

Electricity Amendment Regulations 2002

Silvia Cartwright, Governor-General

Order in Council

At Wellington this 16th day of December 2002

Present:

The Right Hon Helen Clark presiding in Council

Pursuant to section 169 of the Electricity Act 1992, Her Excellency the Governor-General, acting on the advice and with the consent of the Executive Council, makes the following regulations.

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Regulations

1 Title

- (1) These regulations are the Electricity Amendment Regulations 2002.

- (2) In these regulations, the Electricity Regulations 1997¹ are called “the principal regulations”.

¹ SR 1997/60

2 Commencement

- (1) These regulations (except regulations 5 to 10) come into force on 1 January 2003.
- (2) Regulations 5 to 10 come into force on 1 April 2003.

3 New regulation 2 substituted

- (1) The principal regulations are amended by revoking regulation 2, and substituting the following regulation:

“2 Interpretation

- “(1) In these regulations, unless the context otherwise requires,—

“**a.c.** means alternating current

“**Act** means the Electricity Act 1992

“**all practicable steps** has the same meaning as in section 2(1) of the Health and Safety in Employment Act 1992

“**arm’s reach** means 2.5 m vertically upwards, and 1.25 m sideways or downwards, from any point on a surface where persons usually stand or move about

“**AS** means Australian Standard

“**AS/NZS** means a joint Australian and New Zealand Standard

“**caravan park** means an area of land—

“(a) that is used, or intended to be used, to site 2 or more vehicles or relocatable buildings containing connectable installations; and

“(b) on which are installed fittings to supply electricity to those installations

“**certificate of compliance** means a certificate issued in accordance with regulation 39

“**certificate of verification** means a document certifying that any inspection, checking, and testing necessary to verify compliance with section 5 of NZS 3019 has been successfully completed

“**conductor** means a wire, cable, bar, or tube, used or placed in position for the conveyance of electricity; but does not include the wire of an electric fence

“**d.c.** means direct current

“**direct contact** means contact, by any person or animal, with live parts, including contact by any thing being carried or worn by that person or animal

“**earthed** means effectively connected to the general mass of earth

“**electric line** means all conductors (including fittings supporting, or connected to, those conductors), whether above or below ground, that are used, or intended to be used, in, or in connection with, the supply of electricity from the outgoing terminals of a generating station, a building, enclosure, or other structure to—

“(a) the incoming terminals of another building, enclosure, or other structure; or

“(b) an electrical appliance, in any case where the electrical appliance is supplied with electricity other than from a terminal in a building, enclosure, or other structure

“**electrically safe** has the same meaning as in regulation 69(2)

“**employer licence** means an employer licence issued under section 101 of the Act

“**extra-low voltage** means any voltage normally not exceeding 50 volts a.c. or 120 volts ripple-free d.c.

“**generating station** means those parts of works that are used principally for the generation of electricity

“**hazardous area** means an area in which an explosive atmosphere is present, or may be expected to be present, in quantities that require special precautions for the construction, installation, and use of electrical equipment

“**high voltage** means voltage exceeding 1,000 volts a.c. or 1,500 volts d.c.

“**IEC**, when immediately followed by a number, means a standard of that number set by the International Electrotechnical Commission

“**IEC shock currents standard** means the magnitude and duration of shock currents specified in Zones AC-1 and AC-2 of Figure 14 of IEC 60479-1 for a.c. currents, and Zones DC-1 and DC-2 of Figure 15 of IEC 60479-1 for d.c. currents

“**indirect contact** means contact, by a person or animal, with exposed conductive parts that are live under fault conditions,

including contact by any thing being carried or worn by that person or animal

“**insulated**, in relation to conductors and other fittings, means that the conductors or fittings are covered with insulation in such a manner that a person may safely handle them when they are live

“**isolated**, in relation to fittings or electrical appliances, means that the fittings or appliances are deliberately disconnected from any source of electricity

“**isolating transformer** means a transformer that has its input and output windings electrically separated to limit hazards that may occur due to accidental simultaneous contact between earth and—

“(a) live parts; or

“(b) metal parts that may become live in the event of an insulation fault

“**live** or **alive** means charged with electricity so that a difference in voltage exists to earth or between conductors

“**low voltage** means any voltage exceeding 50 volts a.c. or 120 volts ripple-free d.c. but not exceeding 1,000 volts a.c. or 1,500 volts d.c.

“**main earthing system** means an earthing system of an electrical installation—

“(a) that operates at standard low voltage; and

“(b) that incorporates both an earth electrode and an earthing lead that is connected at that earth electrode and at the switchboard

“**main switchboard**, in respect of an electrical installation, means the switchboard that is used by the consumer to provide the greatest degree of control of the supply of electricity to that installation

“**mains** means those fittings forming part of an electrical installation that are used for the supply of electricity to the main switchboard of that installation

“**mains parallel generation system** means fittings that—

“(a) are used or intended for use by any person in the generation of, or in connection with the generation of, electricity for that person’s use; and

“(b) are capable of supplying electricity to fittings that, at the same time, are supplied with electricity from other systems of electrical supply

“**MEN switchboard** means a switchboard that has a connection to an earth electrode via an earthing lead, and a connection between earth and neutral made by a removable link, for the purposes of a MEN system

“**Multiple Earthed Neutral System** or **MEN system** means a system of supply of electricity in which the neutral is connected to the earth—

“(a) at the source of supply; and

“(b) at points on the supply system; and

“(c) at every electrical installation connected to that system

“**NZS** means New Zealand Standard

“**personal protective equipment** means items of apparel and equipment worn by a person that are intended either to prevent the occurrence of harm to the person or to minimise any harm that may occur from hazards that are present in the workplace or hazards that may arise in the course of work

“**prescribed electrical work** has the same meaning as in regulation 17

“**residual current device** or **RCD** means a device for isolating supply to protected circuits, socket-outlets, or electrical appliances in the event of a current flow to earth that exceeds a predetermined level

“**safety extra-low voltage** means extra-low voltage in a circuit that is isolated from the electricity supply mains by means such as a safety isolating transformer

“**safety isolating transformer** means an isolating transformer designed to supply safety extra-low voltage circuits

“**service protective fitting** means a fitting that can interrupt the supply of electricity to an electrical installation

“**shock currents** means electrical currents that pass through the body of a person or animal, and that have characteristics that are likely to cause disorders of physiological processes of the body

“**source of supply** means either the generating station or the substation from which electricity, at the voltage at which it is delivered to the consumer, is derived

