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**THE ELECTRICITY LAW (17 OF 1974)**

**ELECTRICITY REGULATIONS**

**(1996 Revision)**

The Electricity Regulations, 1977 made the 27th day of September, 1977.

Consolidated with the-

Electric (Amendment) Regulations, 1978 made the 5th December, 1978.

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Revised under the Law Revisions Law ( 19 of 1975).

Consolidated and revised this            day of            , 1995.



**ELECTRICITY REGULATIONS**

**(1995 Revision)**

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**ELECTRICITY REGULATIONS**

**(1995 Revision)**

1. These Regulations may be cited as the Electricity Regulations (1995 Revision). Citation

2. In these Regulations, unless the context otherwise requires- Definitions

“accessory” means a device such as an adapter cut-out, plug or socket which is associated with wiring, fitting, switchboards, or appliances; but does not include a switchboard or fitting or appliance as herein specifically defined;

“approved” means approved by the Electrical Inspectorate;

“armoured cable” means a cable provided with a metallic covering of wires or tapes as a protection against mechanical injury;

“authorised Inspector” means an Electrical Inspector authorised in writing under the Law;

“Board of Examiners” means a board appointed under regulation 57(2) responsible for the licensing of persons under the Law;

“British Standard Specification” means a specification issued under that name by the British Standards Institution, and includes all supplements, amendments and additional British Standards which may from time to time be issued in connection therewith;

“cable” means one or more conductors whether with or without insulating covering and with or without protective coverings;

“consumer” means any person supplied or entitled to be supplied with electricity by undertakers;

“electrical hazard” means danger to life and/or property from electrical energy;

“fixed wiring” means all conductors forming part of the electrical installation between the place of entry at which supply is obtained and any point of outlet;

“fuse-link” means the actual wire or strip of metal in a cut-out or other device which is intended to be fused by an excessive current;

“grounded” means connected to the general mass of earth in such a manner as will ensure at all times the immediate discharge of electrical energy without electrical hazard;

“flammable” means capable of being readily ignited;

“Law” means Electricity Law; (1997Revision)

“live” or “alive” in relation to a conductor means its condition when a potential difference exists between it and ground.

“N.E.C.” means the National Electrical Code published by the National Fire Protection Association in the United States of America and current at any time:

“non reversible” in respect of any accessory device in the nature of an adapter, or a plug and socket, for connecting apparatus, means so constructed and installed that the respective conductors between such adapter, or plug, and the device are always connected to the same pole, phase, neutral or earthed conductor, as the case may be;

“point” means a point on the wiring system at which current is taken to supply lamps, heaters, motors and current-using devices generally;

“premises” includes any land owned or occupied by an undertaker or consumer, as the case may be, on which electrical energy is generated, transmitted or used;

“P.V.C.” means Polyvinyl-Chloride compound;

“section” means a section of the Law;

“source of supply” means either the generating station, the substation, or the transformer as the case may be, which is the source of the electrical energy at the voltage at which it is delivered to the consumer; and

“switchgear” means any apparatus for controlling the distribution of electrical energy, or for controlling or protecting electrical circuits machines, or other apparatus.

## **PART II-Application, Modification and Exemption**



3. (1) Subject to section 3, these Regulations apply to all electrical installations connected with any source from which an electrical energy is available; Application

Provided that nothing herein contained applies to any electric line or work-

- (a) on any vessel or vehicle used for transport purposes with the exception of mobile homes or recreational vehicles;
- (b) installations of communication equipment under the exclusive control of communication utilities, located outdoors or in building spaces used exclusively for such installations;
- (c) installations under the exclusive control of electric utilities for the purpose of communication or metering; or for the generation, control, transmission and distribution of electric energy located in buildings used exclusively by utilities for such purposes or located outdoors on property owned or leased by the utility or on public highways, streets, roads, etc., or outdoors by established rights over private property.

(2) Additions and alterations to existing installations are deemed to be new installations and these Regulations apply to all work done in connection with such additions and alterations.

