

[Received by email 15/4/08]

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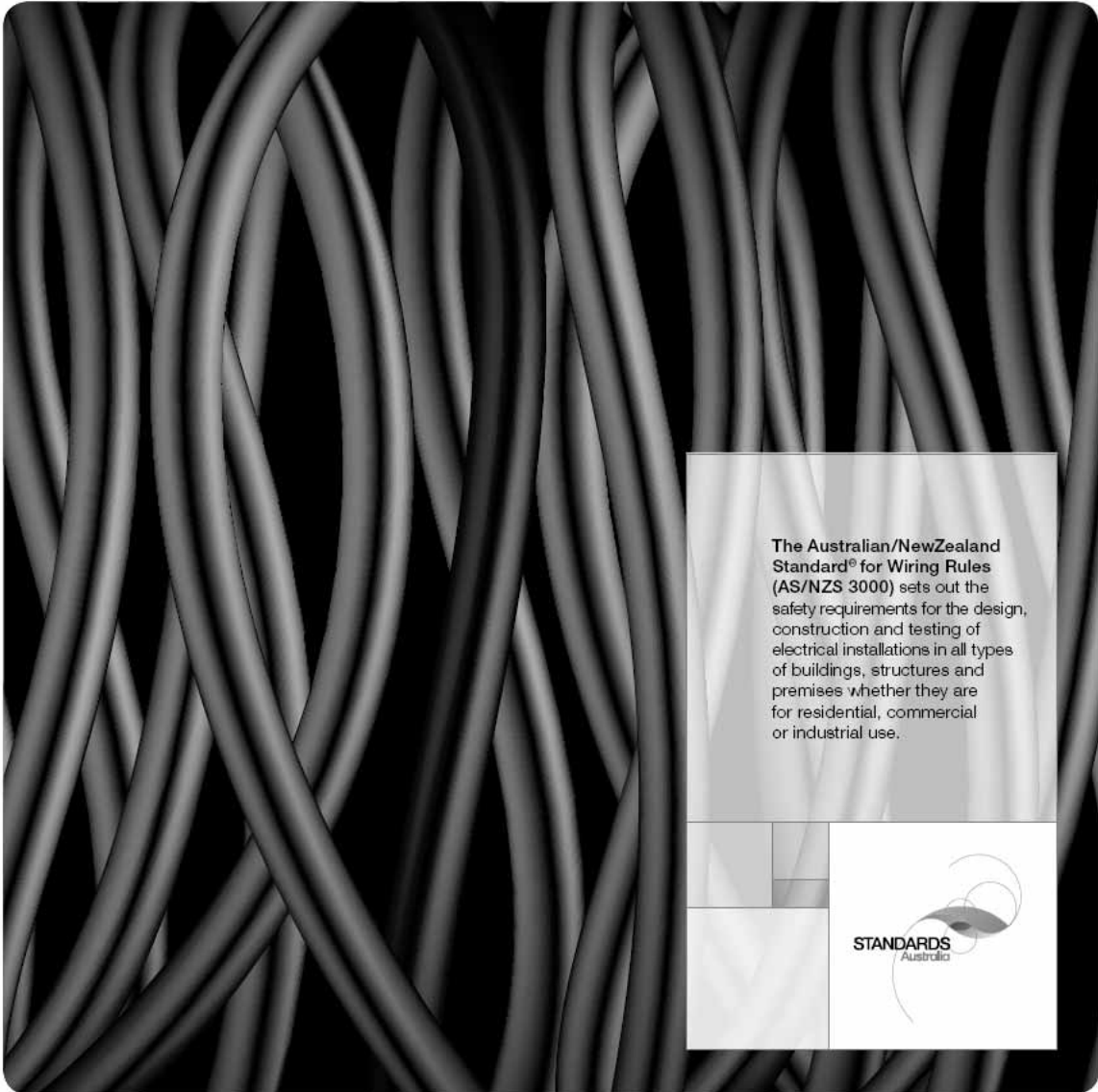
1. In Standards Australia's submission to your current review, we said we would provide you with further examples of co-regulation – instances where standards are picked up in black-letter regulation and the model works successfully. **Attached** is a document on the Wiring Rules (AS/NZS 3000) which, we believe, is such an example.
2. The Commission has commented favourably in the past on the Building Code of Australia, as an example of harmonised co-regulation. The Wiring Rules provide another good example. It is not quite as structured as the building example, but again it is co-regulation, where generalised regulation in each jurisdiction calls up the Wiring Rules, which are very detailed.
3. There is a difference from the Building Code, however, in that the performance requirements in this case are in the standard itself, not in a higher level code or Act.
4. The outcome is a common regime covering electrical installations across Australia. Electricians moving from jurisdiction to jurisdiction work under the same rules.
5. It is important to note the relative bulk of the components of the co-regulation and the commensurate workloads on government and industry. The generalised regulation extracts in this paper run to just ten pages of text to cover eight States and Territories. The complete Wiring Rules, on the other hand, run to 460 pages. If this was found in black-letter regulation (an Act or regulations) it could rightly be characterised as a 'hot spot'.
6. But the Wiring Rules have been produced by consensus between industry, consumer groups and regulators. It is the industry and regulators, rather than legislators, on whom the bulk of the work of producing the regulatory regime falls.
7. More importantly, there is far less likelihood of complaints about regulatory burdens because the Wiring Rules are what the industry wanted to preserve safety and efficiency in the sector. Indeed, the latest, 2007, version of the standard contains *more* detail than did the 2000 version, at the request of stakeholders.
8. We understand that the proposed National Construction Code (Business Regulation and Competition Working Group implementation plan, COAG, 26 March 2008) may incorporate current regulatory arrangements for building and electrical installations, as well as for plumbing and telecommunications installations. It is to be hoped that, in developing the Construction Code, the good features of the Building Code and the Wiring Rules are retained.

