## **ELECTRICITY ACT 1945—REGULATION**

(Electricity (Installation Safety) Regulation 1992)

**NEW SOUTH WALES** 



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HIS Excellency the Governor, with the advice of the Executive Council, and in pursuance of the Electricity Act 1945, has been pleased to make the Regulation set forth hereunder.

GARRY WEST, Minister for Energy.

## **PART 1—PRELIMINARY**

### Citation

**1.** This Regulation may be cited as the Electricity (Installation Safety) Regulation 1992.

## Commencement

2. This Regulation commences on 1st January, 1993.

## Repeal

**3.** The Consumers' Electrical Installations (Safety) Regulations 1961 are repealed.

### Crown bound

4. This Regulation binds the Crown.

## **Definitions**

5. In this Regulation:

- "consumer's aerial line" means an overhead line which is designed for, or operates at, a voltage lower than 650 volts and which is part of a consumer's installation;
- "consumer's high voltage installation" means a consumer's installation designed for, or operating at, a voltage over 1000 volts (alternating current) or 1500 volts (direct current);
- "consumer's installation" means all the electric wires, cables, appliances, fittings insulators and apparatus installed in, on, under or over any land or premises and used for, or for to, the conveyance, measurement, control or use of electricity supplied (or intended to be supplied) by an electricity supply authority, but does not include:
  - (a) an electricity supply main or service line, meter or apparatus the property of an electricity supply authority and used solely for the conveyance. measurement or control of electricity supplied to any land or premises; or
  - (b) movable electrical equipment; or
  - (c) an electrical installation operating at not more than 32 volts alternating current or 115 volts direct current;
- "consumer's mains" has the same meaning as in the SAAWiring Rules:
- "dangerous" means posing a risk to life, health or property;
- "hazardous area" has the same meaning as in the SAA Wiring Rules:
- **"installation work"** means the work of installing, repairing, altering, removing or adding to a consumer's installation, or the product of that work:
- **"installing contractor"** means an electrical contractor who carries out installation work or tests (whether himself or herself or though any partner, subcontractor or employee) whether or not for fee, gain reward;

## "movable electrical equipment" means:

(a) any electrical appliance or apparatus (including its associated wires and fittings) connected to, or designed for connection to, any consumer's installation socket-outlet at which fixed wiring terminates (or to any socket-outlet in a dwelling which is a movable dwelling within the meaning of Division 5B of Part 10 of the Local Government Act 1919), but does not include any appliance or apparatus connected to a socket-outlet by means of wiring which is fixed in position externally to the appliance or apparatus itself; or

- (b) a movable dwelling (within the meaning of Division 5B of Part 10 of the Local Government Act 1919) connected to, or designed for connection to, any consumer's installation socket-outlet;
- **"SAA Wiring Rules"** means Australian Standard AS 3000, Electrical Installations—Buildings, Structures and Premises, as in force for the time being, published by the Standards Association of Australia:
- "safe" means not dangerous;
- "supply" refers to the supply of electricity;
- "the Act" means the Electricity Act 1945.

## Scope and application

**6.** This Regulation does not apply to a consumer's installation, or installation work, to which the Coal Mines Regulation Act 1982, or any rule or regulation made under that Act, applies or to which the Mines Inspection Act 1901, or any rule made under that Act, applies.

# Work by installing contractor

- **7.** (1) In this Regulation, a reference to something done by an installing contractor is a reference to something actually done by the installing contractor, or done by a partner, subcontractor or employee of the installing contractor.
- (2) If by this Regulation something is required to be done by an installing contractor, the requirement is sufficiently complied with if the thing is actually done by the installing contractor, or is done by a partner, subcontractor or employee of the installing contractor.
  - (3) Subclause (2) has effect subject to clause 26.

#### Notes in the text

**8.** Notes in the text of this Regulation are explanatory notes and do not form part of this Regulation. They are provided to assist understanding.

## PART 2—INSTALLATION WORK

#### **SAA Wiring Rules**

**9.** (1) A person (including an installing contractor) who carries out any installation work which does not comply with the SAA Wiring Rules as in force at the completion of the work is guilty of an offence.

Maximum penalty: \$2,000.

(2) For the purposes of this Regulation, a consumer's aerial line designed and constructed in accordance with the Electricity (Overhead Line Safety) Regulation 1991 is taken to comply with the SAA Wiring Rules.