4. (1) Subject to sub-regulation (2) where an undertaker is empowered to supply electrical energy to any consumer's premises unless such installation or any completed part thereof has been inspected, tested and certified pursuant to regulations 55 and 56. Connection, inspection and testing, etc.

(2) An authorised inspector may authorise a temporary connection pending an inspection provided that the tests prescribed by regulations 50 and 54 have (where applicable) been satisfied, and that such temporary connection is made for a period not exceeding three months.

5. No undertaker shall connect, supply or continue to supply electrical energy to any existing installation connected with such undertaker's lines unless every part of such installation is free from electrical hazard. Hazardous installations

6. Where any installation and all appliances connected therewith comply with the requirements of these Regulations the undertaker shall not, without the permission of the Inspectorate in writing, refuse or fail to supply such installation on the ground only that the installation or any appliance therewith constitutes an electrical hazard. Compliance with regulations

*Electricity Regulations (1995 Revision)*

Supply authority as consumer	7. In any case where the undertaker is also the consumer of the electrical energy supplied by it, the conditions imposed by regulations 3 and 4 shall apply to it in its capacity as undertaker as if it were supplying energy to a consumer other than itself.
Persons to be licensed	8. (1) No person other than a licensee under the Law shall make or cause to be made or extend any installation of wires or fittings for electrical purposes.  (2) Persons engaged in electrical work shall be classified in accordance with regulation 61.
Licences	9. For the purpose of obtaining a licence, persons shall be subject to the requirements of regulations 57 to 61.

**Modification and Exemption**

Existing permits, approval, etc.	10. Permits, approvals, requirements and authorisations, and generally all acts of authority which originated under the old law and subsist at the coming into force of these regulations take effect for the purposes of these Regulations as fully and effectually as if they had originated under the corresponding provisions of these Regulations and are deemed so to have originated.
Work pending or in progress	11. Actions, prosecutions, and other legal proceedings commenced under the old law and pending or in progress at the coming into force of these Regulations may continue under these Regulations.
Material in stock, etc.	12. (1) Nothing in these Regulations prohibits the sale, installation, or use of anything thereby affected which was in the Islands, or in transit in the Islands or the subject of an irrevocable order by a person in the Islands at the date of the coming into force of these Regulations provided that it is free from electrical hazard and either conforms with or is approved under the Law.  (2) The Inspectorate may, by giving not less than six months notice in the Gazette, require that material which does not comply with the requirements or these regulations, be used only in certain specified places and have affixed before sale or installation an official transfer issued by the Inspectorate.  (3) In the event of any dispute as to whether the material was in the Islands or in transit to the Islands, or the subject of an irrevocable order by a person in the Islands on the date of the coming into force of these Regulations, the onus of proof is on the person making the claim.

13. (1) If the Inspectorate upon application being made in writing by any person proposing to make any new installation, alteration or addition to an existing installation, is satisfied that strict compliance with these Regulations would involve expenditure out of proportion to the freedom from electrical hazard to be secured thereby it may modify them if satisfied that freedom from electrical hazard can be secured in a more convenient manner.

Modification of requirements

(2) Every such application shall be accompanied by a statement of the reasons why such modification is desired and the nature thereof, and by a statement or opinion by the undertaker as to whether the application is a reasonable one and whether the modification would be safe.

(3) In granting any such modification the Inspectorate shall specify what special work (if any) is required to be done to render the installation free from electrical hazard.

(4) The Inspectorate may at any time rescind any modification if satisfied that the electrical hazard has thereby been unduly increased.

14. Where an undertaker changes over from one voltage or system to another, the Governor may, by notice published in the Gazette, make modifications to these Regulations in their application to the reconditioning of installations for the purposes of such change.

Changeovers

### **PART III-General**

15. The Governor may from time to time, by notice in the Gazette, approve methods or types of construction or materials not especially provided for in these Regulations and impose such conditions as appear necessary in that behalf.

Approval of other methods

16. (1) The Inspectorate may prohibit the installation and use of any appliance, apparatus, accessory, cable, fitting, machine, switchgear, switchboard, method or type of construction, or material or method of installation which in his opinion constitutes or may constitute an electrical hazard.

