

# ELECTRICITY SUPPLY REGULATIONS 1992

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#### Queen's Representative

# ORDER IN EXECUTIVE COUNCIL

March day of 1992 At Avarua, Rarotonga, this 9th

#### Present:

## HIS EXCELLENCY THE QUEEN'S REPRESENTATIVE IN EXECUTIVE COUNCIL

PURSUANT to the Ministry of Energy Act 1991, His Excellency the Queen's Representative acting by and with the advice and consent of the Executive Council, hereby makes the following regulations:

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#### REGULATIONS

1. <u>Title and commencement</u> - (1) These regulations may be cited as the Electricity Supply Regulations 1992.

(2) These regulations shall come into force on a date to be appointed by the Minister and notified in the Cook Islands Gazette.

#### <u>PART I</u> GENERAL

2. <u>Interpretation</u> - In these regulations, unless the context otherwise requires-

"Act" means the Ministry of Energy Act 1991;

- "Appliance" means any device which utilises electricity for a particular purpose;
- "Authority" means any Electricity Supply Authority, local authority, company or body licenced under the Act to supply electricity in any specified area and includes the Te Aponga Uira O Tumu-Te-Varovaro;

"Bare" means not covered with insulating material;

- "Boundary" means a continuous line enclosing the extent of an area within which the consumer has ownership or a right of occupation;
- "Cable" means a length of insulated single conductor (solid or stranded) or of two or more conductors, each provided with its own insulation;
- "Conductor" means any wire, cable, bar or tube used for conducting electricity; but does not include the wire of any electric fence;
- "Consumer" means any person who is supplied with energy by an Authority or by a licensee or by any other person engaged in the business of supplying energy to the public under this Act or any other law for the time being in force and includes any person whose premises are for the time being connected for the purpose of receiving energy from the works of the Authority or of a licensee or such other person as the case may be;
- "Distribution line" means an electric supply line of any voltage or voltages acquired, erected or laid and maintained by an Authority which is not a distribution main or a service main;
- "Distribution main" means that portion of an electric supply line of any voltage or voltages on private property which is jointly used by consumers all of whom have the legal right for its use for purposes of receiving electricity;

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"Earthed" means effectually connected to the general mass of earth;

- "Electrical hazard" means danger from electricity to life and property or both;
- "Electric Supply line" means a wire, conductor, or other means used for conveying, transmitting, or distribution of energy, whether by overhead line or ground cable, together with any casing, covering, coating, tube, pipe or insulator enclosing, surrounding or supporting the same or any part thereof, or any apparatus connected therewith for the purpose of conveying, transmitting, or distributing such energy and includes any support, cross-arm, stay, strut, or safety device erected or set up for that purpose;

"Energy" means electrical energy: -

- generated, transmitted or supplied for any (a) purpose, or used for any purpose except the transmission
- (b)of a message;

"Gazette" means the Gazette of the Cook Islands;

- "High voltage" means any voltage exceeding 650 volts but not exceeding 11,000 volts;
- "Installation" means the assemblage of apparatus and accessories intended for the production, distribution, and utilisation of electrical energy;
- "Inspector" means an Electrical Inspector appointed under section 18 of the Act;
- "Isolated" in relation to any electric supply line or conductor means that the electric supply line or conductor is deliberately disconnected from any source of electricity;
- "Licensee" means a licensee appointed pursuant to Section 6 of the Act and includes officers and employees thereof acting in their official capacity, any local authority, company, body, person or persons authorised under the Act, or any other Act, to lay, construct, put up, place, or use any electric supply line;
- "Live" in relation to a conductor of electricity means charged with electricity so that a difference in electrical potential exists between the conductor and earth;
- "Low voltage" means any voltage normally exceeding 32 volts alternating current, or 50 volts direct current but not exceeding 250 volts in either case;

- "Main Switchboard" means that switchboard on a consumer's premises which provides the greatest degree of control of the supply of electricity from a service main or distribution main, but does not include any panel that is used exclusively for the mounting of a meter or control device, which is part of the supply system, or the master switch;
- "Master switch" means that first switch after the distribution line for the purpose of the isolation of a distribution main or mains, or the isolation of more than one service main;
- "Medium Voltage" means any voltage normally exceeding 250 volts but not exceeding 650 volts:
- "Minister" means the Minister of Energy;
- "Ministry" means the Ministry of Energy constituted under the Act and includes officers and employees thereof acting in their official capacity;
- "Point of supply" in respect of a consumer's premises means the main switchboard for that supply;
- "Portable appliance" means an appliance that from the nature of its use requires to be moved while it is working or is so designed that it can be moved readily while it is working and is connected to the fixed wiring by means of a plug or similar device;
- "Premises" means the area within the boundary of any land, building, or installation where there is only one consumer receiving, or capable of receiving a supply of electricity;
- "Regulation" means regulations made under the Act;
- "Road" includes a street or other highway used by the general public for vehicular traffic;
- "Secretary" means the Secretary of Energy appointed pursuant to Section 7 of the Act;
- "Semi portable appliance" means an appliance, not being a portable appliance, that from the nature of its use requires to be moved or is capable of being moved to a new position from time to time while it is working or between the poriods when it is working;
- "Service fuse" means a fuse installed by the Authority for interrupting the supply to an installation on a consumer's premises from the Authority's lines;
- "Service main" means the portion of an electric supply line of any voltage or voltages on a consumer's premises for the sole use of that consumer between the boundary of the premises and the consumer's main switchboard or consumer's installation where the main switchboard is not within the boundary of the consumer's premises;

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- "Standard frequency" means the rated frequency of alternating current systems, and this frequency shall be 50 hertz;
- "Standard voltage" means in the case of a low voltage single-phase supply, a voltage of 240 volts between phase and neutral and, in case of a 3-phase supply, 415 volts between phases, or in the case of any high voltage supply, the voltage at which the Authority has contracted to give supply;
- "Substation" means any building, structure, enclosure, either above or below ground, confined to a given area, incorporating electrical equipment which may include electrical switchgear, control gear, transformers, or protection devices but excludes those installations which contain only isolation equipment or fuses or relays and where such electrical equipment is not contained in a building, structure or enclosure, the electrical equipment itself is the substation;
- "Supply system" means all electric supply lines, substations, and equipment which are operated by the Authority, but does not include any service main or distribution main;

"Telecom" means Telecom Cook Islands Limited;

"Works" means any works for the generation, transmission, conversion or supply of electricity, including generating plants, electric supply lines, and any building, plant, machinery, apparatus, and any other thing of whatever description required to supply energy to the public;

3. <u>Application</u> - (1) These regulations shall apply to all electric supply lines or works used for generating, transforming, converting, or conveying electricity.

(2) Every addition to, or alteration of an existing electric supply line shall be deemed to be a new work and all the provisions of these regulations shall apply to all work done in connection with any such addition or alteration.

(3) These regulations shall bind the Crown.

