AS 2067—2008

Australian Standard®

Substations and high voltage installations exceeding 1 kV a.c.

This Australian Standard® was prepared by Committee EL-043, High Voltage Installations. It was approved on behalf of the Council of Standards Australia on 6 November 2008.
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The following are represented on Committee EL-043:

- Association of Consulting Engineers Australia
- Bureau of Steel Manufacturers of Australia
- CIGRE
- Electrical Regulatory Authorities Council
- Energy Networks Association
- Engineers Australia
- Institute of Electrical Inspectors

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PREFACE

This Standard was prepared by the Standards Australia Committee EL-043, High Voltage Installations, to supersede AS 2067—1984, *Switchgear assemblies and ancillary equipment for alternating voltages above 1 kV*.

The objective of this Standard is to provide common rules for the design and the erection of electrical power installations in systems with nominal voltages above 1 kV a.c. and nominal frequency up to and including 60 Hz.

In the preparation of this Standard, consideration was given to IEC 61936-1:2002, *Power installations exceeding 1 kV a.c.*—Part 1: *Common rules,* and its proposed revision *(IEC 61936-1 CDV/2008.05)*, and acknowledgement is made of the assistance received.

Following publication of this Standard, AS/NZS 3000:20007 is to be amended such that, in Australia, those portions of electrical installations operating at high voltage shall be designed and installed in accordance with this Standard. Appendix K of AS/NZS 3000:2007 will be deleted when this Standard is published.

Where a reference is made to ‘national regulations’, it is intended to encompass national, state and local regulations.

The terms ‘normative’ and ‘informative’ are used to define the application of the appendix to which they apply. A normative appendix is an integral part of a standard, whereas an informative appendix is only for information and guidance.

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SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard provides minimum requirements for the design and erection of high voltage installations in systems with nominal voltages above 1 kV a.c. and nominal frequency up to and including 60 Hz, so as to provide safety and proper functioning for the use intended.

For the purposes of this Standard, a high voltage installation is considered to be:

(a) An electricity network substation, under the control of an electricity network operator or entity authorized by a licence or other legal instrument to convey electricity.

(b) The high voltage parts of an electrical installation of a power station including all auxiliary systems and interconnecting lines and cables between power stations if on the same site.

(c) The high voltage parts of an electrical installation that are not covered in (a) and (b) above. This may include but not be limited to consumer and customer electrical installations serving premises such as factories, commercial facilities, industrial plants, institutional facilities and mine sites.

A high voltage installation includes, but is not limited to, the following equipment:

(i) High voltage electrical installations on masts, poles and towers.

(ii) Switchgear and/or transformers and/or electrical equipment located outside a closed electrical operating area.

(iii) Rotating electrical machines.

(iv) Switchgear, controlgear and assemblies.

(v) Transformers and reactors.

(vi) Converters.

(vii) Cables.

(viii) Lines.

(ix) Wiring systems.

(x) Batteries, battery chargers and associated d.c. supply systems.

(xi) Capacitors.

(xii) Earthing systems.

(xiii) Buildings and fences that are part of a closed electrical operating area.

(xiv) Associated protection, control, auxiliary and ancillary systems.

(xv) Structures, foundations, earthworks and drainage.

NOTE: In general, a Standard for an item of equipment takes precedence over this Standard.

This Standard does not apply to the design and erection of any of the following:

(A) Overhead lines and underground cables between separate installations.

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