Prohibited work

(2) The premises of any business or institution which caters for the public or invites public attendance and complexes comprising multiple units must, if wired after 31st. December, 1978, and if capable of accommodating one hundred persons or more at any time, have an all conduit wiring system installed.

(3) Where E.M.T. (Electrical Metallic Tubing) is used there must be a continuous ground wire run in the conduit along with the other conductors.

(4) Where there is more than one metered supply to the same building the metered circuits belonging to one consumer may not run through any switch or panel board of another consumer unless there is a separate compartment sealed off. In the absence of such separate compartment the circuit must run directly in conduit from the meter to the appropriate consumer's panel board.

Device and apparatus which do not comply

17. No person shall manufacture for sale or sell or offer for sale, and no person shall install or cause or permit to be installed or assist in installation on any premises any device or apparatus which does not comply with the requirements or which is not the character specified by these Regulations in respect of such device or apparatus.

Wiring which does not comply

18. No person shall install or cause or permit to be installed or assist in stalling on any premises any wiring which does not comply with the requirements or which is not of the character specified by these Regulations in respect of such wiring.

Methods which do not comply

19. No person shall install or cause or permit to be installed or assist in installing on any premises any device or apparatus or wiring in a manner contrary to these Regulations.

Uses prohibited

20. (1) No person shall use or maintain or cause or permit to be used or maintained on any premises any apparatus, device or wiring-

- (a) which does not comply with the requirements or which is not of the character specified by these Regulations in respect of such apparatus, device, or wiring; or
- (b) in a manner contrary to these Regulations.

(2) No person shall knowingly continue to use or maintain or cause or permit to continue to be used or maintained for or in connection with the supply, distribution, or consumption of electrical energy any device or apparatus or wiring or any part of an installation which has ceased to comply with the requirements or to be of the character specified by these Regulations in respect thereof. The Inspectorate if satisfied that any installation does not comply with these Regulations shall have the right to call on the undertaker to disconnect such installation.

(3) This regulation does not apply to any apparatus, device, or wiring installed on any premises prior to the coming into force Of these Regulations provided it is in use at the premises where so installed and is free from electrical hazard.

Disputes

21. (1) A interpretation or application of these Regulations may be referred to the Inspectorate for adjudication whose decision is final dispute between a contractor or lineman and an undertaker regarding any technical

(2) A consumer to whose premises an undertaker in compliance with these Regulations refuses or discontinues a supply of energy who is aggrieved thereby may apply for his installation to be inspected and tested by the Inspectorate whose decisions are final.

22. No person shall assemble, wire-up, or repair any electrical device or apparatus in a manner which contravenes these Regulations. Assembly and repair

23. If an accident of an electrical nature causes or is likely to cause loss of life the licensee shall give immediate notice thereof to the Chief Secretary and to the Inspectorate. Reporting of accidents

24. Notices or requisitions required to be served upon the Inspectorate under these Regulations may be so served by being addressed to the Inspectorate and left at, or transmitted through the post to the Inspectorate at, the office of the Public Works Department; and notices required to be served upon an undertaker or other person may be served by being addressed to such undertaker or person and left at or transmitted through the post to his last known address. Service of notices

#### **PART IV-Penalties**

25. The Inspectorate may suspend, cancel or endorse a licence granted upon proof of any technical malpractice, carelessness or other contravention of these Regulations by the licensee. Breach of regulations

26. The Board of examiners may suspend or cancel any licence issued by it on grounds by which the Inspectorate can so do under regulation 25. Suspension of licences

27. Whoever employs an unlicensed person for carrying out electrical installations is guilty of an offence and liable on summary conviction to a fine not exceeding five hundred dollars and a daily penalty not exceeding one hundred dollars per day in the event of a continuing offence. Employment of unlicensed electricians

28. Whoever carries out electrical installations when not licensed under these Regulations is guilty of an offence and liable on summary conviction to a fine not exceeding five hundred dollars and a daily penalty not exceeding one hundred dollars per day in the event of a continuing offence. Penal

**Part V-Permits for Wiring Work**

Approval

29. (1) Save as provided in regulations 42 to 44 no licensee shall until he has obtained approval from the Inspectorate-

- (a) do any electrical wiring work;
- (b) connect to any source from which electrical energy is available-
  - (i) any electrical wiring;
  - (ii) any electrical apparatus for use in any situation where a person touching it may under normal conditions simultaneously make contact with earth or earthed metal;
  - (iii) electrical apparatus exceeding 10 amperes in capacity.