“**standard low voltage** means,—

- “(a) in respect of electricity supplied by either a single-phase MEN system or a multiple-phase MEN system, a nominal voltage of 230 volts a.c. between phase and neutral; or
- “(b) in respect of electricity supplied by any other system, a nominal voltage,—
 - “(i) in relation to single-phase supplies, of 230 volts a.c. between conductors; or
 - “(ii) in relation to two-phase supplies, of 400 volts a.c. or 460 volts a.c. between conductors; or
 - “(iii) in relation to multiple-phase supplies, of 400 volts a.c. between conductors

“**submain** means those fittings forming part of an electrical installation that are used for the supply of electricity from the main switchboard to another switchboard, whether or not through intermediate switchboards

“**substation** means those parts of works or electrical installations, being a building, structure, or enclosure, incorporating fittings that are used principally for the purposes of the control of the distribution of electricity

“**suitably qualified auditor** means—

- “(a) a person who holds a relevant audit qualification recognised under the Joint Accreditation System—Australia New Zealand; or
- “(b) a person who satisfies the Secretary that the person is competent to assess a system or operation referred to in section 101 of the Act and regulation 16

“**telecommunications line** means a line within the meaning of section 5 of the Telecommunications Act 2001

“**telecommunications network voltage**, in relation to telecommunications lines or equipment, means a voltage that is not greater than the limits specified in AS/NZS 60950.

“(2) Unless the context otherwise requires, terms used in these regulations that are not defined in subclause (1) or in the Act have the meaning given to them (if any),—

- “(a) in the case of electrical installations, in AS/NZS 3000; and
- “(b) in all other cases, in IEC 60050.

“(3) In these regulations,—

“**ECP 34** means the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP34:2001) issued on 9 August 2001

“**ECP 35** means the New Zealand Electrical Code of Practice for Power Systems Earthing (NZECP35:1993) issued on 4 February 1993

“**ECP 36** means the New Zealand Electrical Code of Practice for Harmonic Levels (NZECP36:1993) issued on 4 February 1993

“**ECP 41** means the New Zealand Electrical Code of Practice for Single Wire Earth Return Systems (NZECP41:1993) issued on 4 February 1993

“**ECP 50** means the New Zealand Electrical Code of Practice for Repair of Domestic Electrical Equipment (NZECP50:1993) issued on 4 February 1993

“**ECP 51** means the New Zealand Electrical Code of Practice for Electrical Wiring Work in Domestic Premises (NZECP51:1993) issued on 4 February 1993

“**ECP 52** means the New Zealand Electrical Code of Practice for Retrofit Heaters for Spa-Pool Installations (NZECP 52: 1996) issued on 15 May 1996

“**ECP 54** means the New Zealand Electrical Code of Practice for Electrical Installations of Recessed Luminaires and Auxiliary Equipment (NZECP 54:2001) issued on 5 April 2001

“**ECP 60** means the New Zealand Electrical Code of Practice for Inspection, Testing and Certification of Low Voltage AC Railway Signalling Control Circuits (NZECP 60: 1997) issued on 6 July 1997.

“(4) In these regulations,—

“**AS/NZS 2381.1** means the Joint Australian/New Zealand Standard known as AS/NZS 2381.1:1999 (Electrical equipment for explosive atmospheres – Selection, installation, and maintenance – General requirements)

“**AS/NZS 2500** means the Joint Australian/New Zealand Standard known as AS/NZS 2500:1995 (Guide to the safe use of electricity in patient care)

“**AS/NZS 3000** means the Joint Australian/New Zealand Standard known as AS/NZS 3000:2000 (Australia/New Zealand Wiring Rules)

“**AS/NZS 3001** means the Joint Australian/New Zealand Standard known as AS/NZS 3001:2001 (Electrical installations – Movable premises (including caravans and their site installations))

“**AS/NZS 3002** means the Joint Australian/New Zealand Standard known as AS/NZS 3002:2002 (Electrical installations – Shows and carnivals)

“**AS/NZS 3003** means the Joint Australian/New Zealand Standard known as AS/NZS 3003:1999 (Electrical installations – Patient treatment areas of hospitals and medical and dental practices)

“**AS/NZS 3004** means the Joint Australian/New Zealand Standard known as AS/NZS 3004:2002 (Electrical installations – Marinas and pleasure craft at low voltage)

“**AS/NZS 3012** means the Joint Australian/New Zealand Standard known as AS/NZS 3012:1995 (Electrical installations – Construction and demolition sites)

“**AS/NZS 3016** means the Joint Australian/New Zealand Standard known as AS/NZS 3016:1994 (Electrical installations – Electric security fences)

“**AS/NZS 3112** means the Joint Australian/New Zealand Standard known as AS/NZS 3112:2000 (Approval and test specification – Plugs and socket-outlets)

“**AS/NZS 3350.2.98** means the Joint Australian/New Zealand Standard known as Humidifiers AS/NZS 3350.2.98:1998 (Safety of household and similar electrical appliances – Particular requirements)

“**AS/NZS 3551** means the Joint Australian/New Zealand Standard known as AS/NZS 3551:1996 (Technical management programmes for medical devices)

“**AS/NZS 3760** means the Joint Australian/New Zealand Standard known as AS/NZS 3760:2001 (Inservice safety inspection and testing of electrical equipment)

“**AS/NZS 3820** means the Joint Australian/New Zealand Standard known as AS/NZS 3820:1998 (Essential safety requirements for low voltage electrical equipment)

“**AS/NZS 3832** means the Joint Australian/New Zealand Standard known as AS/NZS 3832:1998 (Cold cathode illumination systems)

“**AS/NZS 4249** means the Joint Australian/New Zealand Standard known as AS/NZS 4249:1994 (Electrical safety practices – Film, video, and television sites)

“**AS/NZS 4417** means the Joint Australian/New Zealand Standard known as AS/NZS 4417:1998 (Marking of electrical products to indicate compliance with regulations (all parts))

“**AS/NZS 4701** means the Joint Australian/New Zealand Standard known as AS/NZS 4701:2000 (Requirements for domestic electrical appliances for reconditioning or parts recycling)

“**AS/NZS 60950** means the Joint Australian/New Zealand Standard known as AS/NZS 60950:2000 (Safety of information technology equipment)

“**BS 196** means the British Standard known as BS 196:1961 (Specification for protected type non-reversible plugs, socket-outlets, cable couplers, and appliance couplers with earthing contacts for single phase a.c. circuits up to 350 volts)

“**IEC 60050** means the International Electrotechnical Commission Standard known as IEC 60050 (International Electrotechnical Vocabulary)

“**IEC 60309** means IEC 60309-1988, Plugs, socket-outlets, and couplers for industrial purposes

“**IEC 60479-1** means IEC 60479-1:1994, Effects of current on human beings and livestock – Part 1: General

“**NZS 1989** means the New Zealand Standard known as NZS 1989:1965 (Specification for protected type non-reversible plugs, socket-outlets, cable couplers and appliance couplers with earthing contacts for single phase a.c. circuits up to 350 volts)

“**NZS 3019** means the Interim New Zealand Standard known as NZS 3019 (Int):2002 (Electrical installations – In-service testing).”