# Requirement etc. of electricity supply authority

- 10. A requirement or determination made by an electricity supply authority and referred to in the SAA. Wiring Rules has effect for the purposes of this Regulation only in relation to the area supplied by the authority and only if
  - (a) approved by the Corporation with regard to unifonnity and safety content; and
  - (b) made in writing and copied so that copies are available from the authority on request and free of charge, both to the owners of installations located in the area supplied by the authority and to installing contractors who carry out installation work in that area.

#### **Test**

- 11. (1) Before being permanently connected to supply, all installation work completed on or after the day when this Regulation takes effect must be tested to check its compliance with the SAA Wiring Rules (as in force at the completion of the work) and its safe operation.
- (2) The testing must be carried out by one or more of the following persons:
  - (a) the installing contractor who completed the work;
  - (b) another installing contractor;
  - (c) a person authorised under clause 25.
- (3) A test on installation work of any class is not carried out in accordance with this clause unless the person who actually carries it out is qualified to carry out a test on work of that class in accordance with clause 26.
- (4) A test carried out under this clause on installation work must, in addition to any other procedure considered relevant by the person carrying out the test, include so many procedures as are necessary to check such of the following matters as can be applied to the installation work:
  - (a) that there is earth continuity and that the earth resistance is safe;
  - (b) that the insulation resistance is safe;
  - (c) that polarity is correct;
  - (d) that there is no transposition of earthing and neutral conductors;

- (e) that there is no short circuit between conductors:
- (f) that there is no intermix between conductors of different circuits;
- (g) that switchboard equipment is correctly marked to indicate:
  - (i) the corresponding active and neutral. connections for each circuit; and
  - (ii) the relationship of the equipment to the various sections of the installation work;
- (h) that the number of wiring points connected to each circuit does not exceed the maximum permitted by the SAA Wiring Rules (as in force at the completion of the installation work);
- (i) that the installation work will operate in the manner intended by the parties who agreed or arranged for it to be carried out.

#### Connection of installation work

- **12.** (1) A person must not connect any installation work to the supply in my area unless its compliance with the SAA Wiring Rules and its safe operation have been established by a test in accordace with clause 11.
- (2) In addition, a person must not, without the permission of the electricity supply authority which supplies the area, connect to the supply in any area any installation work:
  - (a) associated with a consumer's mains OF main switchboard (unless the work only consists of repairs to the consumer's maims, or main switchboard, in residential premises); or
  - (b) forming part of a consumer's high voltage installation; or
  - (c) located within a hazadous area.
- (3) This clause does not prohibit a person from temporarily connecting installation work to the supply for the purpose of testing the work in accordance with clause 11 if the person has reason to believe that it will be safe to do so.

Maximum penalty: \$2,000.

#### Notification of installation work

- 13. (1) Within 14 days after the completion of any installations work, particulars of the work are to be notified to the electricity supply authority which supplies the area where the work was done and to the owner of the consumer's installation on which the work was done.
  - (2) The particulars must:
  - (a) be in a written form acceptable to the authority; and

- (b) identify the person who actually completed the work, the installing contractor (if any) in whose employment that person completed the work, and any other installing contractor who completed the work through a partner or subcontractor; and
- (c) be signed by the person notifying the particulars.
- (3) If the particulars are not notified in accordance with this clause, the person who actually completed the work, the installing contractor (if any) in whose employment that person completed the work, and any other installing contractor who completed the work through a partner or subcontractor, are each guilty of an offence.

Maximum penalty: \$2,000.

- (4) This clause does not require particulars to be given of any work:
- (a) that consists only of the disconnection, reconnection or replacement of appliances, switches, lighting points or socket-outlets without an increase in their number or the electrical load imposed by them; or
- (b) that consists only of installation work on a consumer's aerial line carried out in accordance with the Electricity (Overhead Line Safety) Regulation 1991 by the electricity supply authority which supplies the area where the work was done.

#### **Notification of test**

- **14. (1)** Within 14 days of the completion of any test on installation work under clause 11, particulars of the test are to be notified to the electricity supply authority which supplies the area where the work was done and to the owner of the consumer's installation on which the work was done.
  - (2) The particulars must:
  - (a) be in a written form acceptable to the authority; and
  - (b) identify the person who actually carried out the test, the installing contractor (if any) in whose employment that person carried out the test, and any other installing contractor who carried out the test through a partner or subcontractor; and
  - (c) be signed by the person notifying the particulars.
- (3) If the particulars are not notified in accordance with this clause, the person who actually carried out the test, the installing contractor (if any) in whose employment that person carried out the test, and any other installing contractor who carried out the test through a partner or subcontractor, are each guilty of an offence.