(2) Applications shall be accompanied by sketch plans and specifications.

(3) The Inspectorate shall-

- (a) on receipt of an application to do any electrical wiring work, satisfy itself that any necessary permission to do the work under the Development and Planning Law (Revised) has been obtained; or
- (b) on receipt of an application to make a connection to any source from which electricity is available, satisfy itself that any necessary permission under the Development and Planning Law (Revised) has been obtained and any condition subject to which that permission was granted has been complied with,

and shall refuse its approval if that permission has not been obtained or any such condition has not been complied with, as the case may be, but shall otherwise signify its approval or disapproval, as soon as possible.

Work to begin within two months of approval

30. (1) Every approval under regulation 29 authorises The execution of the work only on condition that the work is commenced within two calendar months of the approval being granted and if the work has not commenced within such period the approval expires.

(2) The applicant shall inform the Inspectorate of the date on which he intends to commence work.

Validity of approval

31. Every such approval shall be valid for a period not exceeding one year from the date of commencement of the work and the Inspectorate may extend such approval or if satisfied that The licensee is in breach may withdraw it.

Only one approval to be in force at a time

32. No approval shall be issued for any work in relation to which a previous approval is in force.

33. (1) Persons who have carried out electrical wiring or installation shall, on completion of such work, notify the Inspectorate in writing that the work is completed and that the tests prescribed by regulations 49 to 54 (where applicable) have been satisfied and request an inspection of the work. Such notice shall include the signature and registration number of the electrical workman in charge of the work along with a receipt from the Treasury for the appropriate sum paid in accordance with regulation 48.

Inspection after completion

(2) Inspections are to be made at each floor level and no panels conduit boxes or other electrical appurtenances may be covered or concealed until they have been approved.

(3) Final inspection is to be made after the work is completed and the premises are ready for use or occupancy.

34. A temporary supply consists of a service head, service mast and meter socket and is to be provided with a rain-tight safety switch, or enclosed circuit breakers with one or more receptacles mounted in a weather proof box situated on a pole or wall. The temporary supply is to be disconnected as soon as a permanent supply has been connected.

Temporary supply

35. The Inspectorate may grant permission for temporary electrical wiring work and such permission authorises the undertaking of the work referred to therein so that the provisions of regulations 30 and 32 apply and also authorises the use and maintenance of such work for the period stated in such permit. No permits under this regulation shall be for a period exceeding three months, from the date when the work is first connected with the source from which electrical energy is available.

Temporary wiring

36. The period for which any temporary electrical wiring may be used and maintained may from time to time be extended by successive permits each for a period not exceeding one month provided that the total period for which such work may be used and maintained does not (except in the case of temporary electrical wiring work used or maintained in connection with a building or works in course of construction) exceed six months from the date when the work was first connected with the source from which electrical energy is available.

Period for temporary wiring

37. Permits issued under regulation 36 may be subject to such written conditions, not in conflict with these Regulations, as the Inspectorate thinks fit to impose.

