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NORTHERN TERRITORY OF AUSTRALIA

ELECTRICITY BY-LAWS

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NORTHERN TERRITORY OF AUSTRALIA

Regulations 1981, No.21 *

By-laws under the Electricity Commission Act

The Northern Territory Electricity Commission, pursuant to section 26 of the Electricity Commission Act, hereby makes the following By-laws.

Dated this Twenty-Eighth day of JULY, 1981.



Chairman

ELECTRICITY BY-LAWS

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The Electricity By-laws, being Regulations 1978, No. 35, are repealed.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

"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 Commission;

"electrical contractor" means a person licensed under the Electrical Workers and Contractors Act;

* Notified in the Northern Territory Government Gazette on 31st July, 1981.

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"permit holder" means the holder of a permit issued in accordance with the provisions of 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 Commission or an agent of the Commission, through which electricity may be supplied or is intended to be supplied by the Commission to a consumer or consumers, either from any supply main or directly from the premises of the Commission;

"standard rules" means the Australian Standard Rules for the Electrical Equipment of Buildings, Structures and Premises Part I Wiring Materials known as the SAA Wiring Rules;

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

(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 Commission 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 -

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- (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 IV - TERMS AND CONDITIONS OF SUPPLY

6. APPLICATION FOR SUPPLY

(1) A person may apply to the Commission for the supply of electricity to premises owned or occupied by him at which -

- (a) there is, or is to be, an electrical installation; and
- (b) the Commission has installed or is able to install a meter for measuring the supply of electricity to those premises.

(2) An application under clause (1) shall -

- (a) be in the approved form and shall include the consumer's address and details of the electrical installation to be supplied;
- (b) be accompanied by the fee, if any, prescribed by the Electricity (Fees and Charges) Regulations;
- (c) if required, be accompanied by a deposit in the amount estimated by the Commission to be 4 months consumption of the consumer's electrical installation or such other lesser amount as it thinks fit; and
- (d) be accompanied by such identification or evidence of authority as the Commission thinks fit.

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7. TERMS AND CONDITIONS OF SUPPLY

The following terms and conditions are the terms and conditions of the supply of electricity by the Commission to a consumer:

- (a) that the supply of electricity may be interrupted or terminated by the Commission -
 - (i) for such time as is necessary for the purpose of testing any electrical installation;
 - (ii) where the electrical installation to which the electricity supply is supplied is, in the opinion of the Commission, unsafe or defective or does not comply with these By-laws;
 - (iii) if the consumer is a company - when the company is wound up, enters into or attempts to enter into a scheme of arrangement or a receiver or a receiver and manager is appointed;
 - (iv) if the consumer is not a company - when the consumer becomes bankrupt, applies to take the benefit of any law for the relief of bankrupt or insolvent debtors, compounds with his creditors or makes an assignment of his remuneration for their benefit;
 - (v) if, due to circumstances within the control of the consumer, an employee of the Commission is hindered or obstructed in the exercise of his powers or the performance of his functions in relation to the electrical installation on the consumer's premises; or
 - (vi) if the consumer fails to pay any fees or charges due by him to the Commission or fails to pay within 3 days a deposit requested by the Commission during a period of supply;
- (b) that the consumer shall pay to the Commission, within 14 days after the posting or delivery to him of an account for electricity supplied to him, the amount due by him to the Commission for the supply of electricity in respect of the period specified in the account;
- (c) that if the consumer intends to discontinue the use of electricity, he shall give to the Commission not less than 48 hours written notice of his intention to so discontinue and that if no such notice is given, the consumer will be liable for the cost of electricity supplied to his electrical installation until such time as the meter is first read after the Commission becomes aware that the consumer has discontinued the use of the supply of electricity;

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- (d) that the Commission, with or without assistance and machinery, may enter upon the premises which contain a consumer's electrical installation and remove or cut back any tree, bush or other plant which, in the opinion of the Commission, is interfering or is likely to interfere with any electrical equipment of the Commission;
- (e) that the consumer shall be liable to pay to the Commission the cost of any loss or damage to the electrical equipment of the Commission installed on the consumer's electrical installation; and
- (f) that where the use of any electrical motor or equipment by the consumer may cause or is causing interference with the supply of any other consumer the Commission reserves the right to restrict the hours of use or discontinue the supply of electricity to the consumer.

