Australian/New Zealand Standard™

Electrical installations—Extra-low voltage d.c. power supplies and service earthing within public telecommunications networks





#### AS/NZS 3015:2004

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-001, Wiring Rules. It was approved on behalf of the Council of Standards Australia on 11 May 2004 and on behalf of the Council of Standards New Zealand on 25 May 2004.

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The following are represented on Committee EL-001:

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Australian Electrical and Electronic Manufacturers Association

Canterbury Manufacturers Association New Zealand

Communications, Electrical Plumbing Union

Consumers Federation of Australia

Electrical Contractors Association of New Zealand

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Electrical installations—Extra-low voltage d.c. power supplies and service earthing within public telecommunications networks

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## **PREFACE**

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-001, Wiring Rules, to supersede AS 3015—1993, *Electrical installations—Extra low-voltage d.c. power supplies within public telecommunications networks*.

The objective of this Standard is to establish safety requirements, consistent with maintaining continuity of essential supply, for the installation of extra-low voltage d.c. power supplies in restricted access locations of public telecommunications networks.

This standard is intended to apply only to installations constructed after its date of publication. The previous edition may be applied to upgrades to installation that were originally constructed prior to he publication of this edition.

Major changes to AS 3015—1993 are as follows:

- (a) The ventilation requirements for valve-regulated cells have been reviewed.
- (b) Requirements for colours of earthing conductors have been added.
- (c) Allowance has been made for the use of main distribution frame or single-point connection as the service earth bar frame in installations with the single power supply rated at less than 2.4 kW.
- (d) Requirements for equipotential bonding conductors for the lightning protection system have been added.
- (e) Appendix C has been extensively reviewed.
- (f) Provision has been made for sharing of sites by two or more carriers
- (g) Requirements for the protection of battery strings against overcurrent have been
- (h) Requirements for the care and protection of batteries have been aligned with the following:

AS

- 3011 Electrical installations—Secondary batteries installed in buildings
- 3011.1 Part 1: Vented cells
- 3011.2 Part 2: Sealed cells
- Guide to the installation, maintenance, testing and replacement of secondary batteries in buildings
- 2676.1 Part 1: Vented cells
- 2676.2 Part 2: Sealed cells

Statements expressed in mandatory terms in notes to tables are deemed to be requirements of this Standard.

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