4 New regulation 9 substituted

The principal regulations are amended by revoking regulation 9, and substituting the following regulation:

“9 Registers

The registers maintained by the Board in accordance with section 87 of the Act must contain the following information for each registered person:

“(a) name and address:

“(b) class of registration:

“(c) date of registration:

“(d) whether the person holds a current practising licence:

“(e) any limits imposed by the Board under section 86 of the Act on the work that the person may undertake.”

5 Prescribed electrical work registered line mechanics may do

Regulation 19(1) of the principal regulations is amended by omitting the words “to regulation 24 and”.

6 Prescribed electrical work registered electricians and registered electrical inspectors may do

Regulation 20 of the principal regulations is amended by omitting the words “to regulation 24 and”.

7 New regulation 21 substituted

The principal regulations are amended by revoking regulation 21, and substituting the following regulation:

“21 Prescribed electrical work qualified engineers may do

Qualified engineers may do any prescribed electrical work.”

8 Regulations 24 and 27 revoked

The principal regulations are amended by revoking regulations 24 and 27.

9 New regulation 28 substituted

The principal regulations are amended by revoking regulation 28, and substituting the following regulation:

“28 Work on live high voltage overhead electric lines

Work on live high voltage overhead electric lines must be—

“(a) managed and carried out only in accordance with any standard set by the Secretary for that purpose; and

“(b) carried out only by a person who complies with any standard set by the Secretary for the competency and qualifications of persons who carry out that work.”

10 New regulation 29 substituted

The principal regulations are amended by revoking regulation 29, and substituting the following regulation:

“29 Work on live conductors of low voltage overhead electric lines in electrical installations

“(1) This regulation applies to work on live conductors of low voltage overhead electric lines in electrical installations—

“(a) that have exposed live metal; or

“(b) if there is a likelihood of accidental contact with any other conductor or bare earthed metal.

“(2) A person may only carry out the work if he or she uses the associated equipment and personal protective equipment that is necessary to ensure his or her safety and the safety of other persons in the vicinity of the work.”

11 New regulation 30 substituted

The principal regulations are amended by revoking regulation 30, and substituting the following regulation:

“30 Safe approach distances

“(1) Every person working near an exposed live fitting or conductor must—

“(a) maintain a safe approach distance; and

“(b) comply with ECP 34.

“(2) This regulation does not apply to a person working—

“(a) near conductors or fittings of extra-low voltage; or

“(b) on a live electric line; or

“(c) on a live substation.”

12 New regulation 32 substituted

The principal regulations are amended by revoking regulations 32 and 33, and substituting the following regulation:

“32 Temporary earthing requirements

“(1) A person who works on a high voltage conductor or fitting that is disconnected from a supply of electricity must, before beginning work, ensure that the conductor or fitting—

“(a) is earthed; and

- “(b) remains earthed until the work is completed.
- “(2) The conductor or fitting must be sufficiently earthed to protect any person working on the conductor or fitting from exposure to a significant risk of electric shock or other injury.
- “(3) A temporary earthing connection of a conductor or fitting must be adequate to carry any short circuit current that may flow.
- “(4) A person may remove an earthing connection to test a conductor or fitting, but must take all practicable steps to ensure his or her own safety, and the safety of others in the vicinity.
- “(5) A person who works on a high voltage conductor or fitting that is disconnected from a supply of electricity need not comply with subclause (1) if—
- “(a) the high voltage conductor or fitting is isolated but not earthed; and
 - “(b) the person carries out the work using the procedures approved by the employer (if any); and
 - “(c) the person uses the associated equipment and personal protective equipment necessary to ensure his or her own safety, and the safety of others in the vicinity.”

13 New regulations 35 and 36 substituted

The principal regulations are amended by revoking regulations 35 and 36, and substituting the following regulations:

- “35 **Responsibility of employers for safety of employees**
- “(1) An employer who employs a person to carry out work referred to in regulation 17(1) or (2)(d) to (f) must take all practicable steps to ensure the safety of the employee while carrying out the work, and must take the steps described in subclauses (2) and (3) in particular.
- “(2) The employer must take all practicable steps to—
- “(a) provide safe working procedures for employees to follow when carrying out the work; and
 - “(b) ensure that any associated equipment and personal protective equipment used by an employee is arranged, designed, made, tested, inspected, and maintained so that it is safe for the employee to use.
- “(3) The employer must take all practicable steps to ensure that the employee who carries out the work—

- “(a) has adequate knowledge and experience of the type of work being carried out; and
 - “(b) has been adequately trained in the safe use of the associated equipment, the personal protective equipment, and the procedures for carrying out the work; and
 - “(c) immediately before the start of the work, checks that the associated equipment and personal protective equipment is in good order and condition; and
 - “(d) uses the equipment and the procedures that the employer has approved for the work.
- “(4) Subclause (3)(a) does not apply if the employee is in training and the employer ensures that the employee is adequately supervised to ensure the safety of the employee.
- “(5) The responsibilities of the employer set out in this regulation are in addition to, and do not limit, the responsibilities of the employer under the Health and Safety in Employment Act 1992.

“36 **Safety responsibilities of person who carries out work**

- “(1) A person who carries out work referred to in regulation 17(1) or (2)(d) to (f) must take all practicable steps to ensure his or her safety while carrying out the work, and must take the steps described in subclause (2) in particular.
- “(2) That person must take all practicable steps,—
- “(a) before beginning the work, to check that any associated equipment and personal protective equipment to be used by that person is in good order and condition, and is safe for its intended use; and
 - “(b) to follow the procedures approved by the employer (if any) for the work to be carried out; and
 - “(c) to use the associated equipment and the personal protective equipment provided in a competent manner.
- “(3) The responsibilities set out in this regulation of a person carrying out work are in addition to, and do not limit, the responsibilities of that person under the Health and Safety in Employment Act 1992.”