9. The Wiring Rules example has been provided to Ministers Tanner and Emerson and to COAG jurisdictions.
10. Please call me if we can provide anything further on this matter. We will shortly be sending you some material on instructions to Parliamentary Counsel on the incorporation of standards into regulation and on United States practices in standards and regulation.

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**Disclaimer**

This advice/information is provided by Dr David Stephens (Clamshred Pty Ltd) on the basis of the best information available to him and after thorough consideration. Dr Stephens and Clamshred cannot be held liable for loss or damage arising out of action taken by another party on the basis of this advice/information



# **The Wiring Rules (AS/NZS 3000) in Australian regulation:**

***A successful example of co-regulation and  
harmonisation***

**Standards Australia  
March 2008**

## Wired to protect lives and property

<ul style="list-style-type: none"> <li>• <b>Electrical</b></li> <li>• <b>Government Regulators</b></li> </ul>	<p>Ian Graham is the chairman of Standards Australia's Electrotechnology Standards Sector Board and a former electrical safety regulator for Victoria. He talks about the Wiring Rules AS/NZS 3000 and its importance to the Australian community.</p>
<p><b>Key Benefits</b></p> <ul style="list-style-type: none"> <li>Protection of life and property</li> <li>Reduction of OH&amp;S risks</li> <li>Guidance for electricians and electrical contractors</li> <li>Assists government to craft laws that protect the community</li> <li>Provides uniformity</li> <li>Provides benchmarks for safety inspections</li> </ul>	<p>"AS/NZS 3000 is an important Standard which sets out the safety requirements for the design, construction and testing of electrical installations in all types of buildings, structures and premises whether they are for residential, commercial or industrial use.</p>
<p><b>"AS/NZS 3000 is Australia's most widely distributed Standard. It has been developed and overseen by a large, active and widely represented committee of industry and government experts."</b></p> <p>Ian Graham</p>	<p>"It protects life and property against the risks of shock and fire and it deals with the wiring itself and all the associated accessories and equipment which is fixed in the building and connected to the wiring such as switches, socket outlets, lighting, cookers and heating and cooling equipment.</p>
<p>Standards Australia is recognised by the Government as Australia's peak standards body. It develops Australian Standards® of public benefit and national interest and supports excellence in design and innovation through the Australian Design Awards.</p> <p><a href="http://www.standards.org.au">www.standards.org.au</a></p>	<p>"In effect, AS/NZS 3000 sets the work standards for Australia's 120,000 electricians, 30,000 electrical contractors and the wiring and equipment which they install, maintain, test and certify. Regulations in all States and Territories require that their work complies with this Standard. This provides for national uniformity which is important for the safety and efficiency of electricians who work in more than one State.</p> <p>"The Standard also sets the benchmark by which this work and the resulting installations are audited by inspectors according to regulatory requirements for the protection of the community. This includes protection of the user of the installation and the electrician who installs it.</p> <p>"AS/NZS 3000 is Australia's most widely distributed Standard and it is developed and overseen by a large, active and widely represented committee of industry and government experts.</p> <p>"There have unfortunately been many deaths and major property loss from electric shock and fires from electrical causes over the years. As a regulator I always considered this Standard an essential tool to protect the life and property of all Australians from the ever present but high risk energy source of electricity which can be a "faithful servant - but a cruel master."</p>