Conditions for temporary wiring

*Electricity Regulations (1995 Revision)*

Connection and inspection of temporary wiring	38. No person shall connect any temporary electrical wiring work with a source from which electrical energy is available until such work has been inspected and approved by an authorised Inspector as having been installed in accordance with these Regulations and with the conditions (if any) set out in the permit.
Expiry of period	39. No person shall continue to use or maintain any temporary electrical wiring work after the expiration of the period authorised in that behalf by a permit granted under these Regulations.
Temporary wiring	40. On the expiration of the period during which any temporary electrical wiring work may lawfully be used and maintained pursuant to a permit granted under these Regulations the occupier of the premises on which such work is constructed shall, forthwith, have such work demolished and dismantled.
Dead and disused wire, etc.	41. All dead or disused conductors, accessories, appliances and apparatus- (a) which do not conform to these Regulations shall either be removed from the building or be rendered useless for electrical purposes to the satisfaction of an authorised Inspector; (b) which conform to these Regulations shall be maintained free from electrical hazard.
Emergency repair work	42. In any case of emergency due to a breakdown or other accident, a person licensed to do electrical wiring work may, without first obtaining a permit as required by these Regulations, begin any work necessary to repair or make safe the installation, provided that a person who begins any such work shall make an application for a permit under these Regulations to the Inspectorate within forty eight hours after such work begins.
Undertaker as consumer or contractor	43. Notwithstanding the terms of any licence or any regulation to the contrary, in any case where an undertaker is also the consumer of the electrical energy supplied by such undertaker or is the contractor for any electrical wiring work, unless the Governor directs, the provisions of these Regulations apply.
Private plants	44. Where electrical energy is generated upon a consumer's premises or is obtained from a privately owned plant no person shall, until he has obtained written permission from the Inspectorate- (a) commence or undertake any electrical wiring work; or (b) connect to any source from which electrical energy is available- (i) any electrical wiring work; or



- (ii) any electrical apparatus intended to be used in any situation where the person touching it, may under normal conditions, simultaneously make contact with earth or earthed metal; or
- (iii) electrical apparatus exceeding 10 amperes in capacity.

**PART VI - Inspection and Fees**

45. Manholes shall be provided in ceiling to facilitate access to the roof of all buildings for the purpose of inspection. Manholes

46. Traps shall, where practicable, be provided at all inspection fittings and drawn-in boxes and such traps shall be securely fastened by means of screws. Traps

47. (1) An authorised Inspector may, at any time between the hours of 9:00 a.m. and 5:00 p.m. on any day of the week other than Sunday, upon production of his authority, demand admission to the premises of any consumer for the purpose of ascertaining whether the requirements of these Regulations have been complied with. Admission to premises

(2) The consumer shall render such person every reasonable facility for inspecting and testing the installation.

(3) If a consumer refuses to admit such person during such hours, the undertaker shall, on demand in writing by the Inspectorate, discontinue to supply electrical energy to such consumer.

**Fees**

48. (1) Application for inspection shall be made on the prescribed form and submitted to the Treasury along with the appropriate fee in accordance with scale in sub-regulation (4). Fees

(2) The application form shall contain details of the installation for which the fee has been paid along with the Treasury receipt number, the full address of the building or premises where the work has been done, the name of the occupier and signature of the licensed electrician who has done the work.

(3) In the event of an installation failing the test, a new application must be made along with the appropriate fee.

**(4) FEES**

**Description of Equipment**

(a)	120-Volt ceiling outlets double or single convenience, outlets, bell transformer capacitors, neon light transformers	<b>Points</b>	1-25	256-100	251-500	501-1000		
		<b>Fee</b>	\$4	\$5	\$7.50	\$12.50	\$25	
(b)	Temporary supply or temporary lighting points for use over period not exceeding 90 days	<b>Points</b>						
		<b>Fee</b>						
(c)	Overhead lines	<b>Poles</b>						
		<b>Fee</b>						
(d)	240-Volt single-phase supply; cookers, water heaters, transformers, lighting points, sterilisers, AC lights.	<b>Points</b>						
		<b>Fee</b>	□					
		<b>OR \$1.50 per point when additional to existing installation under inspection</b>						
(e)	Electric motor (in H.P.) Elec. generators (in KVA) Elec. rectifiers (in KVA)	<b>Size</b>	<b>Up to 5 H.P.</b>					
(f)	Transformer other stations	<b>Size</b>	Up to 100 KVA					
		<b>Fee</b>	\$6					
(g)	Customer's request for inspection	<b>Fee</b>	For each report on and test of an existing installation of electric light or power or voltage recording of 24 hours-\$8 with appropriate mileage charge.					
(h)	Separate meter boards or removal of meter boards or distribution panels.	<b>Fee</b>	Boards supplying not more than two circuits-\$2 per inspection per board or distribution panel. Boards or panels supplying more than two circuits require a fee of 50¢ for each additional circuit emanating from the board or panel.					
(i)	Interim ceiling inspections	Receipts for payment of fees must accompany such requests for interim inspections with appropriate mileage added. Mileage fee only is charged for final inspection.						
(j)	Arbitration in disputes arising between contractor and consumers or other parties	For settling matters in dispute affecting contracts or financial disagreements or other arbitration by personnel of the Inspectorate- a charge of \$3 per hour.						
(k)	For testing electric meters	\$4.20						
(l)	For the examination of-							

