

# NORTHERN TERRITORY OF AUSTRALIA

## ELECTRICITY BY-LAWS

As in force at 2 January 1992

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# NORTHERN TERRITORY OF AUSTRALIA

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As in force at 2 January 1992

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## ELECTRICITY BY-LAWS

### By-laws under the *Electricity Act*

#### Part I Preliminary

##### 1 Citation

These By-laws may be cited as the *Electricity By-laws*.

##### 2 Repeal

The *Electricity By-laws*, being Regulations 1978, No. 35, are repealed.

##### 3 Interpretation

(1) In these by-laws, unless the contrary intention appears:

***approved electrical contractor*** means an electrical contractor approved by the Authority under by-law 19A(3).

***consumer*** means a person who has made application for, or to whom is supplied, electricity.

***consumer's electrical installation*** means the electrical installation on and within the consumer's premises after the point of attachment.

***consumer's service*** means the line or cable from the supply line to the point of attachment.

***directed*** means directed by the Authority.

***electrical contractor*** means a person licensed under the *Electrical Workers and Contractors Act*.

***electrical installation work*** has the same meaning as in the *Electrical Workers and Contractors Act*.

***permit holder*** means the holder of a permit issued in accordance with section 30 of the *Electrical Workers and Contractors Act*.

**point of attachment** means the point at which aerial conductors of a service line or aerial consumer's main are terminated on a consumer's building, pole or structure.

**point of entry** means the point at which the consumer's main or underground service cable enters a building.

**service line** means any overhead conductor or group of overhead conductors, maintained by the Authority or an agent of the Authority, through which electricity may be supplied or is intended to be supplied by the Authority to a consumer or consumers, either from any supply main or directly from the premises of the Authority.

**standard rules** means the Australian Standard Rules for Electrical Installations – Buildings, Structures and Premises known as the SAA Wiring Rules and such publications of the Authority as are, from time to time, prescribed in the Schedule.

**underground service cable** means an underground cable maintained by the Authority or agent of the Authority through which electricity may be supplied by the Authority to a consumer or consumers either from any supply main or directly from the premises of the Authority.

- (2) In these By-laws, unless the contrary intention appears, "A.S." followed by a numeric, alphabetic or numeric and alphabetic series and a name, shall be read as a reference to an Australian Standard, of that series so named.

## **Part II                      Inspectors**

### **4                      Qualifications of inspector**

For the purposes of section 19(1) of the Act, the prescribed qualifications for an employee of the Authority to be appointed an electrical inspector is that the employee holds an electrical mechanic's licence Grade A issued by the Electrical Workers and Contractors Licensing Board.

## **Part III                    Prohibition on sale of certain classes of equipment**

### **5                    Certain equipment not to be sold**

A person shall not sell or hire or expose or advertise for sale or hire any wire, cable, appliance, fitting, meter, insulator, apparatus, equipment or thing which:

- (a) is intended, suggested or designed for use in the generation, storage, reticulation or consumption of electricity or is otherwise intended, suggested or designed for use in any electrical installation;
- (b) is required, under a law in force in that State, to be approved by the Energy Authority of New South Wales constituted by the *Energy Authority Act* of New South Wales, the Electricity Trust of South Australia constituted by the *Electricity Act* of South Australia, the State Electricity Commission of Queensland constituted by the *Electricity Act* of Queensland, the Hydro-Electric Commission constituted by the *Hydro-Electric Commission Act* of Tasmania, the State Electricity Commission of Victoria constituted by the *State Electricity Commission Act* of Victoria or the State Energy Commission of Western Australia constituted by the *State Energy Commission Act* of Western Australia; and
- (c) does not have affixed to it a mark impressed or placed by one of the persons specified in paragraph (b) upon testing it.

Penalty:        \$500.

## **Part V                    Service rules**

### **Division 1                Standard rules**

#### **9                    Incorporation of standard rules**

The standard rules are, with such modifications as are made by these By-laws, incorporated in these By-laws.

## **Division 2            Loads**

### **10            Load balancing**

- (1) A consumer's electrical installation or a separately metered portion of a consumer's electrical installation which is supplied through a service line and has more than one active conductor shall be load balanced in accordance with this by-law.
- (2) A consumer's electrical installation shall be balanced as nearly as practicable over the active conductors so that the out-of-balance current shall not exceed 25 amperes or 15% of the most heavily loaded phase, whichever is the greater.

### **11            Assessment of service**

The method for assessing a service will be as follows:

- (a) a 2-wire service (one active conductor and one neutral) will be installed unless:
  - (i) the calculated maximum demand on the service exceeds 80 amperes; or
  - (ii) a motor rated for more than 3kW is to be supplied through the service; or
- (b) if the demand is greater, or the load heavier, than that indicated in paragraph (a)(i) or (ii), a 4-wire service (3 active conductors and neutral) will be installed if available.

## **Division 3            Service lines**

### **14            Damage**

The Authority shall not be liable for damage to premises of a consumer resulting from normal strain in the service line or from causes beyond the Authority's control.