A case study from the Standards Australia website (<http://www.standards.org.au> )

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## **Introduction**

### **The argument**

Existing regulation that works well can provide models for future regulation. Some existing regulation strikes the right balance between, on the one hand, protecting the community and serving other policy objectives and, on the other, minimising the burden of regulation. Some of this regulation is *co-regulation*, where industry and government share in the operation of the regulatory process and legislative backing ensures compliance.

Under co-regulation, the community is protected by the Act or regulation (which is often in general terms) and by the detail contained in a standard called up in the regulation. Business has less reason to complain of regulatory burdens because it has been involved in making the standard.

The Building Code of Australia ([http://www.abcb.gov.au/go/about\\_bca\\_p4](http://www.abcb.gov.au/go/about_bca_p4)) is one example of this approach and something similar is being done in the plumbing industry. Australian/New Zealand Standard 3000 ('the Wiring Rules') is another example and it is the subject of this paper.

Standards Australia hopes to work with COAG jurisdictions, using examples like the Wiring Rules to improve awareness of existing good regulatory practice (and successes) involving standards. This should provide models for future consensus-based good regulatory practice, whether:

- as a substitute for existing detailed, black-letter regulation;
- in an area where regulation is required for the first time; or
- where one jurisdiction seeks to adopt a regulatory model that has been successful in another jurisdiction. (The Wiring Rules are a good example of where this has been done already.)

### **The Wiring Rules**

This paper shows how Australian lawmakers have made use of Australian/New Zealand Standard 3000, 'the Wiring Rules', when regulating to ensure safety and effectiveness in electrical installation and maintenance. AS/NZS 3000 has consistently been the most widely distributed Australian Standard and is used throughout the electrical industry, by electricians, electrical inspectors and others.

The 2007 edition of the Wiring Rules is an excellent example of harmonisation and co-regulation because of two features. First, it is a standard agreed by industry and government regulators which has been adopted by regulation with very little variation by all the relevant jurisdictions, thus avoiding the need for separate prescriptive regulatory requirement. Secondly, it is a performance-based standard which states outcomes, provides a detailed methodology for compliance and allows the industry operator to use alternative means of compliance if the operator wishes and can demonstrate that they achieve the standard.

This is the least prescriptive type of regulation. It provides maximum harmonisation between jurisdictions and maximum flexibility for industry in the determination of requirements and means of compliance. It does so by means of a highly inclusive and consensus-based process.

The fact that the Wiring Rules are adopted by regulation across eight jurisdictions by reference to a common Australian Standard is important for the safety and efficiency of electrical contractors who work in more than one State or Territory. There is a national regime in this industry.

The Wiring Rules are regularly revised (most recently in 2007). They are developed by consensus between stakeholders, including Association of Consulting Engineers Australia, Australian Building Codes Board, Australian Electrical and Electronic Manufacturers Association (now part of Australian Industry Group), Communications, Electrical and Plumbing Union, Consumers' Federation of Australia, Electrical and Communications Association (Qld), Electrical Regulatory Authorities Council, ElectroComms and Energy Utilities Industries Skills Council, Energy Networks Association, Engineers Australia, Institute of Electrical Inspectors, National Electrical and Communications Association, Telstra Corporation Limited and equivalent organisations in New Zealand.

## The paper

The paper contains examples from each State and Territory of where the Wiring Rules are called up as the centre piece of co-regulation of electrical installation in the jurisdiction.

The paper is organised under jurisdictions and notable features of each piece of regulation are commented upon in **boxes**. These might provide 'triggers' for developing template legislation in the future. Is the Tasmanian approach of simply incorporating the Wiring Rules into regulation neater than some of the other jurisdictions? Is Queensland's explicit provision for self-employed contractors a model for other States and Territories? Is South Australia's approach to conflicts between other regulation and the Wiring Rules preferable to Western Australia's?