8. ENFORCEMENT OF RESTRICTIONS ON SUPPLY

A person shall not, during a period when restrictions on the supply of electricity, whether under a scheme of rationing or otherwise, are in force pursuant to section 14(2)(f) of the Act -

- (a) use electricity in contravention of those restrictions; or
- (b) use an amount of electricity greater than that which he is permitted to use.

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.

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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.

12. 3-PHASE SUPPLY

Subject to this Division, an electrical installation comprising an individual appliance the load of which exceeds 60 amperes shall, if it is supplied with electricity by a 3-phase supply, be balanced over 3 phases.

13. WATER HEATERS

The loading of water heaters of the instantaneous type shall not exceed -

- (a) in respect of single-phase equipment - 240 volt AC - 15 amperes; and
- (b) in respect of 3-phase equipment - 415 volt AC - 18 amperes per phase.

Division 3 - Service Lines

14. DAMAGE

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

15. ONE SERVICE ONLY TO BE INSTALLED

The Commission 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 Commission.

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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 Commission.

(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 Commission.

Penalty: \$50.

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

Penalty: \$50.

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

Division 5 - Electrical Installations

19. NOTIFICATION OF WIRING WORK

(1) A person shall not carry out electrical wiring work within the meaning of the Electrical Workers and Contractors Act on any electrical installation unless -

(a) he has, not less than 7 days before commencing the work, notified the Commission on the approved form; or

(b) the work is required to be done in pursuance of an inspection of the installation under clause (4).

Penalty: \$100.

(2) Upon completion of any electrical wiring work, the person completing the work shall notify the Commission on the approved form.

Penalty: \$100.

(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

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(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 the Commission has -

(a) inspected and tested it; and

(b) approved it.

Penalty: \$500.

20. CONNECTION OF NEW CIRCUIT

(1) A new circuit may not be connected to a switchboard unless -

(a) the circuit is isolated from the supply of electricity by removing the fuse element from the circuit cut-outs or by leaving the circuit-breakers in the off position; and

(b) the fuses or circuit-breakers are clearly labelled to indicate that the fuse element shall not be reconnected to the fuses or the circuit-breakers closed until the new circuits have been tested and approved under by-law 19(4).

(2) A person other than an employee or agent of the Commission shall not, without the written consent of the Commission, insert or remove the end of any conductor to equipment which is the property of the Commission or under the sole control of the Commission.

Penalty: \$500.

(3) A person other than an employee or agent of the Commission shall not, without the written consent of the Commission, remove a Commission 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 Commission 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: \$100.

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Division 7 - Power Factors

22. MAINTENANCE OF POWER FACTOR

If the power factor, as determined by the Commission, of the supply taken by a consumer's installation is such that, in the opinion of the Commission, the Commission'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 Commission 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.

23. FLUORESCENT LIGHTS IN COMMERCIAL PREMISES

Where fluorescent lights are installed in commercial premises within the meaning of the Electricity (Fees and Charges) Regulations, not less than 30% of those lights shall be of the high power factor type.

Division 8 - Capacitors

24. REQUIREMENTS AS TO CAPACITORS

(1) Each capacitor shall comply with the requirements of A.S. 1013 - 1971.

(2) Capacitors shall be -

(a) connected in parallel with individual motors and transformers or groups of discharge lights;

(b) controlled by automatic equipment in groups corresponding with variation in KVAR load; or

(c) controlled in a manner approved by the Commission.

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.

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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 Commission.

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 Commission in accordance with the relevant standard code.

Penalty: \$500.

(3) The Commission 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 Commission 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 Commission.

(5) A person shall not carry out switching and isolation of high voltage supply unless he has attended a course approved by the Commission 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.