### **15            One service only to be installed**

The Authority shall not install more than one service line or underground service cable to a consumer's electrical installation.

### **16            Route of service line**

The route of each service line or underground service cable shall be determined by the Authority.

**17            Point of attachment**

- (1) Subject to clause (2), the position, style and design of a point of attachment shall be as determined by the Authority.
- (2) The point of attachment for a property shall not be positioned further than 20 metres from the boundary of the property closest to the service line.

**Division 4            Metering**

**18            Meters**

- (1) A person shall not position a meter box on a consumer's premises otherwise than in accordance with the directions of the Authority.

Penalty:        \$500.

- (2) A person shall not alter the position of a meter box without the written consent of the Authority.

Penalty:        \$500.

- (3) Meters, current transformers and maximum demand meters supplied by the Authority remain the property of the Authority.

- (4) A person shall not use any electrical installation or connect it to supply unless it has been inspected, tested and approved by:

- (a) the Authority; or
- (b) an approved electrical contractor.

Penalty:        \$500.

**Division 5            Electrical installations**

**19            Notification of electrical installation work**

- (1) A person shall not carry out electrical installation work on any electrical installation unless:
  - (a) he has, not less than 7 days before commencing the work, notified the Authority on the approved form; or

- (b) the work is required to be done in pursuance of an inspection of the installation under clause (4) or following any other inspection which the Authority may carry out on the installation.

Penalty:        \$500.

- (2) Upon completion of any electrical installation work, the person completing the work shall notify the Authority on the approved form.

Penalty:        \$500.

- (3) Notification under clauses (1) and (2) shall be given:

- (a) by the permit holder carrying out the work;
- (b) if he is a natural person, by the electrical contractor carrying out the work; or
- (c) if the electrical contractor is a body or other association of persons, by the person nominated in accordance with section 34(2)(d)(ii) of the *Electrical Workers and Contractors Act*.

- (4) A person shall not use any electrical installation or connect it to supply unless it has been inspected, tested and approved by:

- (a) the Authority; or
- (b) an approved electrical contractor.

Penalty:        \$500.

#### **19A        Approval of electrical contractors**

- (1) An electrical contractor may apply to the Authority to become an approved electrical contractor.
- (2) An application under clause (1) shall be in the approved form.
- (3) The Authority, on receiving an application from an electrical contractor under this by-law may approve or refuse to approve the contractor as an approved electrical contractor for the purposes of these By-laws.
- (4) An approval of the Authority under clause (3) may be subject to such terms and conditions as the Authority thinks fit.



## **19B Approved contractor to carry out inspections**

- (1) On completion of any electrical installation work an approved electrical contractor shall not connect the installation to supply unless the contractor has tested the work to ensure that it has been carried out in accordance with these By-laws and the standard rules as incorporated in these By-laws.
- (2) Where, after carrying out a test under clause (1), an approved electrical contractor is satisfied the electrical installation work has been carried out in accordance with these By-laws and the standard rules as incorporated in these By-laws, the contractor shall complete the approved installation test certificate and shall:
  - (a) provide a copy of the completed certificate to:
    - (i) the owner of the installation; and
    - (ii) the Authority; and
  - (b) retain a copy as part of the contractor's records.
- (3) An approved electrical contractor shall retain a copy of an approved installation test certificate referred to in clause (2) for 12 months after the date of its completion, and shall during that period, on being requested to do so by an Inspector, permit that Inspector to inspect the certificate.
- (4) An approved electrical contractor who:
  - (a) fails to carry out or complete a test of any electrical installation work as required by; or
  - (b) contravenes or fails to comply with,this by-law is guilty of a regulatory offence.

Penalty: \$500.

## **19C Electrical installation work to comply with by-laws**

A person who carries out electrical installation work other than in accordance with these By-laws and the standard rules as incorporated in these By-laws is guilty of an offence.

Penalty: \$500.

**20            Connection of new circuit**

- (3) A person other than an employee or agent of the Authority shall not, without the written consent of the Authority, remove a Authority seal from a fuse, meter, instrument or connecting links or alter or make any connection to such equipment.

Penalty:       \$500.

**Division 6            Earthing**

**21            Earthing system**

- (1) The Authority may direct that the core balance earth leakage system of earthing be used on an electrical installation and determine the operating current to apply to that installation.
- (2) A person who has been given a direction under clause (1) shall ensure that the electrical installation the subject of the direction is earthed by the core balance earth leakage system.

Penalty:       \$500.

**Division 7            Power Factors**

**22            Maintenance of power factor**

If the power factor, as determined by the Authority, of the supply taken by a consumer's installation is such that, in the opinion of the Authority, the Authority's or a licensee's supply system is not or would not be efficiently utilized or the supply to another consumer is or would be adversely affected, the consumer shall, if so required by the Authority or by the licensee, maintain such power factor at a value not less than 0.85 and ensure that no condition of operation of power factor correction equipment or variation of inductive load at any time causes the power factor of the installation to become leading.