Examples have been sourced from Standards Australia's AUSTLII database (<http://www.standards.org.au>) and from the databases at <http://www.comlaw.gov.au> and <http://my.lawlex.com.au/>.

Finally, to reiterate, the general regulation extracts in this paper run to just ten pages of text or approximately 3000 words.

The task of regulation making for each jurisdiction is commensurate.

On the other hand, the Wiring Rules in their latest version run to 460 pages or about 170 000 words. The preface and table of contents may be found at <http://www.saiglobal.com/PDFTemp/Previews/OSH/as/as3000/3000/3000-2007.pdf>.

The task of writing these rules over many years and updating them has been considerable, but it is taken on by industry, consumer and regulator representatives as a necessary task to ensure safety and efficiency in their industry while minimising the costs to business.

It is not a call on government.

And, the fact that the Wiring Rules have been produced by stakeholder consensus greatly reduces the burden of regulation and the likelihood of complaints in this regard.

## New South Wales

New South Wales has separate provisions for installers and testers.

### **Electricity (Consumer Safety) Regulation 2006**

#### **3 Definitions**

(1) In this Regulation:

**Australian/New Zealand Wiring** means the Australian and New Zealand Standard entitled AS/NZS 3000:2000, *Electrical Installations* (known as the Australian/New Zealand **Wiring**), as in force from time to time, published jointly by Standards Australia and Standards New Zealand.

#### **32 Standards and requirements for electrical installation work: section 31 (1) of Act**

- (1) For the purposes of section 31 (1) of the Act, electrical installation work is required to be carried out in accordance with the standards and requirements specified in this clause.  
**Note.** Section 31 (1) of the Act makes it an offence for a person to carry out electrical installation work that is not in accordance with such standards or requirements as may be prescribed by the regulations. This clause sets out those standards and requirements.
- (2) The following electrical installations, or parts of electrical installations, may not be energised unless the relevant distribution network service provider first authorises it:
- any new electrical installation (other than a free-standing electrical installation) that has not previously been energised,
  - any alteration of, or addition to, an electrical installation (other than a free-standing electrical installation) that will require a change to the network connection or metering arrangements.
- (3) Electrical installation work is required to be carried out in accordance with the **Australian/New Zealand Wiring**.  
**Note.** Persons carrying out electrical installation work on electrical installations connected, or intended for connection, to a distribution system within the meaning of the *Electricity Supply Act 1995* should also have regard to the *New South Wales Service and Installation Rules* published by the Department of Energy, Utilities and Sustainability from time to time.
- (4) An electrical installation, or part of an electrical installation, must not be energised unless its safe operation and compliance with the **Australian/New Zealand Wiring** have been established by a safety and compliance test.
- (5) A free-standing electrical installation must not be energised unless the stand-alone power system to which it is to be connected complies with the requirements for such systems specified by the Australian Standard entitled AS 4509:1999, *Stand-alone power systems*, as in force from time to time, published by Standards Australia.

#### **33 Conduct of safety and compliance tests**

- (1) A safety and compliance test on electrical installation work on an electrical installation, or part of an electrical installation, must be carried out by a qualified person in accordance with the requirements of this clause after the completion of the work.
- (2) A safety and compliance test on electrical installation work must verify that the work complies with the requirements of the **Australian/New Zealand Wiring**, including in relation to (but not limited to) the following:
- continuity of the earthing system,
  - insulation resistance,
  - polarity,



- (d) circuit connections.
- (3) A safety and compliance test on electrical installation work must:
  - (a) include an inspection of switchboards and any other electrical equipment that is required by the Australian/New Zealand ~~Wiring~~ ~~Rules~~, and
  - (b) ensure that the electrical equipment used is designed to enable the electrical installation concerned to function for the use intended.
- (4) If one or more residual current devices are installed or replaced as part of electrical installation work, each device must be tested in accordance with the Australian/New Zealand ~~Wiring~~ ~~Rules~~ to determine whether it complies with the requirements of those Rules for such devices.

## Victoria

Victoria has made a number of modifications to the Wiring Rules to cross-reference other state regulation or to meet state requirements.

