5 of 2008), declare the amendment of the compulsory specification for safety of medium-voltage electric cables (VC 8077) as set out in the attached schedule, effective six (6) 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 1339 and SAN 97 standards apply.

2.2 In addition, the following definitions shall apply:

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

2.2.2 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. The proof shall comprise of the manufacturer's quality management system certificate or report, and a control plan.

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 Full test report: a valid test report that cover the full testing of a product for NRCS approval.

- 2.2.5 **NRCS:** the National Regulator for Compulsory Specifications as established by the National Regulator for Compulsory Specifications Act, 2008 (Act No. 5 of 2008).
- 2.2.6 **Proof of approval:** a letter of authority (LoA) issued by the NRCS, which confirms that a particular medium voltage electric cable type satisfies the requirements of this compulsory specification.
- 2.2.7 **Proof of conformity:** documented evidence of conformity with the requirements of this compulsory specification.
- 2.2.8 **Product Certificate:** a document (a certificate or a permit or a license) issued by a body operating a system 5 product certification as described in ISO/IEC 17067 and accredited to SANS ISO/IEC 17065 standard.
- 2.2.9 **Valid test report:** copy of an original test report issued less than 36 months before the date of submission to the NRCS for approval.

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 or import or supply, 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, EN, UL, AUS/NZ 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 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.

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.

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 reports in IEC 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 reports 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 Evidence of conformity shall be traceable to the specific medium voltage electric cables type(s).

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.