4. Modification of requirements - (1) In any case where the Secretary, upon application being made to him in writing by any person, Authority, or licensee, who intends to erect or construct or alter any electric supply line or works or who is under any obligation imposed by these regulations to do any act, perform any service or make any inspection, is satisfied that strict compliance with the requirements of these regulations would involve expenditure out of proportion to the degree of freedom from electrical hazard to be secured by any such compliance, he may modify, relax or grant exemption from alectrical hazard is likely to continue to exist or can otherwise be secured. (2) In granting any such modification, relaxation or exemption the Secretary shall specify what special work (if any) he requires to be done to render any electricity supply line or work reasonably free from electrical hazard and may impose any other reasonable conditions or qualifications he may think fit.

(3) Any such modification, relaxation, or exemption may be general or special, and may be rescinded by the Secretary at any time.

(4) The Secretary may permit the use of methods or types of construction or materials not especially provided for in these regulations and may impose such conditions as he deems necessary with respect to the use thereof.

#### PART II LICENCES

5. Application for licence - (1) Every application for the grant of a licence under section 6 of the Act shall be addressed to the Minister and shall include the following particulars -

- (a) a title of the undertaking to whom a grant of licence is proposed together with its address and relationship of the applicant with the proposed undertaking;
- (b) if the applicant is a Company, a copy of its Memorandum and Articles of Association and the names and addresses of all its directors or partners;
- (c) three copies, each signed by the applicant of maps of the proposed area of supply which shall be on a scale of not less than 10 cm to one kilometre or on such other scale as the Secretary may specify;
  (d) a list of local authorities invested with the
- (d) a list of local authorities invested with the administration of any portion of the area of supply;
- (e) an approximate statement describing any lands which the applicant proposes to acquire or lease for the purpose of the licence;
- (f) an approximate statement of the capital proposed to be expended for setting up the facilities;
- (g) a Treasury receipt for the following amounts:
   (i) For any installation up to and including 100 kilowatts \$10.00
  - (ii) For any installation over 100 kilowatts
     \$20.00

the rating in kilowatts of any installation being deemed to be the capacity of the generating or the main transforming plant.

(2) Before considering any application, the Minister may require the applicant to furnish any further information which the Minister may deem relevant to the decision as to whether or not a licence should be granted and if so, the terms and conditions of the licence.

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6. Advertisement of application and public inspection - (1) The applicant shall, within fourteen days from the submission of the application under regulation 12, publish notice of his appli-cation by public advertisement in the daily newspaper of the Cook Islands in two successive issues and shall give the address of his office at which details of the application can be inspected.

(2) The applicant shall deposit at his office in three copies for public inspection;

(a) a brief description of the undertaking proposed to be established by him and; a map referred to in Regulation 5 (C).

(b)

The above shall remain available for public inspection for twenty working days after the date of advertisement in the daily newspaper.

7. <u>Local enquiries</u> - If any person who is locally interested objects to the grant of a licence applied for under the Act, the Minister may cause a local enquiry to be held of which notice in writing shall be given to the applicant and to the objector.

Provided that the Minister may refuse such an enquiry if in his opinion, the objection is frivolous or vexatious.

Grant of licence - (1) When the Minister has approved 8. grant of a licence, a copy of the licence shall be published in the official gazette.

(2)The date of notification in the gazette shall be deemed to be the date of commencement of the licence.

9. <u>Monopoly</u> - Nothing in the licence granted under regulation 8 shall be deemed to give the licencee a monopoly or the exclusive right to supply electricity within the area of supply specified in the licence.

10. Fees - The following fees shall be paid into the Treasury on the issue of licence under regulation 8 -

(i) For any installation up to and including 100kw \$20.00 (ii) For any installation above 100 kw \$50.00

11. <u>Application by an Authority for amendment in its area of supply</u> - An application by an Authority for amendment, increase or decrease in the area of supply as specified in the licence granted to it under regulation 8, shall be treated as a fresh application for licence and shall be dealt with in accordance with regulations 5,6,7,8, 9 and 10.

#### PART III INSPECTORS

12. Appointment of Inspectors - The Minister may, bγ notification in the Gazette, appoint an Inspector to perform the functions defined in the Act and these regulations. 13. <u>Qualifications of Inspectors</u> - No person shall be appointed an Inspector unless the Minister is satisfied that:-

 (i) he possesses a diploma in electrical engineering or an Electrical Trades Certificate from a recognised institution; and

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(ii) he has been regularly engaged for a period of at least five years in the practice of electrical engineering of which at least three years have been spent in electrical wiring work for households, commercial establishments and industries with an electrical contractor, government department, corporation or Authority.

Provided that the Minister may for a period of five years from the date of commencement of the Act, appoint a person who is registered as an electrical technician or electrician in New Zealand or Australia and has the prescribed experience to be an Inspector.

14. <u>Appointment of officers to assist Inspectors</u> - The Minister may, by notification in the Gazette, appoint as many officers, as are considered necessary by him, to assist an Inspector.

15. <u>Qualifications of officers to assist Inspectors</u> - No person shall be appointed as an officer to assist an Inspector unless the Minister is satisfied that:-

- (i) he possesses a diploma in electrical engineering or an Electrical Trades Certificate from a recognised institution; and
- (ii) he has been regularly engaged for a period of at least three years in electrical wiring work for households, commercial establishments and industries with an electrical contractor, government department, corporation or Authority;

Provided that the Minister may for a period of five years from the date of commencement of the Act, appoint a person, who is registered as an electrical technician or electrician in New Zealand or Australia, as an officer to assist the Inspector.

16. <u>Entry and inspection</u> - Any Inspector or any officer appointed to assist the Inspector shall have the right of entry, inspection and examination and to issue necessary orders and notices in accordance with the Act.

17. <u>Amount of fees</u> - The Secretary may, by general or special order, determine the fees to be levied for testing and inspection and generally for the services of an Inspector or of any officer appointed to assist the Inspector and may, if he thinks fits, remit any fee or any portion thereof.

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# Electricity Supply Regulations 1992

18. <u>Submission of records</u> - An Inspector or any officer appointed to assist the Inspector may require a supplier or an owner to submit to him for examination, any records of tests made in connection with his works. Similarly, a supplier or an owner may require the Inspector or any officer appointed to assist the Inspector to submit to him for examination, any records of tests made by the Inspector or any officer appointed to assist the Inspector. Both parties shall comply with such requisitions.

## PART IV SUPPLY TO CONSUMERS

19. <u>Systems</u> - The Authority shall supply electricity to the consumers by means of one or more of the following systems as may be prescribed by the licence -

- (a) three phase 4 wire alternating current system at a normal rated voltage of 415 volts between phases and 240 volts between each phase and the neutral conductor;
- (b) three phase 3-wire alternating current system at a normal rated voltage of 415 volts between phases;
- (c) two wire single phase alternating current system at a normal rated voltage of 240 volts;
- (d) high voltage alternating current-3 phase system;
- (e) such other system as may be authorised by the licence.

20. <u>Frequency</u>- The frequency at the consumers point of supply shall be maintained, except for momentary fluctuations, within 2.0 percent (2%) above or below the standard frequency.

21. <u>Voltage</u> -(1) The voltage at the point of supply on a consumers premises shall be maintained, except for momentary fluctuations, within 6 percent (6%) above or below the standard voltage.