**Division 8            Capacitors**

**25            KVAR rating capacitors**

- (1) The KVAR rating capacitors connected in parallel with individual motors or transformers shall not exceed 90% of the kilowatt rating of the motor or transformer, as the case may be.
- (2) The KVAR rating of any group of capacitors shall not exceed one-quarter of the maximum kilowatt loading of the electrical installation.

- (3) Automatic equipment related to capacitors shall incorporate a no-volt release.

## **Division 9          High Voltage Supply**

### **26          Installation and maintenance of high voltage supply**

- (1) A person shall not install any high voltage electrical equipment which is to be connected to mains unless the design, construction and location of the equipment has been approved by the Authority.

Penalty:          \$500.

- (2) A consumer who has on his premises a high voltage electrical installation shall maintain the switch gear and protective equipment of the installation in such manner as may be required by the Authority in accordance with the relevant standard code.

Penalty:          \$500.

- (3) The Authority may carry out maintenance work on any high voltage electrical installation where that work is required to be carried out under clause (2) but is not carried out.

- (4) Where the Authority carries out maintenance work in accordance with clause (3), the cost of that work is a debt due by the owner of the electrical installation and the consumer jointly and severally to the Authority.

- (5) A person shall not carry out switching and isolation of high voltage supply unless he has attended a course approved by the Authority relating to high voltage electrical equipment and has been instructed in the operation of the high voltage equipment that it is proposed he should operate.

## **Part VI                  Offences**

### **27          Regulatory offences**

An offence of contravening or failing to comply with by-law 5, 18(1) or (2), 19(1), (2) or (4), 20(1) or (3) or 26(1) or (2) is a regulatory offence.

## **Schedule**

by-law 3

The Service and Installation Rules

The Contractors Bulletin

The Metering Manual.

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## ENDNOTES

### 1 KEY

Key to abbreviations

<b>amd</b> = amended	<b>od</b> = order
<b>app</b> = appendix	<b>om</b> = omitted
<b>bl</b> = by-law	<b>pt</b> = Part
<b>ch</b> = Chapter	<b>r</b> = regulation/rule
<b>cl</b> = clause	<b>rem</b> = remainder
<b>div</b> = Division	<b>renum</b> = renumbered
<b>exp</b> = expires/expired	<b>rep</b> = repealed
<b>f</b> = forms	<b>s</b> = section
<b>Gaz</b> = <i>Gazette</i>	<b>sch</b> = Schedule
<b>hdg</b> = heading	<b>sdiv</b> = Subdivision
<b>ins</b> = inserted	<b>SL</b> = Subordinate Legislation
<b>lt</b> = long title	<b>sub</b> = substituted
<b>nc</b> = not commenced	

### 2 LIST OF LEGISLATION

#### ***Electricity By-laws (SL No. 21, 1981)***

Notified	31 July 1981
Commenced	31 July 1981

#### ***Criminal Law (Regulatory Offences) Act 1983 (Act No. 68, 1983)***

Assent date	28 November 1983
Commenced	1 January 1984 (s 2, s 2 <i>Criminal Code Act 1983</i> (Act No. 47, 1983) and <i>Gaz</i> G46, 18 November 1983, p 11)

#### ***Amendments of the Electricity By-laws (SL No. 27, 1985)***

Notified	23 October 1985
Commenced	23 October 1985

#### ***Amendments of the Electricity By-laws (SL No. 5, 1988)***

Notified	24 February 1988
Commenced	16 March 1988 ( <i>Gaz</i> G11, 16 March 1988, p 3)

#### ***Amendments of the Electricity By-laws (SL No. 37, 1989)***

Notified	7 February 1990
Commenced	7 February 1990

#### ***Amendments of Electricity By-laws (SL No. 72, 1991)***

Notified	20 December 1991
Commenced	2 January 1992 (r 2)

### 3 LIST OF AMENDMENTS

bl 3	amd No. 5, 1988, bl 2 and 8
bl 4	amd No. 5, 1988, bl 8
bl 6	amd No. 27, 1985, bl 3; No. 5, 1988, bl 8 rep No. 72, 1991, bl 2

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bl 7	amd No. 27, 1985, bl 4; No. 5, 1988, bl 8 rep No. 72, 1991, 1991, bl 2
bl 8	rep No. 72, 1991, 1991, bl 2
bl 12 – 13	rep No. 37, 1989, bl 2
bl 14 – 17	amd No. 5, 1988, bl 8
bl 18	amd No. 5, 1988, bl 3 and 8
bl 19	amd No. 5, 1988, bl 4 and 8; No. 37, 1989, bl 1
bl 19A – 19C	ins No. 5, 1988, bl 5
bl 20	amd No. 5, 1988, bl 6 and 8; No. 37, 1989, bl 2
bl 21	amd No. 5, 1988, bl 8; No. 37, 1989, bl 2
bl 22	amd No. 5, 1988, bl 8
bl 23	rep No. 37, 1989, bl 2
bl 24	amd No. 5, 1988, bl 8 rep No. 37, 1989, bl 2
bl 26	amd No. 5, 1988, bl 8
bl 27	ins Act No. 68, 1983, s 132 amd No. 72, 1991, bl 3
sch	ins No. 5, 1988, bl 7