	Electrical Engineer Master Electrician Electrician Lineman	\$25 \$25 \$10 \$10
(m)	For registration: Electrical Engineer Master Electrician Electrician Lineman	\$150 \$100 \$50 \$50
(n)	For renewal of registration of licence: Electrical Engineer Master Electrician Electrician Lineman Lineman	\$150 \$100 \$50 \$50
(o)	Technical services not especially mentioned above	\$4.20 per hour or \$21 per day with a minimum charge of \$4.20.
(p)	Out of town	25¢ per mile for inspection, originating from the Post Office at George Town. Two or more inspections to be carried out for the same electrical contractor on the same premises under one mile apart are only subject to one mileage fee, distance being considered to the farthest point and measured along the route. Only one mileage charge shall be made for each premises inspected at one time.

**PART VII-Testing**

49. On completion of every wiring work or installation there shall be carried out the following insulation resistance tests with a direct current voltage in each case of not less than twice the voltage to which the circuits will normally be subject provided that in the case of medium voltage (250v to 650v) circuits the test voltage need not exceed 500 volts.

Testing out of installations, etc.

- (a) Where a test is desired of the permanent wiring before any fitting accessories appliances or lamps are installed the conductors shall be connected together so as to ensure that all parts of every circuit are simultaneously tested. The test shall be made between conductors as a whole and ground:

Provided that such test shall be deemed to be satisfied if the insulation resistance is not less in megohms than the result of dividing the number 100 by the outlets points and switch positions) from the fixed wiring.

- (b) (i) A test of the completed installation or an addition to or alteration of an existing installation with all fuse-links in place all switches in the on position ( including the main switch if practicable) and all lamps in position. The test shall be made between conductors as a whole and ground:

Provided that such test shall be deemed to be satisfied if the insulation resistance is not less in megohms than the result of dividing the number 50 by the number of outlets (points and switch positions) from the fixed wiring.

- (ii) Control rheostats heating cooking and power appliances and outdoor electric signs may be disconnected from the circuits during the test in which case the insulation resistance between the case or frame-work and all live parts of each such rheostat appliance and sign shall be tested:

Provided that such test shall be deemed to be satisfied if the insulation resistance is not less than half megohm.

- (c) Where a whole installation is being tested a lower value than that given by the formula above subject to a minimum of two megohms is acceptable.

- (d) Where practicable a test between conductors:

Provided that such test shall be deemed to be satisfactory if the insulation resistance is not less than two megohms.

Continuity

50. There shall be the following continuity tests of every wiring installation-

- (a) a test between the connection to ground and any other part of the completed installation in all cases where metal conduits, metallic sheathed cables or armoured cables which have no other metallic sheath are used; and
- (b) a test between the connection to ground and any part of any grounding lead:

Provided that each such test shall be deemed to be satisfied if the electrical resistance of such conduit sheathing or grounding-lead does not exceed 2 ohms.

Position of s.p. switches

51. A test shall be made on every wiring installation to verify that no single pole switch or circuit-breaker has been fitted in any neutral conductor or ground conductor and in the case of a non-grounded two-wire system that every such switch or circuit-breaker is fitted in the same conductor throughout. This test shall not apply to a switch mounted on a portable appliance or to ground leakage circuit-breakers.

Non reversible plug sockets

52. A test shall be made of every two-pin non-reversible type plug-socket and every three-pin plug socket to verify that the conductors have been connected in accordance with the appropriate provisions of the N.E.C.