(2) In case of a complaint by a consumer regarding voltage at his installation being beyond prescribed limits, the Authority shall arrange to record the voltage for a reasonable period. If the variations are beyond the prescribed limits, the Authority shall take steps to improve the voltage conditions to bring them within these limits.

(3) The Authority may require a consumer to make a deposit for the charges to be incurred in the check of voltage which will be refunded to the consumer in case the voltage is found to be beyond the prescribed limits.

22. <u>Supply to consumers</u> - (1) A consumer requiring supply of electricity to his premises may request the Authority in writing giving such details as the Authority may require including the location and extent of his premises.

(2) The Authority shall supply electricity to the consumer according to its standard terms and conditions for the supply of electricity. Special conditions shall apply to cases of uneconomic supply as laid down in Regulation 25.

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(3) The Authority shall construct its system for providing electricity to the consumer, consistent with its current practice, in a manner that will result in minimum total cost to the consumer. If more than one consumer is to be supplied electricity through the same system, the system will be constructed in a manner so as to balance, as far as possible, the total cost to each consumer.

(4) The consumer shall bear the cost of the installation of all service mains within his premises.

(5) The Authority shall share or apportion equitably among the consumers the cost of a distribution main erected by it.

(6) The Authority may set any requirements in terms of these regulations for the installation and utilisation of distribution mains or service mains to ensure the safe and adequate supply of electricity to the consumer.

(7) Before giving supply to any premises, the Authority shall satisfy itself that all electric supply lines, plant and equipment on a consumer's premises up to and including the point of supply are in a safe condition and in all respects fit to receive a supply of electricity.

(8) The Authority shall, when it is aware that a service main or part thereof is unsatisfactory, inadequate or unreliable, advise the consumer in writing of the work required to remedy the defect and the consumer shall bear the cost.

(9) The Authority shall, when it is aware that a distribution main or any portion thereof is unsatisfactory, inadequate or unreliable, advise the consumers supplied by means of that line in writing of the details of the work required to remedy the defect and specify a reasonable period in which the work is to be completed.

Provided that where the work is not completed to the satisfaction of the Authority, it shall undertake the remedial work and shall be entitled to equitably apportion the cost among the affected consumers.

(10) Where a consumer, because of the nature of his activity, requests a temporary supply of electricity, the Authority shall give supply for a period specified in the permission and subject to any special requirements for temporary supply included in its terms and conditions.

(11) A consumer shall provide and maintain in an acceptable condition, without cost to the Authority, sufficient suitable space on the consumer's premises to enable the Authority to install any substation, lines, or equipment necessary solely to give the consumer a satisfactory supply. In the event that this space, or an extension of space is required for a substation, lines or equipment which will also supply other consumers or premises, the provision of such space shall be on terms to be agreed between the Authority and the consumer -

Provided that nothing in this subclause shall prevent the Authority from taking land or acquiring any easement, lease or licence under the law. (12) Where a consumer demands a supply with enhanced electrical characteristics or enhanced reliability and the Authority provides an enhancement of electrical characteristics of the whole or part of the supply system substantially beyond that which would be provided in accordance with current practice of the Authority for a consumer in similar circumstances without such requirement, the Authority may recover from the consumer additional costs incurred in providing lines or equipment to satisfy these requirements.

23. <u>Right of supply</u> - (1) Every consumer within any part of the Authority's area of supply shall be entitled to a supply of electricity on the same terms and conditions as those on which any other consumer within that part of the area is receiving in similar circumstances a corresponding supply -

Provided that where the electricity distribution economics are significantly different for the area in which the consumer is located, the Minister may authorise the Authority to specify such different terms and conditions for consumers within the affected area as he thinks fit.

(2) The Authority shall prepare standard terms and conditions, including a tariff schedule, under which a supply of electricity will be made available to the consumer and a copy shall be made available to any consumer on request.
 (3) The terms and conditions and any amendments thereto

(3) The terms and conditions and any amendments thereto and tariff schedule shall be deposited with the Secretary when issued.

24. <u>Under-utilised capital assets</u> - Where an Authority has provided a capital investment in electricity distribution assets and the consumer's electricity consumption has failed consistently to achieve the forecast level of consumption for which the consumer had requested supply and a lesser level of investment would have been satisfactory for the installation, the Authority may require the consumer to contribute towards the cost of the investment in the under-utilised capital assets.

25. <u>Standard conditions relating to uneconomic supply</u> (1) In this regulation, unless the context otherwise requires -

- (a) the terms "extension" means any addition or alteration to the supply system of the Authority necessary to give satisfactory supply to the consumer;
- (b) the capital cost of an extension shall be total construction cost of the extension;
- (c) the allocated capital cost of an extension shall be the capital cost of the extension less-
  - (i) the portion of that capital cost allocated for the supply to other consumers in the case of a line which is or may be jointly used to supply other consumers; and
  - (ii) the portion of that capital cost allocated for progressive supply system development.

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(d) the serviced capital cost in relation to an extension shall be the maximum capital cost for which the estimated annual revenue from the consumer will allow an adequate return to the Authority calculated in accordance with the following formula -

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Where

- C is the average annual electricity consumption in the same general class of consumers as the consumer to be supplied
- P is the revenue per kilowatt hour accruing to the Authority from electricity supplied to a consumer in the same general class of consumers as the consumer to be supplied; and
- F is a factor with defined numerical values to be applied to differing extension and consumption situations as determined by the Minister and published from time to time taking into account an appropriate economic rate of return on electricity distribution assets.
- (e) the chargeable capital cost of any extension shall be the allocated capital cost of the extension less the serviced capital cost in relation to the extension; and
- (f) the term "uneconomic supply", in relation to an extension means a supply where the serviced capital cost of the extension is less than the allocated capital cost.

(2) A consumer to be entitled to supply under this regulation shall enter into an agreement for uneconomic supply with the Authority and shall pay the chargeable capital cost either as a lump sum or on a deferred payment basis approved by the Authority and extending over a period of five years, or such shorter period as agreed by the parties, together with interest at a published rate declared by the Secretary.

(3) After acceptance of the electricity agreement for uneconomic supply, the Authority shall undertake to commence construction as soon as reasonably practicable.

(4) The Authority shall retain a record for a period not less than five years of the amount of the lump sum paid by the consumer and details of deferred payment agreement, if any, together with a complete description of the extension, including a schedule of electrical capital assets. (5) When an extension, for which an electricity agreement for uneconomic supply is in force, is used by the Authority to supply electricity to any consumer other than the existing consumer or consumers, the Authority shall undertake a reapportionment on a present value basis of the costing of the extension on behalf of every consumer taking supply from that extension and a copy of the reapportionment shall be delivered to all consumers concerned. Any such additional consumer or consumers or interested party shall be required to pay their proportion of the cost of the extension to the Authority who shall re-imburse the original consumer or consumers in title.

26. <u>Alteration of charges</u> - (1) An Authority's charges for supplying electricity may be altered by giving at least one month's notice of its intention to alter such charges.

(2) Any such notice detailing the new tariff rates and the date from which they apply may be given either by advertising in a newspaper circulating in the area or by writing to the consumers concerned.

