Australian/New Zealand Standard<sup>™</sup>

# Earth potential rise—Protection of telecommunications network users, personnel and plant

Part 1: Code of practice





### AS/NZS 3835.1:2006

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee ET-007, Coordinating Committee on Power and Telecommunications (CCPT). It was approved on behalf of the Council of Standards Australia on 10 April 2006 and on behalf of the Council of Standards New Zealand on 13 April 2006.

This Standard was published on 27 September 2006.

The following are represented on Committee ET-007:

Australian Communications and Media Authority Co-opted Member Electrical Regulatory Authorities Council Energy Networks Association NZCCPTS Telecommunications Carriers

Additional Interests:

Energex Queensland Rail Electranet (South Australia)

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This Standard was issued in draft form for comment as DR 04471.

Australian/New Zealand Standard<sup>™</sup>

# Earth potential rise—Protection of telecommunications network users, personnel and plant

## Part 1: Code of practice

First published as AS/NZS 3835.1:2006.

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Jointly published by Standards Australia, GPO Box 476, Sydney, NSW 2001 and Standards New Zealand, Private Bag 2439, Wellington 6020

## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Technical Committee ET-007-01, Earth Potential Rise, a Joint Committee for the Coordination of Power and Telecommunications Systems.

In Australia, this Standard supersedes the EPR Code, Issue 1, 1984, published jointly by the Australian Telecommunications Commission (now Telstra Corporation), and ESAA (now ENA-Energy Networks Association).

In New Zealand, this Standard supersedes the Application guide for EPR, 1989, published by the New Zealand Committee for the Co-ordination of Power and Telecommunications Systems (NZCCPTS).

The objective of this part of AS/NZS 3835 is to identify and minimize hazards to telecommunications personnel, users and plant caused by earth faults on high voltage a.c. power systems.

Preparation of this Standard was undertaken to update the technical content of the original EPR Code and to remove those contractual and procedural matters better dealt with elsewhere.

This Standard makes reference to publications prepared by the NZCCPTS. Enquiries concerning these publications should be directed to the secretary of NZCCPTS. Contact details for the secretary and details of NZCCPTS publications are available at the web site <u>http://www.nzccpts.co.nz</u>. Some of the publications are available as free downloads from the above web site.

This Standard is Part 1 of a series dealing with Earth Potential Rise (EPR). This Standard when complete will consist of the following parts:

AS/NZS

3835	Earth potential rise—Protection of telecommunications network users, personnel and plant
3835.1	Part 1: Code of practice (this Standard)
3835.2	Part 2: Application guide
3835.3	Part 3: Isolation arrangements for paired cable telemetering telecontrol service in LV areas and HV sites
HB 219	Earth potential rise—Protection of telecommunications network users, personnel and plant—Worked examples for the application guide

The terms 'normative' and 'informative' have been used in this Standard 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.

Statements expressed in mandatory terms in notes to figures, are deemed to be requirements of this Standard. 'Shall' indicates a requirement is mandatory, while 'should' indicates a recommendation and good practice.

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