14 New regulations 37 to 39 substituted

The principal regulations are amended by revoking regulations 37 to 39, and substituting the following regulations:

“37 Testing of prescribed electrical work

- “(1) A person who carries out prescribed electrical work on works or electrical installations must ensure that—
- “(a) the conductors or fittings on which the work was done are tested to ensure the operational safety of the completed work; and
 - “(b) in the case of maintenance, alterations, or additions, the work does not reduce the safety of existing works or electrical installations; and
 - “(c) during testing, all practicable steps are taken to ensure the safety of persons, property, and the works and electrical installations.
- “(2) Except as provided in regulation 45, the requirements in subclause (1) must be completed before the conductors or fittings on which the work has been done are connected to a supply of electricity.
- “(3) Except as provided in subclause (4), a person who carries out prescribed electrical work on a low voltage electrical installation must ensure that work is tested and verified in accordance with section 6 of AS/NZS 3000 after the work is complete and before the installation is connected to a supply of electricity (unless the installation is connected solely for the purpose of testing, certification, or inspection under these regulations).
- “(4) A person who carries out work on low voltage a.c. railway signalling equipment must ensure that the work is tested in accordance with ECP 60.

“38 Testing electrical appliances

- “(1) A person who carries out prescribed electrical work on, or work that may affect the electrical safety of, an electrical appliance must verify that the appliance is electrically safe before releasing it from his or her control or returning it to service.
- “(2) However, subclause (1) does not apply if the repairs are—
- “(a) made in accordance with section 111 of the Act or regulation 48; or
 - “(b) repairs to a medical electrical appliance.
- “(3) A person may comply with this regulation by testing the electrical appliance in accordance with AS/NZS 3760.

“39 Certification of prescribed electrical work

- “(1) This regulation applies to prescribed electrical work—
- “(a) that is carried out on an electrical installation; and
 - “(b) that involves the placing or positioning, or the replacing or repositioning, of conductors, including fittings attached to those conductors.
- “(2) However, this regulation does not apply to the following kinds of prescribed electrical work:
- “(a) the repair or replacement of a faulty or damaged conductor;
 - “(b) the replacement of a fuse carrier with a circuit breaker appropriate to the rating of the electrical circuit in which the replacement is being made;
 - “(c) the replacement of any fitting with a fitting of an appropriate size, type, and rating for the electrical circuit.
- “(3) A person who carries out prescribed electrical work must ensure that the work is certified in accordance with subclauses (4) to (7).
- “(4) The work must be certified by one of the following persons, subject to any limits that may be prescribed by the Board under section 86 of the Act or any limits specified in a provisional licence:
- “(a) a registered electrical inspector;
 - “(b) a registered electrician;
 - “(c) a registered line mechanic, if the work certified is work in relation to electric lines;
 - “(d) a qualified engineer;
 - “(e) a provisional licence holder;
 - “(f) a person authorised to certify the prescribed electrical work under an employer licence.
- “(5) The certificate must be completed within 1 day of completion of the work or termination of the contract for the work, whichever is sooner.
- “(6) A person who certifies prescribed electrical work that has been completed must, before completing the certificate of compliance,—
- “(a) test any fittings in respect of the work in accordance with regulation 37; and
 - “(b) be satisfied that those fittings are safe to operate.
- “(7) The certificate of compliance for prescribed electrical work that has been completed must certify that—

- “(a) the fittings on which the work has been done have been tested and are electrically safe; and
 - “(b) the work has been done in accordance with the Act and these regulations; and
 - “(c) in the case of work done under an employer licence, the work has been done in accordance with the licence.
- “(8) A person who certifies prescribed electrical work that has not been completed must—
- “(a) identify—
 - “(i) the status of the work; and
 - “(ii) what tests have been completed; and
 - “(iii) the outcomes of those tests; and
 - “(b) certify that the work that has been done complies with the Act and these regulations to the extent that they apply to the work; and
 - “(c) certify that the work has been left safe.”

15 Further provisions relating to certification of prescribed electrical work

Regulation 40(2) of the principal regulations is amended by inserting, after the word “given”, the words “within 20 working days of its completion”.

16 Inspection of prescribed electrical work

- (1) Regulation 41(1) of the principal regulations is amended by omitting the expression “regulation 39(1)”, and substituting the expression “regulation 39”.
- (2) Regulation 41(1)(a) of the principal regulations is amended by omitting the expression “ECP 5”, and substituting the expression “AS/NZS 3832”.
- (3) Regulation 41(1)(c) of the principal regulations is amended by revoking subparagraphs (viii) to (x).
- (4) Regulation 41(2) of the principal regulations is amended by omitting the words “ECP 12 or ECP 24”, and substituting the words “AS/NZS 3003 or AS/NZS 2381.1”.
- (5) Regulation 41(2) of the principal regulations is amended by omitting the word “code”, and substituting the word “standard”.

- (6) Regulation 41(3) of the principal regulations is amended by omitting the expression “ECP 11”, and substituting the words “section 3 of NZS 3019”.
- (7) Regulation 41(6) of the principal regulations is amended by omitting the expression “regulation 39(1)”, and substituting the expression “regulation 39”.

17 Further provisions relating to inspection of prescribed electrical work

Regulation 42(1) of the principal regulations is amended by inserting, after the word “given”, the words “within 20 working days of its completion”.

18 Forms for certificates of compliance other than under employer licences

Regulation 43 of the principal regulations is amended by revoking subclause (3), and substituting the following subclause:

- “(3) A person (other than the Board) who supplies a form prescribed for the certification of commercial or electrical work that is part of a continuing building project or ongoing industrial work for which more than 1 certificate would otherwise be necessary must stamp the form with the date of the supply of the form. The form is valid for use for a period of 6 months from that date.”

19 New section 43A inserted

The principal regulations are amended by inserting, after regulation 43, the following regulation:

“43A Connection of electrical installations to electricity

Except as provided in regulation 45, a person who connects or reconnects an electrical installation to a supply of electricity either on which prescribed electrical work has been carried out or that has been disconnected from the supply of electricity for 6 months or longer must, at the time of making the connection,—

- “(a) in the case of a low voltage electrical installation that has been disconnected for 6 months or longer, and whether or not work has been carried out on it, sight a certificate of verification for that installation issued by—

- “(i) a registered electrical inspector; or
- “(ii) a person authorised under an employer licence to issue it; and
- “(b) in the case of a new electrical installation or an installation on which prescribed electrical work has been carried out, sight the requisite certificate of compliance; and
- “(c) ensure that the polarity and phase rotation of the supply is correct; and
- “(d) ensure that the protection of the supply is correctly rated; and
- “(e) verify the safety of revenue meters and associated load control fittings of mains; and
- “(f) verify that there is a main earthing system, if the supply is from a MEN system.”