(3) After the date of a change of any charges, the Authority shall apportion the charges prorata on a time basis during the first meter reading cycle.

27. Meters and control equipment - (1) Meters installed by the Authority for measuring the electricity supplied to any consumer and control equipment required by the tariff shall be supplied and maintained at the expense of the Authority and shall remain the property of the Authority and form part of its supply system.

(2) The position of meters and any other equipment of the Authority on the consumer's premises shall be approved by the Authority and the consumer shall provide adequate space for mounting of the meters and control equipment required by the tariff.

(3) Any meter to be used for the purpose of ascertaining the amount to be paid by the consumer for electricity supplied shall not be installed unless it records within 2.5 percent above or below the true value over the range of load for which it will be used.

28. <u>Electrical viring regulations</u> - (1) The Secretary may, under the Cook Islands Electrical Code of Practice, issue, amend or revoke from time to time Electrical Wiring Regulations for different classes of consumers.

(2) The installations of every consumer shall comply with the requirements of these Electrical Wiring Regulations.

29. Inspection and testing of new installations, additions and alterations - (1) The Authority shall inspect and test every new installation including semi-portable appliances and every alteration or addition to an existing installation.

(2) Every inspection and testing by the Authority under this regulation shall be carried out free of charge.

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30. <u>Reinspection of consumer's installation</u> - (1) An Authority shall reinspect a consumer's installation, including any portable or semi-portable appliances, and the service main and the distribution main where -

- (a) a consumer requests such a reinspection, and the Authority may charge the consumer for the cost of reinspection;
- (b) the Authority considers a reinspection to be advisable on the grounds of the electrical circumstances of the installation. Such reinspection shall be undertaken at the cost of the Authority;
- (c) the Secretary has included the installation in the schedule of "Installations requiring frequent inspections". Such re-inspections shall be undertaken at intervals specified in that schedule and at the cost of the consumer;
- (d) the Secretary requires the Authority to carry out sample reinspection.

(2) The Authority shall furnish to the Secretary as directed a return on inspections and reinspections made under these regulations.

31. Defects to be remedied - (1) If as the result of any inspection or test made under regulation 29 or a re-inspection made under regulation 30 of these regulations, any defect is found in any installation, or in any alteration or addition to an existing installation, the Authority shall immediately notify the consumer, in writing, of the defect or defects and require the consumer to have it remedied within a reasonable time to be stated in the notice.

(2) If the consumer fails to comply with a notice issued under subclause(1) of this regulation, the Authority shall forthwith disconnect supply to the consumer.

(3) The Authority shall not resume supply to the consumer until the defects pointed out in the notice given under subclause (1) of these regulations, have been remedied to its satisfaction.

32. <u>Power to refuse supply</u> - (1) The Authority shall have power to refuse supply of electricity to any new installation which does not at the time of inspection before the commencement of the supply comply with the requirements of these regulations and Electrical Wiring Regulations.

(2) An Authority which refuses to connect a consumer's installation to its electric supply lines shall, on request, serve upon the consumer notice in writing stating the reasons for so refusing.

(3) If any consumer is dissatisfied with the action of the Authority in refusing to give, or in discontinuing, or not recommencing the supply of electricity to his premises, upon the ground only that the installation or any appliance connected therewith constitutes an electrical hazard, that installation or appliance or both may, on application to the Secretary and on payment of the cost, be inspected and tested by an Inspector. If the Inspector is satisfied that the installation and every appliance connected therewith is free from electrical hazard, the Authority shall not, after receipt of notice to that effect from the Inspector, be entitled to refuse to supply the consumer with electricity only upon the ground aforesaid. 33. <u>Disconnection and reconnection</u> - (1) The Authority shall, on request by any consumer, disconnect the supply to the consumer's premises or render the electric supply line reasonably safe where any work has to be carried out in close proximity to any such line. The Authority may charge a fee for such protection. (2) Where the supply has been disconnected at the

(2) Where the supply has been disconnected at the request of the consumer or by reason of default, the Authority may, before reconnecting the supply, charge a reconnection fee.

34. <u>Failure to pay for electricity</u> - (1) If any consumer fails to pay any amount due for payment for electricity supplied, and charges made in accordance with the Authority's tariff schedule, the Authority shall serve written notice on the consumer that, without prejudice to any other remedy in that behalf, the Authority may, after the expiry of a stated reasonable period of time, disconnect the supply of electricity from the premises of that consumer.

(2) Unless the consumer otherwise directs, any amount received by the Authority shall be first applied to debts of electricity supplied and charges made in accordance with the tariff schedule.

35. <u>Review of requirements</u> - (1) Any dispute between an Authority and a person or body as a result of any requirement imposed under the authority of these regulations or arising from terms and conditions for supply of electricity under these regulations may, on application by such person, body or the Authority, be determined by the Secretary.

Provided that this subclause shall not apply to any dispute arising out of the amount of any tariff or the amount of any charge set in the Authority's tariff schedule.

(2) Where any party to any proceedings before the Secretary is dissatisfied with any decision of the Secretary as being erroneous in point of law, either party may appeal to the High Court on that question of law.

(3) This regulation shall not compel the Secretary to decide any dispute as aforesaid or exclude any Court from deciding any such question.

#### PART V

## GENERATING STATION, SUBSTATIONS AND SWITCHGEAR

36. <u>Strength</u> - All generating stations, substations and associated plant shall be designed, constructed and secured to minimise the risk of damage and to facilitate the quick restoration of supply following violent winds, cyclones or other natural disasters.

37. <u>Security and protection</u> - (1) All generating stations and sub-stations shall be so secured against entry by person other than those permitted to enter and all electrical equipment and conductors being part of such stations shall be so located, protected or screened so as to prevent electric shock by accidental contact.

(2) All high voltage switchgear shall be provided with suitable means by which it can be safely isolated from all live conductors.

(3) Every circuit-breaker and fuse shall be capable of breaking the maximum prospective short circuit current at the point of installation and every switch intended to be used for breaking under load shall be capable of breaking the load at the point of installation.

(4) Every transformer or group of transformers, other than step-up transformers directly connected to a generator, shall be electrically protected on the primary side either individually or as a group of transformers.

38. <u>Reclosing of circuit-breakers</u> - (1) Where an automatic reclosing circuit breaker is used for the control of distribution lines, it shall be set for not more than four consecutive openings during a total period not exceeding 60 seconds and shall not be capable of any further automatic reclosing until reset by hand:

Provided that -

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- (a) if the circuit-breaker fails to remain closed after the full sequence of automatic operation or part thereof, it may be closed once by hand after the expiry of not less than 5 minutes from its last automatic operation; and
- (b) if the circuit-breaker, after it has been closed by hand in accordance with paragraph (a) of this sub-clause, fails to remain closed, it shall not again be re-closed until the faulty line has been sectionalised or patrolled or a combination of both has been carried out; and
- (c) the resetting of the mechanism to provide for further automatic reclosing shall not be done until the fault has been cleared.