### **Electricity Safety (Installations) Regulations 1999** S.R. No. 49/1999 Version incorporating amendments as at 26 September 2007

#### **105 Definitions**

In these Regulations—

**Reg. 105 def. of AS inserted by S.R. No. 3/2001 reg. 7(a).**

**AS** means an Australian Standard issued by Standards Australia, as published or amended from time to time;

**AS/NZS** means an Australian/New Zealand Standard issued jointly by Standards Australia and Standards New Zealand, as published or amended from time to time;

**Reg. 105 def. of Australian/ New Zealand Wiring Rules inserted by S.R. No. 3/2001 reg. 7(a).**

**Australian/New Zealand Wiring Rules** means the Australian/New Zealand Standard Electrical Installations (known as the Australian/New Zealand Wiring Rules), AS/NZS 3000 published jointly by Standards Australia and Standards New Zealand as published or amended from time to time;

#### **401 Wiring methods**

**Reg. 401(1) substituted by S.R. No. 3/2001 reg. 10(1).**

(1) A person must not install, alter, repair or maintain an electrical installation or a portion of an electrical installation unless the installation or the installed, altered, repaired or maintained portion of the installation complies with the Australian/New Zealand Wiring Rules as modified by the following provisions—

(a) for clause 1.4.13 **substitute**—

**"1.4.13 Authority, regulatory** The Office of the Chief Electrical Inspector established under Part 2 of the **Electricity Safety Act 1998.**";

(b) in clause 1.4.14, for "licensed electrical contractor or electrician" **substitute**—

"registered electrical contractor or licensed electrician";

(c) after clause 1.4.27 **insert**—

**"1.4.27A Company Assets** Company assets within the meaning of the **Electricity Safety Act 1998.**";

(d) for clause 1.4.42 **substitute**—

**"1.4.42 Electrical equipment** Appliances, wires, fittings, cables, conduits or apparatus that generate, use, convey or control electricity or that are intended to generate, use, convey or control electricity.";

(e) for clause 1.4.43 **substitute**—

**"1.4.43 Electrical installation** An electrical installation within the meaning of the **Electricity Safety Act 1998.**";

Reg. 401(1)(f) substituted by S.R. No. 58/2004 reg. 3(1)(a).

(f) after clause 1.4.55 **insert**—

**'1.4.55A Hazardous bushfire risk area**

An area—

(a) that a fire control authority has assigned a fire hazard rating of "high" under section 80 of the **Electricity Safety Act 1998**; or

(b) that is not an urban area within the meaning of section 3 of that Act unless a fire control authority has assigned to that area a fire hazard rating of "low" under section 80 of that Act.';

(g) after clause 1.4.58 **insert**—

**"1.4.58A Licensed electrician**

Electrical installation worker holding an electrician's licence under regulation 302 of the Electricity Safety (Installations) Regulations 1999.";

Reg. 401(1)(h) substituted by S.R. No. 58/2004 reg. 3(1)(b).

(h) after clause 1.4.59 **insert**—

**'1.4.59A Low bushfire risk area**

An area—

(a) that a fire control authority has assigned a fire hazard rating of "low" under section 80 of the **Electricity Safety Act 1998**; or

(b) that is an urban area within the meaning of section 3 of that Act.';

(i) for clause 1.4.71 **substitute**—

**"1.4.71 Point of supply** Point of supply within the meaning of the **Electricity Safety Act 1998**.";

(j) after clause 1.4.72 **insert**—

**"1.4.72A Registered Electrical Contractor**

A person who is registered as an electrical contractor under regulation 201 of the Electricity Safety (Installations) Regulations 1999.";

(k) in clause 1.6, after "suitable" **insert** "by the regulatory authority";

(l) in clause 2.4.1(c) **omit** "or the electricity distributor";

(m) in the NOTE to clause 3.11.4 for "Regulatory authorities, such as water and gas suppliers" **substitute** "Water, gas, telecommunications";

(n) in clause 3.11.5.1 for "electricity distributor"

**substitute** "regulatory authority";

(o) after the Heading "3.12 AERIAL WIRING SYSTEMS", **insert**—

**'3.12.0 General**

**3.12.0.1 Hazardous bushfire risk areas** Aerial wiring systems must not be constructed or substantially reconstructed in hazardous bushfire risk areas.