53. Ground resistance tests will be made in accordance with the appropriate provisions of the N.E.C.

Ground resistance tests

54. All moulded insulating material shall be capable of with standing the tests prescribed by the appropriate current edition of the British Standard Specification or equivalent standard.

Moulded insulation

### **PART VIII-Certification**

55. (1) After having inspected any electrical wiring work or installation the authorised Inspector, if satisfied that the work has been carried out in accordance with the requirements of these Regulations, shall certify in writing to the undertaker, or, where there is no such undertaker, then to the party responsible for the supply of electrical energy that he has duly inspected such work and that the tests are satisfactory, and that to the best of his knowledge and belief the installation may be safely connected with the source from which electrical energy is available.

Issue of certificate

Any authorised Inspector shall at all times have the right to inspect and test any electrical installation at his discretion.

(2) Nothing in any such certificate shall relieve the owner or occupier of any premises from the obligation to bring any installation into conformity with these Regulations if on any subsequent inspection any defects are discovered which render such installation electrically hazardous.

(3) Any certificate issued in pursuance of sub-regulation (1) shall be delivered only to the undertaker for the area concerned or to the party responsible for the supply of electrical energy as the case may be and shall in no event be handed or delivered to any other person or body.

56. (1) Notwithstanding anything to the contrary in the foregoing provisions of this Part, the Inspectorate may, in case of urgency issue a permit authorising an installation to be temporarily connected with the source from which electrical energy is available notwithstanding that any one or more of the hereinbefore prescribed insulation resistance tests have not been satisfied:

Special connections

Provided that no such permit shall be granted unless the installation otherwise generally complies with the requirements of these Regulations and is in the opinion of an authorised Inspector to be reasonably free from electrical hazard, such permit shall be subject to the conditions as set out in regulations 36 to 38.

(2) On the expiration of the period or extended period as aforesaid for which temporary connection has been so authorised the installation shall be disconnected from the source from which electrical energy is available unless before such expiration an authorised Inspector has issued his certificate pursuant to regulation 55(1).

### **PART IX-Licensing of Electrical Employees**

57. (1) Every person requiring a licence authorising him to carry out electrical work of any nature, shall make application for such a licence in writing to the Board or Examiners. Such application shall set out in full the name, age and address of the applicant, where he acquired his experience and the length of his experience together with satisfactory references as to his character and a receipt from the Treasury for the fee as required in regulation 48(4)(1). The Board of Examiners on being satisfied of the applicants qualifications and fitness for a licence under these Regulations shall issue a licence to such applicant.

(2) The Board of Examiners is composed of a Chairman and not more than four or less than two other members appointed by the Governor from time to time from among suitable persons one of whom must be the Chief Electrical Inspector. Members will hold office at the pleasure of the Governor, and save in the case of Members of the Civil Service, may be remunerated from funds provided by the Legislative Assembly.

Duration of Licences

58. Every licence shall expire on the 31st of December next after the date of issue and the fee shall abate proportionately in respect of licences first taken out after the month of March in any year upon a quarterly basis, part of a quarter counting as a full quarter. No abatement is allowable upon renewal of a licence expiring on the 31st December in the previous year.

Work undertaken to be in accordance with licence

59. No person shall carry out electrical work of any nature unless he is holder of a licence. The type of work he shall execute being determined according to his licence.

Trading and supervision by non-licensees prohibited

60. No person shall trade as an electrical contractor of any nature or employ staff for any such work unless he holds an appropriate licence

61. (1) Every person carrying out electrical work shall be licensed in one of the following categories-

Categories of licences

- (a) electrical engineer;
- (b) master electrician;
- (c) electrician;
- (d) lineman,

except as provided in regulation 62.

(2) (a) Qualification for an electrical engineer is Corporate Membership of the Institution of Electrical Engineers, or any other similar Institution approved by the Board of Examiners, with five years' experience in the field of electrical engineering plus three years' subsequent experience in a position of responsibility.