(2) A circuit-breaker controlling distribution lines not arranged for automatic reclosing as provided in sub-clause (1) of this regulation may, upon automatic tripping, be reclosed by hand:

Provided that -

- (a) any such reclosure is completed within 60 seconds of the tripping; and
- (b) if it is not possible to reclose the circuit breaker in accordance with paragraph (a) of this sub-clause, or if after such reclosure the circuit-breaker fails to remain closed, it may be closed again only after the expiry of not less than 5 minutes; and
- (c) if the circuit-breaker, after it has been reclosed in accordance with paragraph (b) of this sub-clause, fails to remain closed it shall not again be reclosed until the faulty line has been sectionalised or patrolled or a combination of both has been carried out.

(3) A circuit-breaker equipped with high speed automatic reclosing equipment which is set to complete its cycle of automatic tripping and reclosures within 5 seconds, and which fails to remain closed after completing that cycle, may be reclosed by hand subject to paragraphs (a), (b) and (c) of subclause (2) of this regulation.

(4) Notwithstanding anything in subclause(2) of this regulation, a circuit-breaker connected to lines that are already live may be immediately reclosed.

39. <u>Fire extinguishers</u> - (1) All generating stations and substation buildings shall contain the required number of suitable fire extinguishers filled with a non-conducting extinguishing agent, such extinguishers being kept in a convenient place, ready for immediate use, and being conspicuously marked.

(2) The Authority shall every year check each fire extinguisher installed under subclause (1) of this regulation to determine the effectiveness of such extinguisher.

#### PART\_VI MAINTENANCE OF LINES AND WORKS

40. <u>Maintenance of Authority's supply system</u> - (1) The Authority or licensee shall maintain all electric supply lines, substations and works forming part of its supply system in good order and condition and shall take all reasonable precautions to secure at all times continuity of service and immunity from danger.

Provided that no responsibility shall attach to any Authority or licensee where any part of its supply system is affected by an event or circumstances of which the Authority or licensee could not have reasonably been aware.

(2) Every consumer or licensee shall take all reasonable steps to maintain or cause to be maintained free from electrical hazard the installation and every portable and semi-portable appliance and every electric line connected thereto on the consumer's or licensee's premises which do not form part of the Authority's supply system.

41. <u>Repair and disconnection of hazardous service mains</u> - (1) Where an Authority considers that a service main requires repair or reconstruction in whole or in part due to damage, deterioration, or change in land use or for any other reason which may result in a hazard, it shall give the consumer written notice of the defect and the work required to be undertaken and may require the consumer to enter into an agreement for the work to be carried out to the requirements of the Authority within 3 months, or earlier if the circumstances so require, at the consumer's cost.

(2) Where notice has been served and the consumer has failed to enter into an agreement in accordance with subclause (1) of this regulation, the Authority may disconnect the service main after giving 7 days' written notice of its intention to disconnect.
 (3) When an Authority considers that a service main

constitutes a serious electrical hazard, it may immediately disconnect the service main. The Authority shall, where practicable, give written notice of its intention to disconnect. (4) No responsibility shall lie with any Authority in

(4) No responsibility shall lie with any Authority in respect of any hazardous service main when the existence of that hazard is not known or could not have been reasonably known or discoverable by the Authority. 1992/01

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42. <u>Repair of hazardous distribution mains</u> - (1) Where an Authority considers that a distribution main requires repair or reconstruction in whole or in part due to damage, deterioration, or change in land use, or for any other reason which may result in a hazard, it shall give to the consumers supplied by that distribution main, written notice of the defect and the work required to be undertaken and shall require the consumers to enter into an agreement for the work to be carried out to the requirements of the Authority within a reasonable period stated in the notice.

(2) The consumers supplied by that distribution main shall bear the cost of such repair or reconstruction.

(3) Where notice has been served and the consumers have failed to enter into an agreement in accordance with subclause (1) of this regulation the Authority shall undertake the work required, and equitably apportion the cost between every consumer supplied by that distribution main.

(4) Where an Authority considers that a distribution main constitutes a serious electrical hazard, it shall immediately undertake the work to remove the hazard where necessary discontinuing supply for the repair, and shall be entitled to equitably apportion the cost between the consumers supplied by that distribution main.

(5) No responsibility shall attach to any Authority in respect of any hazardous distribution main when the existence of that hazard is not known or could not have reasonably been known or discoverable by the Authority.

43. <u>Removal of undergrowth and trees menacing lines and works</u> - If any tree, part of any tree or undergrowth is likely to cause damage to any electric line or work, the Authority or licencee shall take action in accordance with Section 21 of the Act.

44. Authorisation for operation and maintenance of specified installations - (1) In this regulation the term 'electricity user' includes any user of electricity, but does not include an Authority.

(2) No consumer shall operate or maintain any substation, electric line, or equipment exceeding medium voltage without the written authorisation of the Secretary. The Secretary in considering such authorisation shall consult with the Authority licenced to operate in that area.

Provided that for the purposes of this sub-clause the term "operate or maintain" means to isolate and earth any substation, electric line, or equipment exceeding medium voltage for the purpose of working on it or to enliven or carry out any prescribed electrical work on any such substation, electric line, or equipment. (3) No electricity user shall operate an electrical

(3) No electricity user shall operate an electrical installation with electrical generating equipment which is capable of operating in parallel with an Authority's supply system without the written consent of the Secretary. The Secretary in considering such authorisation shall consult with the Authority licenced to operate in that area.

(4) Any such authorisation shall be for a specified period and shall include requirements for the safe operation, maintenance, and supervision of such installations, and the safety of personnel working on the equipment.

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(5) The Secretary may withdraw the authorisation to operate and maintain such installations if the conditions of the authorisation are not complied with.

45. Inspection of Authority's or licensee's lines and works -(1) At all reasonable times an inspection may be made by an Inspector of the whole or any part of the Authority's or licensee's electric lines and works, and the Authority or licensee shall provide the Inspector with all reasonable facilities and assistance.

(2) It shall be lawful for the Secretary or any person authorised by him in writing, or for any Inspector at all reasonable times, whether during or after the construction of any works, to enter upon and inspect any such works for the purpose of ascertaining whether the conditions of any licence authorising the works and these regulations are being diligently complied with, and for that purpose to require that any motive machinery be set in motion and to take specimens of materials, make tests and measurements, and do all other things reasonably necessary or convenient for the purpose of any such inspection, and the Authority or licensee shall at all times comply with the reasonable requirements of any such person.

(3) If an Inspector is at any time of the opinion that any electric supply lines or works are not in conformity with the requirements of these regulations, the Secretary may, by notice in writing, call upon the Authority or licensee to discontinue the use of any such electric supply lines and works. Upon receipt of any such notice it shall not be lawful for the Authority or licensee to continue the use of any such electric supply lines and works. The Secretary may, by notice in writing call upon the Authority or licensee to carry out such work, within a specified time, as is necessary to make the electric supply lines and works comply with these regulations. Any such lines or works shall not be used until the Secretary has given notice in writing that he is satisfied the lines or works are in conformity with these regulations.