**3.12.0.2 Low bushfire risk areas**

Aerial wiring systems constructed or substantially reconstructed in low bushfire risk areas must comply with the requirements of Clauses 3.12.1 to 3.12.7.3.

### **3.12.0.3 Substantially reconstructed**

In this clause, *substantially reconstructed* means reconductoring of more than 30% of the wiring or replacement of more than 30% of the number of poles in a line supporting wiring.;

(p) in clause 3.12.2.1, paragraph (c) and the NOTE are **revoked**;

(q) after the Heading "3.13 CABLES SUPPORTED BY A CATENARY" **insert**—

### **3.13.0 Outdoor cables**

#### **3.13.0.1 Hazardous bushfire risk areas**

Outdoor cables supported by means of a catenary must not be constructed or substantially reconstructed in hazardous bushfire risk areas.

#### **3.13.0.2 Low bushfire risk areas**

Outdoor cables supported by means of a catenary constructed or substantially reconstructed in low bushfire risk areas must comply with the requirements of clauses 3.13.1 and 3.13.2.

#### **3.13.0.3 Substantially reconstructed**

In this clause, *substantially reconstructed* means reconductoring of more than 30% of the cable supported by a catenary or catenaries or replacement of more than 30% of the number of supports for the catenary or catenaries supporting a cable.;

(r) in clause 5.6.3.1(c) for "electricity distributor" (where secondly occurring) **substitute** "regulatory authority";

(s) in clause 7.8.11.4(c), after "appropriate means" **insert** "considered suitable by the regulatory authority";

(t) for clause 7.11.12 **substitute**—

**"7.11.12 Construction and demolition sites.** Installations on construction and demolition sites must comply with AS/NZS 3012."

(2) An installation that is supplied from an underground electrical distribution system must have—

(a) a short circuit protective device provided at the point of supply; or

(b) the consumers mains cables sheathed from the point of supply to the first protective device located within the installation.

(3) For the purposes of subregulation (2), an electricity suppliers' protective device at the installation's metering point, may be treated as the first protective device.

(4) If materials or methods of design, construction or installation are not specifically covered in these Regulations, the Office may require a suitably qualified person to certify that the materials and methods are equivalent to the requirements of these Regulations.

**Reg. 401(5) amended by S.R. No. 3/2001 reg. 10(2).**

- (5) Installations required to be earthed must conform to the requirements for the Multiple Earthed Neutral (MEN) system of earthing set out in the Australian/New Zealand Wiring Rules.

**Reg. 401(6) inserted by S.R. No. 3/2001 reg. 10(3).**

- (6) The minimum depth of underground cables set out in Clause 7.8.11.3 of the Australian/New Zealand Wiring Rules does not apply to the first 2000 millimetres of a high voltage underground cable from the point where the underground cable enters the ground if that initial portion of the line is selected, installed and protected in accordance with clause 3.3.7 of the Australian/New Zealand Wiring Rules.

## **Queensland**

Queensland has separate provisions for self-employed electricians and for work on a construction site or involving water equipment.

### ***Electrical Safety Regulation 2002 (reprinted as in force on 1 March 2008)***

#### **66 Licensed electrical worker to comply with wiring rules**

A licensed electrical worker who performs electrical work on an electrical installation must ensure that the electrical installation, to the extent it is affected by the electrical work, is in accordance with the wiring rules.

Maximum penalty—40 penalty units.

#### **67 Employer to ensure electrical installation complies**

An employer who employs a licensed electrical worker to perform electrical work on an electrical installation must ensure that the electrical installation, to the extent it is affected by the electrical work, is in accordance with—

- (a) if the electrical installation is to be used for construction work—the wiring rules and AS/NZ 3012 (Electrical installations—Construction and demolition sites); or
- (b) if the electrical installation is not to be used for construction work—the wiring rules.

Maximum penalty—40 penalty units.

#### **67A Self-employed person to ensure electrical installation complies**

A self-employed person who is a licensed electrical worker and who performs electrical work on an electrical installation must ensure that the electrical installation, to the extent it is affected by the electrical work, is in accordance with—

- (a) if the electrical installation is to be used for construction work—the wiring rules and AS/NZ 3012; or
- (b) if the electrical installation is not to be used for construction work—the wiring rules.

Maximum penalty—40 penalty units.