Maximum penalty: \$2,000.

- (4) This clause does not require particulars to be given of any test:
- (a) that relates only to the disconnection, reconnection or replacement of appliances, switches, lighting points or socket-outlets without an increase in their number or the electrical load imposed by them; or
- (b) that relates only to installation work on a consumer's aerial line carried out in accordance with the Electricity (Overhead Line Safety) Regulation 1991 by the electricity supply authority which supplies the area where the work was done.

# PART 3—AUTHORITY INSPECTIONS OF INSTALLATION WORK

## Installation work which must be inspected

- **15.** (1) This clause applies only to installation work:
- (a) associated with a consumer's mains or main switchboard (unless the work only consists of repairs to the consumer's mains, or main switchboard, in residential premises); or
- (b) forming part of a consumer's high voltage installation; or
- (c) located within a hazardous area.
- (2) An electricity supply authority must, after receiving both the notifications required under clauses 13 and 14, inspect the installation work to which the notifications relate.
- (3) The authority must do so as soon as practicable, and in any case within 3 months, after receiving the later of those 2 notifications.
- (4) The inspection is to determine whether the installation work complies with the SAA Wiring Rules as in force at the completion of the work.
- (5) If the inspection reveals that the installation work does not comply with the SAA Wiring Rules as in force at the completion of the work, the authority must, within 7 days after the completion of the inspection, give written notice to the installing contractor who completed the work or the owner of the consumer's installation on which the work was done of the non-compliance and of the period within which the non-compliance is to be remedied.

## Other installation work

**16. (1)** This clause applies only to installation work to which clause 15 does not apply.

- (2) An electricity supply authority must draw up a program of inspection of installation work to which this clause applies in the area supplied by the authority.
- (3) The program is to provide criteria for the authority to determine whether inspection of the work for compliance with the SAA Wiring Rules is required.
- (4) After the authority is notified of the particulars of installation work to which this clause applies, it is to inspect the work if the program so requires.
- (5) The authority must provide the Corporation with a copy of the program of inspection, with notices of my alterations made to the program from time to time, and, when requested by the Corporation, with a progress report on the implementation of the program.
- (6) If an inspection referred to in this clause reveals that installation work does not comply with the SAA Wiring Rules as in force at the completion of the work, the authority must, within 7 days after the completion of the inspection, give written notice to the installing contractor who completed the work or the owner of the consumer's installation on which the work was done of the non-compliance and of the period within which the non-compliance is to be remedied.

# **Exceptions: some aerial lines, lifts etc.**

- 17. (1) An electricity supply authority is not required to inspect installation work if the work consists only of installation work on a consumer's aerial line carried out by the same electricity supply authority in compliance with the Electricity (Overhead Line Safety) Regulation 1991.
- (2) An electricity supply authority is not required to inspect any wiping or equipment associated with any lift or escalator beyond the supply terminals of any circuit breaker in the lift or escalator machine rooms if the lift or escalator is one to which the Construction Safety Act 1912 applies.

[NOTE: See also clause 6 as to mines.]

## No connections where immediate danger

- 18. (1) If an electricity supply authority is satisfied that any part of any installation work does not comply with the SAA Wiring Rules as in force at the completion of the work and that the part is immediately dangerous, the authority:
  - (a) must not connect the part to its supply mains; and

- (b) must refuse permission to connect the part to its supply mains; and
- (c) if the part is already connected to the authority's supply mains—must disconnect it.
- (2) If any part of any installation work is shown in an inspection referred to in clause 15 or 16 by an electricity supply authority not to comply with the SAA Wiring Rules as in force at the completion of the work, but is not immediately dangerous, the authority must instead satisfy itself after the period notified under clause 15 or 16 that the part does comply with those Rules as in force at the completion of the work.
- (3) The authority may disconnect the part at any time after the period so notified has ended, if the non-compliance has not been remedied by that time.

### Connection or reconnection.

19. (1) A person must not connect to the supply mains of an electricity supply authority any part of any installation work in any case where the authority has disconnected the part or refused to give permission to connect the part, until the authority gives permission for the connection.

Maximum penalty: \$2,000.

(2) Before giving permission for the connection of the part, the authority must be satisfied that the part complies with the SAA Wiring Rules as in force at the completion of the installation work which includes that part.