46. Notification of new lines - (1) Before commencing to erect, lay or construct any electric supply line or make any addition or alteration to an existing line, the Authority shall notify the Secretary in writing of the details of the proposed work and shall provide the following information:-

- (a) advice as to whether the proposed work is within the Authority's licensed area of supply;
- (b) advice that the Department of Survey has been consulted and that the Authority has legal access for laying the proposed line;
- (c) advice that 14 days' notice of the proposed work has been given to concerned officers of Telecom, Ministry of Works and Waterworks and no objection to the work has been received from them during that period;
- (d) a plan on a scale not less than 10cm to one kilometre showing all existing and proposed lines.

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(2) Nothing in this regulation shall require notice of work of maintenance or alteration on an electric supply line in case such work does not include the removal of the line to a new position, the use of the line to carry electricity at a voltage different from the voltage at which it was previously thereby carried, an alteration or replacement of the wires or other conductors servicing to increase the current carrying capacity of the line.

(3) Upon completion of any work notified under sub clause (1) of this regulation, the Authority shall give notice of the completion to the Secretary enclosing an "as executed" plan of the work done.

47. <u>Clearances of overhead electric supply lines above ground</u> - (1) Overhead electric supply line conductors shall have the minimum vertical clearances above ground set out in the following table:

## TABLE

# Voltage and Description of Lines

<u>Minimum Vertical</u> <u>Clearance Above</u> <u>Ground in Meters</u>

Exceeding 650 volts but not exceeding 11,000 volts -	
<ul><li>(a) along or across any road or footpath</li></ul>	6.5
(b) in any other place	5.5

Not exceeding 650 volts-

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(b)

(a)	Distribution	lines-
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distribu	ct of the span connecting to the ation main or service main and located on a but not crossing any part of the road	
used by	vehicular traffic Pr part of a distribution line along	4.0
or acros	ss the road or private road or way vehicular traffic	5.5
(iii) in any o		5.0
Distribution	mains and service mains -	
	across any part of a private road	

	or way used or likely to be used by vehicles	5.5
(ii)	along or across any footpath used only	
	by pedestrians	4.0
(iii)	for the last span connected to any	
	building or other structure other than	
	over a place to which members of the public	
	have access-	
	in places used or likely to be used by vehicles	3.5
	elsewhere	2.7
(iv)	in any other place	5.0
· · · · /	in any bondi pidde	J. V

(2) All sections of lines not complying with the requirements of subclause (1) of this regulation shall be recon-structed or modified within a period of 10 years as a part of a programme of work to be carried out in the order of an assessment of the degree of electrical hazard.

Installation and protection of underground electric 48. supply lines - Underground electric supply lines shall have conductors suitably insulated throughout for their operating voltage and shall be adequately protected against mechanical injury.

## PART VII EARTHING

49. Connection of alternating current systems with earth -(1) In medium voltage or any lower voltage alternating current

 (a) the neutral of a 3-phase 3-wire system shall

- be multiple earthed; and
- (b) the neutral of a single-phase 2-wire system shall be multiple-earthed; and
- the neutral point of a 3-phase 3-wire system (C) shall be established and earthed at the source of supply.

For the purposes of this regulation a multiple-(2)earthed neutral shall be deemed to be a neutral which is earthed-(a) at the source of supply; and

- (b) at one or more points along the distribution line;
- on consumer's premises. (C)

(3)In high voltage systems (except series streetlighting systems) an earthing point shall be provided at the source of supply-

- (a) by earthing of the neutral point. Anv such systems may be earthed at any other point in addition if no interference of any description is caused by that earthing; or
- by earthing an artificial neutral point obtained from an earthing transformer of (b) sufficient capacity to operate protective equipment; or
- (c) by other approved means

50. <u>Connection of conductors and equipment with earth</u> - (1) All generating station and substation high voltage switching equipment at the site of the earthing point of high voltage systems shall be provided with two separate earthing conductors which shall be taken to separate earth electrodes which may be bonded and to which all metal parts in the generating station or substation not normally alive shall be connected unless otherwise protected.

(2) Lightning arresters shall be earthed by a direct earth connection which presents a low impedance path to high frequency currents and which may in addition be bonded to the multiple earthed neutral or to the earthing point of high voltage system.

(3)No stay wires shall be less than 300 millimeters from a telephone line. Stays which are near telephone lines or which are less than 2.5 metres from the ground shall have either a connection to the neutral or separate earthing connection, unless they are in direct and adequate contact with the earth.

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(4) Metal towers or poles and other metal which may become alive, but which are in direct adequate contact with earth, are not required to have a separate earthing connection. Any such metal may, additionally, be connected to the neutral of a multipleearthed neutral system.

(5) The metal operating handles of all high voltage switching equipment shall be directly earthed unless the handles are adequately insulated.

51. Earthing connections - Every permanent and temporary earth continuity conductor and earthing connection shall be of adequate current carrying capacity for the purpose for which it is to be used and shall be suitably protected against mechanical damage. Permanent earths on poles shall be suitably protected against mechanical damage for a distance of 2.5 metres above the ground. The size of the conductor shall be not less than 16 square millimeters of copper or its equivalent current carrying capacity except that the earthing conductor of a street-lighting fitting shall be not less than its phase conductor in cases where it is fully enclosed and not exposed to the weather. Where the earthing conductor of a street-lighting fitting is exposed to the weather, it shall be not less than 4 square millimeters. Aluminium connections and conductors shall not be used as permanent earthing connections or conductors.

52. <u>Testing of earths</u> - (1) Before any electric lines, electrical equipment, or other devices are livened, all earthing connections as prescribed shall be tested for the electrical resistance of the earth connections as prescribed in this regulation.

(2) Earthing connections of high voltage alternating current systems shall have a resistance to earth not exceeding 10 ohms.

(3) Earthing connections of high voltage electrical equipment or other devices mounted less than 2.5 metres above ground level shall have a resistance to earth not exceeding 10 ohms.

(4) The neutral of a multiple-earthed neutral system shall have an overall resistance to earth not exceeding 10 ohms. The connection to earth at the source of supply, and at least one other connection to earth where this is practicable, shall be tested independently of the neutral and each shall have not more than 25 ohms resistance.

(5) Except as provided by subclause (7) of this regulation, lightning arresters shall have a resistance to earth not exceeding 10 ohms.

(6) Earth connections of high voltage transformers, condensers, and switching equipment other than those referred to in subclause (3) shall have a resistance to earth not exceeding 100 ohms, except as provided in clause (7) of this regulation.
 (7) Where, because of high resistance soils, it is not

(7) Where, because of high resistance soils, it is not practicable to obtain the resistance values required under subclauses (5) and (6) of this regulation then those subclauses shall not be applicable, but at least 2 suitable electrodes, adequately spaced, shall be provided. (8) The Authority or licensee shall, every 2 years, examine all earth-continuity conductors and earthing connections within its jurisdiction to ensure that they are effective.

(9) The Authority, or licensee shall maintain current records of every earth test and inspection made under this regulation.

(10) The Authority, or licensee shall, on request, furnish copies of current earth tests to interested parties and may charge for the provision of this information.

#### <u>PART VIII</u> SAFETY OF PERSONNEL

53. <u>Qualification of persons</u> - (1) No person except a competent person shall carry out or assist in the carrying out of any work on any electric supply line or equipment which is live or is liable to become live in any case where practical knowledge or experience is required in order to avoid danger.