#### **68 Work involving water equipment**

(1) A person must not perform work on water equipment unless—

- (a) the person is a licensed electrical worker; and
- (b) the work performed is work that the person would be authorised to perform on the water equipment under the person's electrical work licence if the water equipment were electrical equipment; and

(c) the water equipment, to the extent it is affected by the work, is in accordance with the wiring rules.

Maximum penalty—40 penalty units.

(2) An employer or self-employed person whose business or undertaking includes the performance of work on water equipment must ensure that, in the conduct of the business or undertaking, a person does not perform work in contravention of subsection (1).

Maximum penalty—40 penalty units.

### **Schedule 9 Dictionary**

*wiring rules* means AS/NZS 3000 (Electrical installations) (known as the Australian/New Zealand Wiring Rules).

## **Western Australia**

Western Australia groups together cross-references to a number of other Australian Standards, as well as the Wiring Rules and its own state requirements. State requirements prevail if there is inconsistency.

### **Electricity (Licensing) Regulations 1991** As at 31 Dec 2007 Version 03-a0-00

#### **3. Interpretation**

**“Australian/New Zealand Wiring Rules”** means

AS/NZS 3000:2000 Electrical Installations (known as the Australian/New Zealand Wiring Rules), published jointly by Standards Australia and Standards New Zealand;

#### **49. Electrical work to be carried out in accordance with certain requirements**

(1) An electrical worker shall carry out electrical work in accordance with the requirements of —

(a) the Australian/New Zealand Wiring Rules as amended from time to time;

(b) the WA Electrical Requirements as amended from time to time, and the following standards, as published by the Standards Association of Australia and amended from time to time, where those standards are relevant to the electrical work being carried out, namely —

AS 2067: “Switchgear Assemblies and Ancillary Equipment for A/C Voltages above 1Kv”;

AS 2381: “Electrical equipment for explosive atmospheres — Selection, installation and maintenance”;

AS 2430: “Classification of hazardous areas”;

AS 3001 (sections 1 and 2 only): “Electrical installations — Movable premises (including caravans) and their site installations”;

AS 3002: “Electrical installations — Shows and carnivals”;

AS 3004 (sections 1 and 2 only): “Electrical installations — Marinas and pleasure craft at low voltage”;

AS 3005 (sections 1 and 2 only): “Electrical installations of tents and similar temporary structures for domestic purposes”;

AS 3008: “Electrical installations — Selection of cables”;

AS 3010 (Part 1): “Electrical Installations — Supply by Generating Set”.

(2) Where any code or standard is inconsistent with the WA Electrical Requirements referred to in subregulation (1) the latter prevails to the extent of the inconsistency.

(3) A person who employs an electrical worker shall not cause or permit the electrical worker to carry out electrical work contrary to this regulation.



## South Australia

South Australia, as well as apply the Wiring Rules generally, allows the Wiring Rules to be a 'deemed to comply' solution under state regulations.

### ELECTRICITY (GENERAL) REGULATIONS 1997

#### 17—Electrical installations

(1) Electrical installations must comply with AS/↔ **NZS 3000** ↔ and any other ↔ **Australian Standard** ↔ or Australian/↔ **New Zealand Standard** ↔ called up by AS/↔ **NZS 3000** ↔.

(2) Despite any other regulation—

- (a) aerial lines, underground lines or other powerlines; and
- (b) earthing and electrical protection systems,

that form part of an electrical installation and that comply with AS/↔ **NZS 3000** ↔ and any other ↔ **Australian Standard** ↔ or Australian/↔ **New Zealand Standard** ↔ called up by AS/↔ **NZS 3000** ↔, will be taken to comply with these regulations.

#### 18—Certain electrical installation work and certificates of compliance

(1) The following provisions apply for the purposes of section 61(1) of the Act:

(a) work on an electrical installation or proposed electrical installation that is work of any kind referred to in AS/↔ **NZS 3000** ↔ or another ↔ **Australian** ↔ ↔ **Standard** ↔ or Australian/↔ **New Zealand Standard** ↔ called up by AS/↔ **NZS 3000** ↔ must be carried out, and the installation must be examined and tested—

(i) in accordance with AS/↔ **NZS 3000** ↔ and any ↔ **Australian Standard** ↔ or Australian/↔ **New Zealand Standard** ↔ called up by or under AS/↔ **NZS 3000** ↔ and so that the installation complies with any other technical and safety requirements under these regulations; and ...