# PART 4—AUTHROITY INSPECTIONS OF EXISTING CONSUMERS' INSTALLATION

## **Existing consumer's installations**

- **20.** (1) If, during an inspection of a consumer's installation by an elecitricity supply authority, whether under the Act or otherwise, the authority finds that the installation is dangerous, or likely to become dangerous, the authority must give the owner of the installation written notice of the danger and, if supply to the installation is not disconnected, of a period within which the installation is to be made safe.
- (2) Except where supply has been disconnected, the owner of the installation notified under this clause must, within the period specified in the notice, have the installation made safe.
- (3) The authority must, after that period has expired, satisfy itself that the installation has been made safe.

[NOTE: Work to make an installation safe is included in the concept of installation work and so comes under the notification provisions in clause 13.]

#### Disconnection

- **21.** (1) If a consumer's installation is dangerous, the electricity supply authority which supplies the installation may refuse or discontinue supply to part or all of the installation until the authority is satisfied that it is safe.
- (2) If a person obstructs or does not permit an inspection referred to in clause 15 or 16 of installation work, an electricity supply authority may disconnect supply to part or all of the consumer's installation on which the work was done until the inspection is completed.
- (3) If a person obstructs does not permit an inspection referred to in clause 20 of a consumer's installation, an electricity supply authority may disconnect supply to part or all of the installation until the inspection is completed.

### **Connection or reconnection**

**22.** (1) A person must not connect to the supply mains of an electricity supply authority my part of a consumer's installation in my case where the authority has disconnected the part or refused to give permission to connect the part, until the authority gives permission for the connection.

Maximum penalty: \$2,000.

(2) Before giving permission for the connection of the part, the authority must be satisfied it is safe.

## PART 5—MOVABLE ELECTRICAL EQUIPMENT

### Movable electrical equipment

- **23.** (1) If, during an inspection by an electricity supply authority, whether under the Act or otherwise, the authority finds that any movable electrical equipment is dangerous, the authority may give the owner or user of the equipment written notice of the respects in which it is dangerous.
- (2) A person who receives a notice under subclause (1) must not connect the equipment to a consumer's installation until the equipment has been made safe.

Maximum penalty: \$2,000.

- (3) If an electricity supply authority finds that any movable electrical equipment is immediately dangerous, the authority must place on the equipment in some conspicuous position a label indicating that the equipment is dangerous and must not be used until it has been made safe.
- (4) A person must not use equipment with such a label on it, or remove the label, until the equipment has been made safe.

Maximum penalty (subclause (4)): \$2,000.

### PART 6—MISCELLANEOUS

# **Authority inspections: general**

- **24.** (1) An inspection by an authority referred to in this Regulation:
- (a) must be carried out by a person authorised under clause 25 to carry out the inspection; and
- (b) may include any test which the authority considers necessary to check the safety of installation work, a consumer's installation or movable electrical equipment (as the case may require).
- (2) Nothing in this Regulation precludes an electricity supply authority from providing any person or organisation with a report of any test referred to in this Regulation carried out by the authority.

### **Authorised persons**

- **25.** (1) An electricity supply authority may authorise a person in writing to carry out a test referred to in this Regulation on installation work of a particular class if the person is qualified under clause 26 to carry out a test on work of that class.
- (2) An electricity supply authority may authorise a person in writing to carry out an inspection referred to in this Regulation:
  - (a) on installation work of a particular class, if the person is qualified under clause 26 to carry out a test on work of that class; or
  - (b) on consumer's installations, if the person is qualified under clause 26 to carry out a test on installation work of the class needed to make the consumer's installations; or
  - (c) on movable electrical equipment, if the person is qualified under clause 26 to carry out a test on installation work of one or more classes.
- (3) An electricity supply authority may authorise any person in writing to check the safety of consumers' aerial lines by inspection, if the person is permitted under the Electricity (Workers' Safety) Regulation 1992 to inspect overhead lines of the authority itself.

## Persons qualified to test

**26.** (1) A person must not carry out a test referred to in this Regulation on installation work of a particular class if he or she is not qualified in accordance with this clause to carry out a test on work of that class.

Maximum penalty: \$1,000.

- (2) A person is qualified to carry out a test referred to in this Regulation on installation work of a particular class if he or she holds a licence OF certificate issued under the Building Services Corporation Act 1989 which entitles the holder to perform work of that class without supervision.
- (3) A person is qualified to carry out a test confined to checking the safety of consumers' aerial lines if the person is permitted under the Electricity (Workers' Safety) Regulation 1992 to test overhead lines of an electricity supply authority.