(2) For the purposes of this regulation, a person shall not be deemed to be a competent person with respect to any class of work unless-

- (a) that person has received training in safe working practices in that class of work through a training system set up by the Authority and which training system shall include instruction in basic first aid and resuscitation; and
- (b) that person has, within the last 12 months, attended a refresher course conducted by an Authority in safe working practices and basic first aid and that particulars of such training and refresher course including the name of the person concerned and the dates and duration of the course, have been entered in a register kept by the Authority.

54. <u>Assistance</u> - (1) No person shall work on any conductor of any live overhead electric supply line of any voltage or any other live high voltage conductor or equipment unless accompanied by a person competent to assist him.

(2) Notwithstanding subclause (1) of this regulation, any competent person employed by an Authority may, without being so accompanied,-

- (a) operate high voltage, circuit-breakers, air break switches, or isolators; or
- (b) remove or replace fuse elements or links; or
- (c) carry out such work as may be necessary to ensure safaty of life or property in an emergency.

55. <u>Working clearances</u> - (1) No person shall carry out work on any live high voltage conductor (whether covered or bare) nor on any medium voltage or lower voltage conductor which has exposed live metal between which and any other conductor he is likely to make accidental contact, unless such of the safeguards set out and indicated in regulation 60 of these regulations as are necessary in the circumstances to make work on the conductor safe are used by him. (2) No person shall carry out any work on a live high voltage conductor except by means of suitable live-line equipment.

56. <u>Conductors and equipment to be earthed</u> - (1) Where any conductor is disconnected from the source of supply and is in proximity to any live high voltage conductor, every person working on the first named conductor shall cause the same to be earthed after disconnection and before work commences and to remain earthed until all work thereon has been completed.

(2) Every person, before working on any high voltage conductor or equipment, or both, disconnected from the source to supply (and liable to become alive), shall cause the conductor or equipment, or both, to be earthed and to remain earthed until all work thereon has been completed.

(3) The requirement for earthing in subclause (2) of this regulation shall, wherever possible, be applied in two or more places so that there is at least one earth between the worker and each possible source of supply. In the case of overhead lines, one earth shall be placed on the conductor or the equipment to be worked on as close as practicable to the working position and where possible within visible distance of it.

(4) Every person before working on any medium or lower voltage conductor (other than an earthed neutral or middle conductor) shall cause the conductor to be earthed and to remain earthed until all work thereon has been completed if the conductor-(a) has been disconnected from the source of

- (a) has been disconne supply; and
  - (b) is liable to become
    - alive; and
  - (c) has exposed metal with which any such person is likely to make contact.

(5) All bare conductors being erected under any bare live lines shall be earthed before work commences and shall remain earthed until work is completed.

57. <u>Erection of lines on existing poles</u> - Where any new line is being erected on poles or other supports carrying any bare live conductors, then -

- (a) Every person engaged in any such erection shall either cause the live conductors to be isolated and earthed or shall not handle the new line unless suitable safeguards are used; and
- (b) No person shall be on any crossarm on which the new line is to be erected while the line is being pulled up; and
- (C) Every person engaged in any such erection shall cause any new bare line to be earthed before erection and to remain earthed until all work on it has been completed.

58. Notice on switches and circuit-breakers - (1) All switches and circuit-breakers isolating conductors or equipment for working on shall have a suitable tag affixed to the operating handle. Any such tag shall have marked thereon "MEN AT WORK" or wording of a similar nature, and the tag shall not be removed until the switch or circuit-breaker (as the case may be) is again closed by or at the instructions of the person carrying out the work - Provided that where the switch or circuit-breaker is under the sole control of and in sight of the person working on the conductors or equipment, the tag may be omitted.

(2) Any such switches or circuit-breakers, when located out of doors, shall always be locked when in the open position -

Provided that, where a suitable isolating switch is provided so as to isolate safely any such switch or circuit-breaker and is in the open position, only the isolation switch need to be locked.

59. <u>Work on switchboards</u> - (1) When work has to be carried out on any high voltage switchboard, then, unless the switchboard is otherwise so arranged as to ensure that the work may be carried out without undue risk, either -

(a) the switchboard shall be isolated and earthed, or

(b) if the switchboard is so arranged that the conductors thereof can be isolated in sections, and the sections are separated by permanent or removable screens from all adjoining sections of which the conductors are alive so that work on any section may be carried out without undue risk, the section on which work has to be done shall be isolated and earthed.

(2) Every generating station or substation switchboard shall be erected in such position as to provide in front and behind the switchboard the clear unobstructed spaces hereinafter mentioned, namely ~

- (a) in the case of low voltage and medium voltage switchboards, an overhead clearance (except in enclosed spaces referred to in paragraph (c) of this subclause) of not less than 2.2 metres from the floor to any conductor under which it is necessary to pass, and a passageway in front of the switchboard with at least 1 metre horizontal clearance from the face of the switchboard or any bare live metal affixed thereto;
- (b) in the case of high voltage switchboards, other than operating desks or panels working solely at medium voltage or any lower voltage, an overhead clearance (except in enclosed spaces referred to in paragraph (c) of this subclause) of not less than 2.5 metres from the floor to any conductor under which it is necessary to pass, and a passageway in front of the switchboard with at least 1 metre horizontal clearance from the face of the switchboard;
- (c) in every enclosed space behind any switchboard where only skilled men would be employed when the switchboard is alive (unless all live metal other than that being worked on is suitably screened) -

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- (i) an overhead clearance of not less than 2.2 metres from the floor to any bare conductor under which it is necessary to pass; and
- (ii) a horizontal clearance of not less than 1.8 metres for high voltage, and not less than 1.2 metres for medium voltage or any lower voltage where it is possible to pass between any live conductors less than 2.2 metres above the floor; and
- (iii) a horizontal clearance of not less than 900 millimeters between any live conductor and less than 2.2 metres above the floor and any wall, screen, or similar object.

(3) Where a passageway is provided behind any switchboard, the horizontal clearance shall be at least 1 metre from the back of the switchboard and shall be measured from any screen erected at the back of the switchboard.

60. <u>Provision of safeguards</u> - (1) The Authority or licensee or contractor or agent of the Authority engaged in erection or maintenance of electric lines shall provide and maintain in good condition for use where necessary by any person employed by it adequate safeguards necessary in the circumstances as a reasonable protection against hazard including -

- (a) insulating gloves, screens, stands, mats and protective covers; and
- (b) safety belts, and for each ladder not less than 2 metres of good quality rope having a diameter of not less than 8 millimetres and a breaking strain of not less than 8 kilonewtons; and
- (c) temporary earthing devices; and
- (d) ropes suitable for pole top rescue.

(2) All insulating gloves shall be marked with their test and working voltage.

61. <u>Use of safeguards</u> - (1) It shall be the duty of every person working or supervising work on electric supply lines or equipment -

- (a) to be satisfied that the safeguards provided are in good physical and mechanical order and condition; and
- (b) if any safeguards are found to be physically damaged or substantially deteriorated, to label and place them where they cannot be inadvertently taken for use; and
- (c) to arrange their prompt return for repair or disposal as soon as practicable to the Authority licensee, contractor or agent engaged in the erection or maintenance of electric supply lines.