20 Safety checks for particular electrical installations and electrical appliances

- (1) Regulation 46(1)(a) of the principal regulations is amended by omitting the expression “ECP 5”, and substituting the expression “AS/NZS 3832”.
- (2) Regulation 46(2) of the principal regulations is amended by revoking paragraphs (b) to (f), and substituting the following paragraphs:
 - “(b) for hazardous areas in electrical installations, in accordance with AS/NZS 2381.1:
 - “(c) for medical-electrical installations, in accordance with AS/NZS 3003, at intervals not exceeding 4 years:
 - “(d) for medical-electrical appliances, in accordance with AS/NZS 3551:
 - “(e) for caravan parks or boat marinas, in accordance with section 6 of NZS 3019, at intervals not exceeding 5 years, by a registered electrical inspector or by a person authorised to carry out the inspection under an employer licence:
 - “(f) for electrical installations on construction or demolition sites, in accordance with AS/NZS 3012, by a registered electrical inspector or by a person authorised to carry out the inspection under an employer licence:
 - “(g) at carnivals or fair grounds, or for animal stunning electrical appliances and meat conditioning electrical

appliances, at intervals not exceeding 1 year, by a registered electrical inspector or by a person authorised to carry out the inspection under an employer licence.”

- (3) Regulation 46 of the principal regulations is amended by revoking subclause (3), and substituting the following subclauses:

“(3) The results of each periodic inspection carried out under subclause (2) must be recorded on a form approved by the Secretary for the purpose, or, if the relevant standard contains a form, on that form.

“(4) A person who completes a form under subclause (3) must—
“(a) give a copy to the person requesting the inspection; and
“(b) keep a copy for at least 3 years or send a copy to the Secretary.”

21 Home-owners’ electrical wiring work

Regulation 47(1)(e)(ii) of the principal regulations is amended by omitting the expression “clause 5.2.2 of ECP 11”, and substituting the expression “NZS 3019”.

22 Limits and requirements of exemption for tradespersons

- (1) Regulation 49(4) of the principal regulations is amended by revoking paragraph (a), and substituting the following paragraph:

“(a) satisfactorily completed tuition in the subject matter specified in regulation 26(2)(b) to (d) within 24 months before becoming the holder of the certificate; and”.

- (2) Regulation 49(8)(a) of the principal regulations is amended by omitting the expression “AS/NZS 3760:1996”, and substituting the expression “AS/NZS 3760”.

23 Systems in general

- (1) Regulation 52 of the principal regulations is amended by revoking subclause (4), and substituting the following subclause:

“(4) An electrical installation supplied with electricity from a MEN system of supply must have at least 1 MEN switchboard, which must be located electrically closest to the point of supply.”

- (2) Regulation 52(5) is amended by omitting the words “may, before 1 April 1999, exceed”, and substituting the words “may exceed”.

24 Voltage

- (1) Regulation 53 of the principal regulations is amended by adding the following subclause:

- “(3) Electrical installations must be designed, constructed, and operated so that the voltage drop is not more than 5% under maximum load conditions between the point of supply and—
- “(a) any socket-outlet within an electrical installation operating at standard low voltage; or
 - “(b) the supply terminals of any fixed wired appliance connected to an electrical installation operating at standard low voltage.”

25 New regulation 55 substituted

The principal regulations are amended by revoking regulation 55, and substituting the following regulation:

“55 Frequency

- “(1) The frequency of electricity supplied by any person must be maintained within 1.5% of 50 hertz, except for momentary fluctuations.
- “(2) The requirement in subclause (1) may be varied for electrical installations operating at other than standard low voltage, if the electricity supplier and the person receiving the supply agree.”

26 Earthing requirements for works

Regulation 60(1) of the principal regulations is amended by omitting the words “Works must”, and substituting the words “Every owner of works must ensure as far as practicable that those works”.

27 New regulation 62 substituted

The principal regulations are amended by revoking regulations 62 and 63, and substituting the following regulation:

“62 Protection against fault currents

- “(1) Works must have adequate electrical protection against short circuits and earth faults.

- “(2) Short circuit and earth fault protective fittings must operate to disconnect supply from the circuit or other fittings that they protect.
- “(3) A person who supplies line function services to a consumer must, in respect of that consumer, provide a service protective fitting of appropriate rating for protection against short circuits or earth faults on mains.
- “(4) In the event of earth fault, earth fault protection in generating stations must disconnect faulty fittings so that any earth potential rise is limited to a level and a duration that are safe.
- “(5) High voltage conductors of overhead electric lines must have earth fault protection fittings that interrupt fault currents to earth in 5 seconds or less.
- “(6) Short circuit and earth fault protective fittings of the auto-closing type must operate for not more than 3 consecutive closures during a period not longer than 60 seconds, and must not be capable of further reclosures unless manually reset.”

28 New regulations 64 and 65 substituted

The principal regulations are amended by revoking regulations 64 and 65, and substituting the following regulations:

“64 **Residual current device characteristics**

- “(1) A residual current device that is used or intended to be used for protection against electric shock must limit the duration of shock currents to the limits specified in the IEC shock currents standard.
- “(2) A residual current device used or intended to be used at low voltage for protection against electric shock must also meet the limits specified in the IEC shock currents standard when tested with pulsating d.c. current.
- “(3) A residual current device for protection of property must have a maximum operating time not longer than 0.4 seconds.

“65 **Isolation fittings for works**

Suitable isolation fittings must be provided to disconnect works, or parts of them, from a supply of electricity if necessary, including in an emergency.”

29 Offences

Regulation 67 of the principal regulations is amended by revoking paragraphs (h) and (i), and substituting the following paragraphs:

- “(h) being a person supplying electricity or line function services, fails to comply with regulation 57 or regulation 62(3); or
- “(i) owns or operates works or electrical installations that do not comply with any of regulations 61, 62(1) or (2), or 65; or”.

30 Electrical safety

Regulation 69 of the principal regulations is amended by revoking subclause (1), and substituting the following subclause:

- “(1) Works, electrical installations, fittings, electrical appliances, and associated equipment must be designed, constructed, maintained, installed, and used so that they are electrically safe.”