# Notification to occupier of installation instead of owner

- **27. (1)** Notification required under clause 13 or 14 to be given to the owner of a consumer's installation may instead be given to the occupier of the installation if the occupier is one of the parties who agreed or arranged for the relevant installation work to be carried out on the consumer's installation.
- (2) An electricity supply authority which is required to give notice to the owner of a consumer's installation under clause 15, 16 or 20 may give that notice instead to the occupier of the installation.
- (3) However, if notice is given under subclause (2) to the occupier, the notice must be accompanied by a copy of it and a statement addressed to the occupier:
  - (a) that the copy of the notice should be forwarded to the owner of the installation; and
  - (b) that the whole or part of the installation may be disconnected by the authority if the installation is dangerous.

## **Copies of notifications**

**28.** An installing contractor who issues a notification, or is given notice or permission, under this Regulation must keep a copy of it for 2 years and, during that period, is to produce it to an electricity supply authority on demand by the authority.

Maximum penalty: \$1,000.

#### Maintenance of consumer's installations

- **29.** For the purposes of section 29 of the Act, all parts of a consumer's installation are prescribed, and the consumer (within the meaning of that section) must, to the best of his or her ability and knowledge, maintain the installation so that:
  - (a) its safe and satisfactory operation is not impaired by interference or damage; and
  - (b) its live parts remain properly insulated, or protected, against inadvertent contact with any person; and
  - (c) it is not used in a manner which exceeds the operating limits imposed by its design or installation.

Maximum penalty: \$1,000.

### PART 7—SAVINGS AND TRANSITIONAL PROVISIONS

#### **Definitions**

### **30.** In this Part:

- (a) a reference to the **old Regulations** is a reference to the Consumers' Electrical Installations (Safety) Regulations 1961 as in force immediately before their repeal; and
- (b) the **commencement date** means the date on which this Regulation commences.

### **Installation work straddling the commencement date**

**31.** If part of any installation work was done before the commencement date in compliance with regulation 5 of the Consumers' Electrical Installations (Safety) Regulations 1961 (as in force at the time the work was done), but the entire work was completed on or after that date, the entire work is taken to comply with clause 9 if so much of the work as was completed after the commencement date complies with clause 9.

#### Notices, tests etc.

- **32.** (1) Written particulars of work supplied under regulation 7 of the old Regulations within 14 days before the commencement date are taken to have been notified under clause 13.
- (2) For the purposes of clause 12, a test carried out under regulation 9 of the old Regulations is taken to have been carried out in accordance with clause 11. However, particulars of the test are not required to be notified under clause 14.

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- (3) A notice under regulation 9 (4) or 12 (2) of the old Regulations in relation to movable electrical equipment is, unless the relevant non-compliance or defect has been remedied before the commencement date, taken to be a notice under clause 23 (1).
- (4) A label affixed to movable electrical equipment under regulation 12 (4) of the old Regulations is, unless the equipment has been made safe before the commencement date, taken to be a label under clause 23 (3).
- (5) Notification under regulation 10 of the old Regulations, if the non-compliance to which the notification refers has not been remedied before the commencement date, is taken to be notice given under clause 15.
- (6) A notice under regulation 12 (2) of the old Regulations in relation to a consumer's installation, if the non-compliance to which the notification refers has not been remedied before the commencement date, is taken to be a notice under clause 20.

## **Connection or reconnection**

33. Clause 19 has effect in relation to a part if the part was disconnected (or the subject of a refusal to give permission to connect) under the old Regulations and permission has not been given for the subsequent connection of the part before the commencement date.

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#### **EXPLANATORY NOTE**

The purpse of this Regulation is to replace the Consumers' Electrical Installations (Safety) Regulations 1961 with an updated version.

Under the new Regulation, electrical contractors will be required to test their work as an additional means to ensure accountability for the safety of their work. Electricity supply authorities will retain their central inspection and supervisory role in determining the safety of movable electrical equipment and of consumers' electrical installations (whether they are new or existing installations).

The new Regulation covers:

- safety standards for installation work
- notification and testing of installation work (these in the main being done by contractors)

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- inspections by supply authorities (ranging from immediate inspections of certain new installations to programs of discretionary inspection targeted at the more important new and existing installations)
- conditions for the connection, disconnection and reconnection of installations and equipment
- qualifications of people who inspect or test
- the duties of consumers in maintaining their electrical installations.