#### 18A—Prescribed work (section 61(4))

(1) For the purposes of section 61(4) of the Act, work of a kind referred to in AS/↔ **NZS 3000** ↔ or any other ↔ **Australian Standard** ↔ or Australian/↔ **New Zealand Standard** ↔ called up by AS/↔ **NZS 3000** ↔ is prescribed.

(2) For the purposes of section 61(4) of the Act, work on an electrical installation or proposed electrical installation that is work of a kind prescribed by subregulation (1) must be carried out—

(a) in accordance with AS/↔ **NZS 3000** ↔ and any other ↔ **Australian Standard** ↔ or Australian/↔ **New Zealand Standard** ↔ called up by AS/↔ **NZS 3000** ↔ ;

## **Tasmania**

Tasmania simply incorporates the Wiring Rules into its regulations.

### **ELECTRICITY INDUSTRY SAFETY AND ADMINISTRATION REGULATIONS 1999**

#### **16. Standard of electrical work**

(1) In this regulation,

"← **AS 3000** →" means AS/← **NZS 3000** →:2000 Electrical Installations (known as Australia/New Zealand Wiring Rules) issued and published by Standards Australia International Limited (ACN 087 326 690), as amended from time to time.

(2) The standard ← **AS 3000** → is incorporated into these regulations.

(3) The holder of an electrical contractor's licence or an electrician's licence must ensure that electrical work carried out under the licence is carried out in accordance with ← **AS 3000** →.

Penalty:

In the case of –

- (a) a body corporate, a fine not exceeding 200 penalty units; and
- (b) an individual, a fine not exceeding 100 penalty units.

## **Australian Capital Territory**

The A.C.T. regulates in terms of the offence attaching to non-observance of the Wiring Rules.

### **ELECTRICITY SAFETY ACT 1971**

#### **NOTES**

##### **Dictionary**

AS/↔ NZS 3000 ↔ means Australian/↔ New Zealand Standard 3000 ↔ (Wiring Rules) as in force from time to time.

#### **SECTION 5**

##### **Compliance with AS/↔ NZS 3000 ↔**

- (1) A person commits an offence if—
  - (a) the person carries out electrical wiring work; and
  - (b) the work does not comply with AS/↔ NZS 3000 ↔ as in force—
    - (i) when the work is completed; or
    - (ii) if the work is not completed—when the work is carried out.

Maximum penalty: 50 penalty units.

#### **SECTION 6**

##### **Testing and reporting of electrical work**

- (1) A person who carries out electrical wiring work commits an offence if—
  - (a) the person does not ensure that the work—
    - (i) is tested in accordance with AS/NZS 3017 as in force when the test is carried out; and
    - (ii) complies with AS/↔ NZS 3000 ↔ when the test is carried out; or
  - (b) within 14 days after the day the test is carried out, the person does not give the construction occupations registrar, or the owner of the installation for which the work was done, a report of the test in a form approved by the registrar under section 65.

Maximum penalty: 5 penalty units.

## ***Northern Territory***

### **ELECTRICITY REFORM (SAFETY AND TECHNICAL) REGULATIONS (As in force at 14 December 2005)**

The Northern Territory's provisions are similar to those in South Australia.

#### **Section 3. Installations to comply with ◀ Australian Standard ▶**

For the purposes of sections 67(1) and 68(1) of the Act, it is a safety and technical requirement of these Regulations that an electrical installation must comply with ◀ AS 3000 ▶ and any other ◀ Australian Standard ▶ called up by ◀ AS 3000 ▶.

#### **Section 4. Certain electrical installation work**

For the purposes of section 69 of the Act, work on an electrical installation or proposed electrical installation that is work of a kind referred to in ◀ AS 3000 ▶ or another ◀ Australian Standard ▶ called up by ◀ AS 3000 ▶ must be carried out, and the installation must be examined and tested -

(a) in accordance with ◀ AS 3000 ▶ and an ◀ Australian Standard ▶ called up by or under ◀ AS 3000 ▶, if any, and so that the installation complies with all other technical and safety requirements under these Regulations; and

(b) in accordance with the requirements, if any, specified by the operator of the transmission or distribution network to which the installation is or is to be connected.