31 New regulations 69A to 69C inserted

The principal regulations are amended by inserting, after regulation 69, the following regulations:

“69A Electrical installations

- “(1) Except as provided in regulation 72(3), electrical installations must comply with clauses 1.6 to 1.10, 2.2, and 3.5.2 of AS/NZS 3000.
- “(2) An electrical installation complies with subclause (1) and regulation 53(3) if it complies with sections 2 to 5 and 7 of AS/NZS 3000.
- “(3) Low voltage domestic and residential type areas of electrical installations must comply with clauses 2.5.3.1 and 2.5.3.2 of AS/NZS 3000, except in the circumstances described in clause 2.5.3.4 of that standard.
- “(4) However, subclause (3) does not apply to socket-outlets in electrical installations covered by AS/NZS 3003 that are installed in accordance with the requirements of that standard.

“69B Compliance with regulation 69(1)

Works, electrical installations, fittings, electrical appliances, and associated equipment comply with regulation 69(1) if they comply with—

- “(a) AS/NZS 2500, AS/NZS 3003, and AS/NZS 3551, in the case of electrical installations, fittings, and electrical appliances located in patient treatment areas of hospitals or medical or dental practices:
- “(b) AS/NZS 2381.1, in the case of works, electrical installations, fittings, electrical appliances, and associated equipment located in hazardous areas:
- “(c) AS/NZS 3002, in the case of electrical installations and electrical appliances located in shows or carnivals:
- “(d) AS/NZS 3012, in the case of electrical installations and electrical appliances located in construction or demolition sites:
- “(e) AS/NZS 4249, in the case of electrical installations and electrical appliances in film, video, and television sites.

“69C Compliance with design, construction, and installation requirements of regulation 69(1)

Works, electrical installations, fittings, electrical appliances, and associated equipment comply with the design, construction, and installation requirements of regulation 69(1) if they comply with—

- “(a) AS/NZS 3001, in the case of electrical installations of caravan parks at low voltage:
- “(b) AS/NZS 3004, in the case of electrical installations of marinas at low voltage:
- “(c) AS/NZS 3016, in the case of electrical installations of electric security fences:
- “(d) NZS 3019, in the case of in-service testing of electrical installations:
- “(e) AS/NZS 3832, in the case of electrical installations of cold cathode illumination systems:
- “(f) ECP 54, in the case of electrical installations of recessed luminaires and their auxiliary equipment.”

32 Cables and conductors

Regulation 70 of the principal regulations is amended by revoking subclauses (2) to (8), and substituting the following subclause:

“(2) Conductors must be adequately identified.”

33 Regulation 71 revoked

The principal regulations are amended by revoking regulation 71.

34 New regulation 72 substituted

The principal regulations are amended by revoking regulation 72, and substituting the following regulation:

“72 Position of switches and protective fittings

“(1) In a 2-wire electrical installation in which neither conductor is earthed, switches and circuit breakers must be fitted in both conductors throughout the installation.

“(2) Switches, fuse links, or circuit breakers must not be inserted into an earthed conductor or into any earthing connection.

“(3) However, subclause (2) does not apply to the extent that,—

“(a) in the case of a traction system or the middle conductor of a 3-wire direct current system, a circuit breaker may be inserted into the earthed conductor; and

“(b) in the case of an impedance earthed system, the neutral/earth connection may be switched, but only if the associated transformer starpoint is connected to earth at all times, either directly or through the neutral earthing impedance.”

35 Regulation 73 revoked

The principal regulations are amended by revoking regulation 73.

36 New regulation 74 substituted

The principal regulations are amended by revoking regulation 74, and substituting the following regulation:

“74 Socket-outlets

“(1) 3-pin flat pin socket-outlets that comply with AS/NZS 3112 must be—

“(a) used only in, or with, any works, electrical installations, or electrical appliances that operate at standard low voltage; and

“(b) connected so that the earth-continuity conductor is connected to the slot on the radial line; and

- “(c) connected so that the order of connection, in a clockwise direction when the socket-outlet is viewed from the front, is—
 - “(i) earth-continuity conductor:
 - “(ii) active conductor:
 - “(iii) neutral (or other) conductor.
- “(2) No person may manufacture, import, sell, or offer for sale any plugs, connectors, or socket-outlets that—
 - “(a) have scraping earth contacts for use in single-phase a.c. circuits of voltages up to and including 250 volts; and
 - “(b) have rated currents of 5, 10, or 15 amperes; and
 - “(c) are referred to in BS 196:1961 or NZS 1989:1965.
- “(3) On or after 1 January 2004, no person may manufacture, import, sell, or offer for sale plugs, connectors, or socket-outlets that—
 - “(a) have scraping earth contacts; and
 - “(b) are referred to in BS 196:1961 or NZS 1989:1965.”

37 Regulation 75 revoked

The principal regulations are amended by revoking regulation 75.

38 New regulations 76 and 76A substituted

The principal regulations are amended by revoking regulation 76, and substituting the following regulations:

“76 Fittings and electrical appliances

- “(1) Low voltage fittings and electrical appliances must comply with AS/NZS 3820.
- “(2) A low voltage fitting or electrical appliance complies with subclause (1) if it has been tested and verified to a standard listed in AS/NZS 4417 by a testing laboratory listed in AS/NZS 4417.
- “(3) A fitting or electrical appliance (other than a medical/electrical fitting or appliance) that is in-service complies with regulation 69(1) if it has been tested, inspected, and tagged in accordance with AS/NZS 3760.
- “(4) An electrical appliance (other than a medical/electrical appliance) being hired out or leased out complies with regulation 69(1) if it has been tested in accordance with AS/NZS 3760

- before the hire or lease and has passed the tests required by that standard.
- “(5) A used electrical appliance (other than a medical/electrical appliance) that is sold complies with regulation 69(1) if, before sale,—
- “(a) it has been tested in accordance with, and meets the requirements of, AS/NZS 3760, and has been tagged accordingly; or
 - “(b) it has been disabled and marked in accordance with AS/NZS 4701.
- “(6) However, subclause (5) does not apply to a spa-pool heater that does not comply with ECP 52.
- “(7) A humidifier electrical appliance for heating liquids that operates on the electrode boiler principle—
- “(a) must comply with AS/NZS 3350.2.98; or
 - “(b) must be—
 - “(i) connected to a supply of electricity by a flexible cord and plug; and
 - “(ii) protected by a residual current device that forms part of the plug or is mounted in the supply lead.
- “76A Non-complying fittings and electrical appliances**
- “(1) A fitting or electrical appliance does not comply with regulation 69(1) if,—
- “(a) in normal use, or in the event of abnormal operation, it functions unsafely so as to cause danger to persons, property, or animals; or
 - “(b) it has inadequate protection against direct contact or indirect contact; or
 - “(c) its unearthed conductive parts are separated from live parts only by basic insulation.
- “(2) An electrical appliance does not comply with regulation 69(1) if—
- “(a) the voltage at which the appliance operates is not adequately marked on the appliance; or
 - “(b) it is used for a use other than its normal use, and is not provided, or used in conjunction, with suitable safeguards; or
 - “(c) it is so constructed that it is not safe under both normal and abnormal conditions of use.”

