

Australian/New Zealand Standard™

Electrical hazards on metallic pipelines



AS/NZS 4853:2012

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 23 February 2012 and on behalf of the Council of Standards New Zealand on 8 March 2012.

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The following are represented on Committee EL-001:

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Australian Building Codes Board
Australian Industry Group
Communications, Electrical and Plumbing Union
Consumers' Federation of Australia
Electrical and Communications Association, Qld
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AS/NZS 4853:2012

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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/NZS 4853:2000.

This revision was prepared to address experience gained with the implementation of AS/NZS 4853:2000.

This revision is a general revision of the Standard and introduces a risk based design approach to address electric shock hazard situations and respective mitigation methods.

The significant changes in this revision include—

- (a) the Standard has been restructured to improve its clarity;
- (b) a structured process to assess the likelihood of an electrical hazard being present on a metallic pipeline, and the methodology by which the risk level associated with the hazard is calculated, and the effectiveness of methods to reduce the risk to an acceptable or in the ALARP region to a tolerable level is provided;
- (c) a safety management methodology to document the assessment and control of electrical hazards is introduced, together with requirements for these to be reviewed at defined intervals to assure the ongoing effectiveness of the control; and
- (d) the appendices are revised and expanded.

This Standard has adopted the risk based assessment criteria developed by Energy Networks Australia and Electrical Engineers Association (New Zealand) to align the safety requirements of this Standard with those of the electrical power industry.

Symbols used in equations in this Standard are defined in relation to the particular equations in which they occur.

The term 'informative' has been used in this Standard to define the application of the appendix to which it applies. An 'informative' appendix is only for information and guidance.

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

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