(2) It shall be the duty of every person working on the lines or equipment to use in a proper manner the safeguards provided.

(3) Where a ladder is used against a pole, the first person to ascend shall immediately tie the top of the ladder to the pole by means of the rope prescribed in regulation 60 (1) (b) of these regulations.

(4) No insulating gloves shall be used unless they have been tested in accordance with regulation 62 of these regulations and have been found to insulate effectively any voltage at which they are likely to be used.

52. <u>Inspection and testing of ladders and safety equipment</u> -The following equipment shall be given a thorough visual 62. (1)inspection by the Authority, or licensee, or contractor or agent of the Authority engaged in the erection or maintenance of electric supply lines at intervals averaging 6 but not exceeding 7 months -

- Insulating gloves, boots, galoshes, stands, (a) protective covers, and mats;
- Ladders and their associated ropes; (b)
- (C) Safety ropes and anchorages;
- Safety belts and harnesses; (d)
- (e) Earth sticks;

 (f) Ropes for pole top rescue.
 (2) Any equipment specified in subclause (1) of this regulation that is found to be physically damaged or substantially deteriorated shall be immediately withdrawn from service and either repaired or destroyed.

(3) In addition to the requirements of subclause (1) of this regulation tests shall be carried out as follows:

- be tested (a) Insulating gloves shall for insulation by the Authority, or the licensee, or contractor or agent not earlier than 7 months prior to issue for use. Only gloves which have been tested and found to insulate effectively for the voltages at which they are likely to be used shall be issued;
- (b) Safety belts shall be tested by the Authority, or licensee, or contractor or agent at intervals averaging 6 but not exceeding 7 months. The complete belt with pole strap, rope, or chain attached to the body belt as under working conditions shall be subjected to a static tension of 2.3 kilonewtons.

(4) A record of inspections and tests required under subclauses (1) and (3) of this regulation and the results thereof shall be kept by the Authority, licensee, contractor or agent for a period of not less than 2 years after the date of inspection or test and shall be available for inspection by the Inspector when required.

63. <u>Suitable clothing to be worn</u> - Every person, while engaged in working on an overhead line, shall wear such clothing as in the opinion of his employer or his authorised representative is likely to promote the safety of that person, having regard to the nature of the work on which the person is engaged. 64. <u>Instruction in treatment of electric shock</u> - Clear instructions in an approved form as to the treatment of persons receiving electric shock shall be affixed by the Authority or licensee, or contractor or agent of the Authority engaged in the erection and maintenance of electric lines in a conspicuous place in every generating station, substation, store, and workshop building used by the Authority or licensee, or contractor or agent of the Authority.

65. <u>Electrical code of safety practice</u> - (1) Every Authority, licensee, or contractor or agent of the Authority engaged in the erection and maintenance of electric lines and works shall comply with the Electrical Code of Safety Practice issued by the Secretary.

(2) All persons undertaking any work on electric lines or electrical plant or equipment on behalf of the Authority shall comply with the provisions of the said Electrical Code of Safety Practice.

(3) Subclauses (1) and (2) of this regulation shall not apply to an Authority, licensee or contractor or agent of the Authority engaged in the erection and maintenance of electric lines and works for which instructions as to standard working procedures have been issued under the authority of other statutory provisions.

## PART IX RECORDS, REPORTS, AND RETURNS

66. <u>Records</u> - (1) From the date of commencement of supply, the Authority shall keep such records as may be necessary to supply annually to the Secretary such information as he may require.

(2) The Authority shall keep a record of each consumer's installation connected to the system.

(3) The Authority shall keep a record showing the names of the registered person and inspector responsible for inspecting any such installation, together with all relevant dates and tests in connection with the inspection of the installation -

Provided that where an Authority has carried out a reinspection under regulation 30 of these regulations, the records required under this subclause need only be those of the most recent reinspection and of any previous defects.

(4) The Authority shall prepare and maintain an up-todate plan showing the location of -

- (a) all works, substations, and distribution lines over which they have control except that part of an overhead distribution line span which connects to a service main or distribution main; and
- (b) all underground distribution mains and underground service mains; and
- (c) all works, substations, and electric supply lines above medium voltage that are under the control of any "electricity user", (as defined in regulation 44 of these regulations), and are connected to the system of the Authority.

\* • 67. Reports to Secretary - (1) The Authority or licensee shall notify the Secretary of -

- (a) every accident to any person which is caused by any electric supply line, plant, or electrical equipment forming part of the Authority's supply system or licensee's installation.
- (b) every accident of which it becomes aware to any person which occurs on a consumer's premises due to electrical causes.

(2) For the purposes of paragraphs (a) and (b) of subclause (1) of this regulation, the expression "accident to any person" means an accident which results in the death of any person, or which necessitates the person receiving first aid, resuscitation, or other medical treatment.

(3) The notice required to be given to the Secretary under subclause (1) of this regulation shall be given in writing forthwith after the accident or other happening.

(4) All notices shall be given in such form as the Secretary may require.

68. <u>Annual returns</u> - Every Authority shall, not later than the 30th day of September in each year, furnish to the Secretary in such form as he may require -

- (a) financial return for the previous financial year ending on 30th day of June including the valuation of assets, balance sheet and profit and loss account.
- (b) return of the operations of the Authority's undertaking during the previous financial year.

## <u>PART X</u> OFFENCES

69. Failure to comply with safety of personnel requirements -Every person who fails to comply with or acts in contravention of any provision of regulations 53 to 65 of these regulations commits an offence against these regulations, and shall be liable on conviction to a fine not exceeding \$5000 and, where the offence is a continuing one, a further amount not exceeding \$50 for every day or part of a day during which the offence has continued.

70. <u>Failure to comply with the licence or regulations</u> - Any Authority or licensee who -

- (a) fails to use and maintain the electric supply lines and works constructed pursuant to its licence in such a manner as to ensure integrity of supply and efficiency of the undertaking in the area of supply; or
- (b) fails to observe, perform, fulfil, or keep any of the requirements, conditions, or provisions of the Act, with respect to its licence; or
- (c) fails to observe or comply with any of the requirements of these regulations, -

commits an offence against these regulations, and shall be liable on conviction to a fine not exceeding \$5,000 and, where the offence is a continuing one, a further amount not exceeding \$50 for every day or part of a day during which the offence has continued.

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71. <u>Sundry offences</u> - (1) Every person, other than an Authority, or licensee, who commits an offence against these regulations for which no other fine is prescribed, shall be liable on conviction to a fine not exceeding \$5,000 and, where the offence is a continuing one, a further amount not exceeding \$50 for every day or part of a day during which the offence has continued.

(2) Every person who, without lawful authority, tampers with any electric supply line or electric plant or equipment subject to these regulations, commits an offence and shall be liable on conviction to a fine not exceeding \$5,000 and, where the offence is a continuing one, a further amount not exceeding \$50 for every day or part of a day during which the offence has continued.

M. Taruia

## Clerk of the Executive Council

These Regulations are administered by the Ministry of Energy

AUTHORITY:

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