39 New regulation 77 substituted

The principal regulations are amended by revoking regulation 77, and substituting the following regulation:

“77 Handheld appliances

- “(1) Handheld appliances must be connected to a supply of electricity by—
- “(a) a plug or pins for insertion into a socket-outlet of suitable capacity; or
 - “(b) a connector of suitable capacity.
- “(2) The voltage of electricity supplied to a handheld appliance must not exceed 250 volts to earth.
- “(3) A handheld appliance used by a person who is partly or wholly immersed in a conducting substance, or who is in a substantially conductive location, must be used in conjunction with one of the following safeguards against electric shock:
- “(a) the appliance is fixed wired and connected through a continuous flexible cord to a supply of electricity from a source isolated from earth with a voltage between conductors not exceeding 250 volts:
 - “(b) the appliance is supplied with electricity from a safety extra-low voltage source:
 - “(c) the appliance is double-insulated and is supplied with electricity through a residual current device.
- “(4) Unless subclause (3) applies, a handheld appliance that is used indoors in a situation that is normally damp, or is used outdoors, or is used in a building or structure under construction, must be used in conjunction with one of the following safeguards:
- “(a) any of the safeguards referred to in subclause (3):
 - “(b) the appliance is supplied with electricity from a monitored earth circuit where the supply to the appliance is automatically disconnected if the earth to the appliance is broken or disconnected:
 - “(c) the appliance is supplied with electricity from a source connected to earth so that the voltage to earth will not be greater than 55 volts a.c.:
 - “(d) the appliance is supplied with electricity through a residual current device:
 - “(e) the appliance is supplied with electricity from a source isolated from earth with a voltage between conductors not exceeding 250 volts:

“(f) the appliance is double insulated.”

40 Regulations 78 to 83 revoked

The principal regulations are amended by revoking regulations 78 to 83 and the headings above regulations 79 and 80.

41 New regulation 84 substituted

The principal regulations are amended by revoking regulation 84, and substituting the following regulation:

“84 Earthing in general

“(1) In this regulation, **metal** means metal forming part of works, electrical installations, fittings, and electrical appliances that is not in substantial contact with the general mass of earth.

“(2) Metal must be earthed or connected to earth by a bonding system if—

“(a) the metal is not fully isolated from both live parts and earth; or

“(b) the metal is located within arm’s reach.

“(3) However, metal may be connected to the neutral if the touch voltages are sufficiently low that shock currents and their duration cannot exceed the IEC shock currents standard.”

42 Regulation 85 revoked

The principal regulations are amended by revoking regulation 85.

43 Construction of works and electrical installations

(1) Regulation 87(1) of the principal regulations is amended by revoking paragraph (b), and substituting the following paragraph:

“(b) conductors are not adequately identified; or”.

(2) Regulation 87 of the principal regulations is amended by revoking subclauses (2) to (6), and substituting the following subclauses:

“(2) Works must be constructed so as to minimise the risk of—

“(a) electric shock; and

“(b) fire and burns.

“(3) Subclause (2)(a) is satisfied,—

“(a) for power system earthing, if ECP 35 is complied with:

- “(b) for works, if the supply of electricity within the works is limited so that shock currents and their duration cannot exceed the IEC shock currents standard.
- “(4) Works and electrical installations must be constructed and installed to take into account any special dangers that they create to persons and property.
- “(5) Subclause (4) is satisfied—
 - “(a) for single-wire earth return systems, if ECP 41 is complied with:
 - “(b) for retrofitting heaters into spa-pool installations, if ECP 52 is complied with:
 - “(c) for recessed luminaires and their associated equipment, if ECP 54 is complied with.”

44 Regulation 88 revoked

The principal regulations are amended by revoking regulation 88.

45 Damp situations

Regulation 90 of the principal regulations is amended by revoking subclause (2).

46 Extra-low voltage installations

Regulation 91 of the principal regulations is amended by revoking paragraph (a).

47 New regulations 93 and 93A substituted

The principal regulations are amended by revoking regulation 93, and substituting the following regulations:

“93 Safety distances from electric lines

- “(1) A person who carries out any construction, building, excavation, or other work on or near an electric line must—
 - “(a) maintain safe distances—
 - “(i) between the conductors and fittings of the electric line and other electric lines, telecommunications lines, stay wires, buildings, structures, ground surfaces, and water surfaces; and
 - “(ii) when building up, removing, excavating, or disturbing ground near the electric line; and

“(iii) when operating mobile plant near the electric line; and

“(b) comply with ECP 34.

“(2) A person who carries out work upgrading or altering an electric line in existence on the date on which this regulation comes into force must comply with ECP 34 only in relation to those parts of the line that are being upgraded or altered.

“93A Interference with, or movement of, works

A person must not interfere with, or move or attempt to move, any works, whether or not the works have been damaged, unless—

“(a) the person obtains permission from the owner or operator of the works; or

“(b) the person is authorised by an enactment; or

“(c) an emergency requires it.”

48 Protection against direct and indirect contact

Regulation 94 of the principal regulations is amended by revoking subclauses (3) and (4).

49 Connectable installations

(1) Regulation 97(2)(a) of the principal regulations is amended by omitting the expression “section 3 of ECP 1”, and substituting the expression “AS/NZS 3001”.

(2) Regulation 97(2)(b) of the principal regulations is amended by omitting the expression “sections 4 and 5 of ECP 29”, and substituting the expression “AS/NZS 3004”.

(3) Regulation 97(3) of the principal regulations is amended by revoking paragraph (a), and substituting the following paragraph:

“(a) a warrant of electrical fitness in accordance with section 7 of NZS 3019; or”.

(4) Regulation 97(4) of the principal regulations is amended by revoking paragraph (a), and substituting the following paragraph:

“(a) a warrant of electrical fitness in accordance with section 7 of NZS 3019; or”.

(5) Regulation 97 of the principal regulations is amended by inserting, after subclause (4), the following subclause:

- “(4A) For the purposes of subclauses (3) and (4), warrants of electrical fitness are valid for a period of 4 years from the date of issue.”
- (6) Regulation 97 of the principal regulations is amended by inserting, after subclause (6), the following subclause:
- “(6A) A person who issues a warrant of electrical fitness must—
- “(a) give a copy of the completed warrant form to the person requesting the warrant; and
 - “(b) keep a copy of the completed warrant form for at least 5 years or send a copy to the Secretary; and
 - “(c) complete and affix the warrant of electrical fitness sticker supplied with the warrant form in a prominent place on the connectable installation.”

50 Supply of electricity to connectable installations

- (1) Regulation 98(2)(a) of the principal regulations is amended by omitting the expression “section 2 of ECP 1”, and substituting the expression “AS/NZS 3001”.
- (2) Regulation 98(2)(b) of the principal regulations is amended by omitting the expression “sections 2 and 3 of ECP 29”, and substituting the expression “AS/NZS 3004”.
- (3) Regulation 98 of the principal regulations is amended by revoking subclause (3), and substituting the following subclause:
- “(3) Socket-outlets for the supply of electricity at standard low voltage to a connectable installation must,—
- “(a) in the case of a connectable installation in a caravan park or boat marina, comply with IEC 60309 or its equivalent or AS/NZS 3112 and be rated at or above 15 amperes; and
 - “(b) have supplementary protection against electric shock, unless the socket-outlets are installed in a caravan park and comply with IEC 60309.”
- (4) Regulation 98 of the principal regulations is amended by revoking subclause (5), and substituting the following subclause:
- “(5) A person who supplies electricity at standard low voltage to a connectable installation must first verify that the installation has—

- “(a) a current warrant of electrical fitness issued in accordance with section 6 of NZS 3019; or
- “(b) a certificate of compliance, for the whole of the installation, that is not more than 4 years old.”

51 Offences

- (1) Regulation 100 of the principal regulations is amended by revoking paragraphs (c) and (d), and substituting the following paragraphs:
 - “(c) installs or uses any—
 - “(i) cable contrary to the requirements of regulation 70(1); or
 - “(ii) conductor contrary to the requirements of regulation 70(2); or
 - “(iii) switch or protective fitting contrary to the requirements of regulation 72; or
 - “(iv) socket-outlet contrary to the requirements of regulation 74; or
 - “(v) handheld appliance contrary to the requirements of regulation 77; or
 - “(vi) low voltage overhead conductor that operates at standard low voltage contrary to the requirements of regulation 92; or
 - “(d) fails to—
 - “(i) comply with regulation 69A(1) or (3); or
 - “(ii) comply with the earthing requirements of regulation 84; or
 - “(iii) comply with the requirements of regulation 87(2) or (4); or
 - “(iv) secure any electricity generating facility, works, electrical installation, or substation against access by unauthorised persons in accordance with regulation 89; or
 - “(v) comply with the requirements of regulation 93; or
 - “(vi) comply with the requirements of regulation 93A; or
 - “(vii) comply with the requirements of regulation 98.”
- (2) Regulation 100(i) of the principal regulations is amended by omitting the expression “AS/NZS 4417:1998”, and substituting the expression “AS/NZS 4417”.

52 Schedule 5 amended

- (1) Clause 1 of Schedule 5 of the principal regulations is amended by adding the following paragraph:
 - “(e) the technical content of problem areas currently identified by the Board.”
- (2) Clause 2 of Schedule 5 of the principal regulations is amended by adding the following paragraph:
 - “(e) the technical content of problem areas currently identified by the Board.”
- (3) Clause 3 of Schedule 5 of the principal regulations is amended by revoking paragraphs (a) to (c), and substituting the following paragraphs:
 - “(a) within 14 months immediately before the date of the application, courses or refresher courses in the following:
 - “(i) safe working practices appropriate to the work of a line mechanic:
 - “(ii) testing to ensure safety before beginning, during, and after completion of that work:
 - “(iii) basic first aid:
 - “(b) within 7 months immediately before the date of the application, a course or refresher course in cardio-pulmonary resuscitation:
 - “(c) the technical content of problem areas currently identified by the Board.”

53 Schedule 9 amended

- (1) The table headed *Fees Payable under Parts 2 and 3* in Schedule 9 of the principal regulations is amended by omitting from the third column of the item relating to an application for a practising licence the expression “regulation 96(2)(b)”, and substituting the expression “section 96(2)(b)”.
- (2) The table headed *Fees Payable under Parts 2 and 3* in Schedule 9 of the principal regulations is amended by omitting from the third column of the item relating to an application for an employer licence the expression “regulation 101(1)”, and substituting the expression “section 101(1)”.
- (3) The table headed *Fees Payable under Parts 2 and 3* in Schedule 9 of the principal regulations is amended by adding the following item:

Application for tradeperson's certificate 34 Regulation 49(2)

- (4) Schedule 9 of the principal regulations is amended by revoking the table headed *Fees Payable under Part 5*, and substituting the following table:

Fees payable under Part 5

Matter in respect of which fee payable	Fee (\$) (GST incl)	Provision of the Act or these regulations under which fee payable
Forms for warrants of electrical fitness for connectable installations	1	regulation 97(7)
Arbitrators	80 per hour plus all expenses of the arbitrator that are paid by the Secretary	regulation 99(5)

Marie Shroff,
Clerk of the Executive Council.

Explanatory note

This note is not part of the regulations, but is intended to indicate their general effect.

These regulations amend the Electricity Regulations 1997. They come into force on 1 January 2003, except for regulations 5 to 10, which come into force on 1 April 2003.

The overall purpose of the amendments is to—

- update and simplify the principal regulations:
- improve domestic and residential safety:
- minimise compliance costs for industry and individuals:
- align Australian and New Zealand wiring practices.

More specifically, the amendments—

- revise the definitions of terms by adopting definitions used in joint Australian/New Zealand standards or definitions that are internationally recognised:

- replace most Electrical Installation Codes of Practice with Standards (in particular, AS/NZS 3000 or its companion Standards), and in other cases adopt new or revised Electrical Codes of Practice and Standards:
- introduce greater flexibility by replacing prescriptive technical requirements with safety principles and obligations, leaving industry to be guided by Codes, Standards or industry Safety Rules (*regulations 8, 11 to 14, 28, 30, 34 to 37, 39 to 50*):
- improve safety by updating the responsibilities of persons connecting or reconnecting some installations (*regulation 19*), requiring the installation of residual current devices in certain situations (*regulation 31*), and prohibiting all “scraping earth” plugs and sockets from 1 January 2004 (*regulation 36*):
- reduce compliance costs by recasting regulations relating to testing electrical appliances (*regulation 14*), certification (*regulation 14*), and inspection (*regulation 16*) to remove requirements that do not contribute to safety outcomes.

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These regulations are administered in the Ministry of Economic Development.