- (b) Qualification for Master Electrician is either a sub-professional qualification approved by the Board of Examiners and in addition or alternatively to, at the discretion of the Board, a candidate may be required to provide
  - (i) evidence of supervisory experience to the satisfaction of the Board;
  - (ii) evidence of experience in estimating quantities and costs of electrical installation materials; and
  - (iii) evidence of experience in designing wiring installations in buildings to the specifications of Engineers or Architects.

(3) Persons not qualified as required for an electrical engineer's or master electrician licence may place a submission before the Board of Examiners seeking licence on grounds of experience and superior responsibility within the profession and the Board may at its discretion grant such licence.

(4) Qualification for such an electrician's licence is a pass in the Electricians Trade Test which will be carried out by the Board of Examiners in accordance with a syllabus which will be published from time to time in the Gazette. In addition to passing the Trade Test the applicant will be required to satisfy the Board that he is familiar with the Law and these Regulations; but persons who satisfy the Board that during the two years immediately prior to the coming into operation of these Regulations they have worked as electricians in the Islands shall be exempted from such Trade Test but will be are required to satisfy the Board that they are familiar with the Law and Regulations:

Provided that, notwithstanding sub-regulation (5), a person shall not be eligible to take the Electricians Trade Test unless-

- (a) he possesses Caymanian status or is a permanent resident of the Islands with a right to work in the Islands;
- (b) he is the spouse of a person possessing Caymanian Status, who satisfies the Board that he has two years practical experience as an electrician; or
- (c) he furnishes documentary evidence that he already possesses a licence which, in the opinion of the Board, has been issued outside the Islands by a body requiring equivalent standards to those required in the Islands.

(5) Exemption from the Trade Test may be granted at the discretion of the Board of Examiners providing the applicant furnishes documentary evidence that he already possesses a licence which, in the opinion of the Board, has been issued by a statutory body requiring equivalent standards.

(6) A lineman may carry out work on power, telephone, wireless or television pole lines or masts and associated fittings with conductors attached thereto, providing that at all times he shall be in the employment of a licensed electrical engineer and working under the said engineer's direct instructions.

(7) Qualifications for such licenses shall be by approval of the Board of Examiners who, at their discretion may grant a licence to the applicant providing they are satisfied with the following-

- (a) applicant's past experience as a lineman, or trainee lineman for a continuous period of employment of at least three years;
- (b) applicant's knowledge of line erection, line maintenance and elementary electrical principles;
- (c) applicant's knowledge of safety precautions.

(8) The Board of Examiners may at their discretion grant a total exemption from examination providing the applicant has had at least seven years' experience of continuous employment and has held a senior grade position in overhead linework, and furnishes a letter of support from a qualified electrical engineer.

Work teams licenses

62. Electrical work may be carried out only by licensed electrical workmen, each of whom may be assisted by one apprentice or university or technical college student and one unlicensed workman.

Supervision by licensees essential

63. The apprentice, student or unlicensed workman must at all times work under the supervision of and in the presence of a licensed electrician or licensed electrical engineer.



64. The student must be taking a prescribed course of engineering at a university or technical college. Students
65. Regulation 62 requires that any work undertaken by persons other than those described shall be stopped until the required number of licensed workmen are engaged. Unauthorised work to be stopped

**PART X-General**

66. The N.E.C. shall, subject to any modifications contained in regulations 67, 68, 69 and 70 and to any regulations made by the Governor in Council from time to time, apply to the Islands. Application of the U S National Electrical Code
67. Notwithstanding anything to the contrary contained in the N.E.C. no cable other than armoured cable or P.V.C/S.W.I.A./P.V.C. cable may be buried direct in the ground. Buried cable
68. The use of aluminium conductor cable will not be permitted without special permission from the Inspectorate and under no circumstances will be permitted for internal fixed wiring. Aluminium cable
69. Conductors manufactured in accordance with British Standards may be substituted for U.S. Standard Conductors in the N.E.C. in accordance with the following correlation table. British Standards
70. All circuits in any installation shall be coloured in accordance with the following colour code- Colour code

**SINGLE PHASE**

BLACK	-(LIVE)
WHITE	-(NEUTRAL)
GREEN OR GREEN WITH ONE OR MORE YELLOW STRIPES	-(GROUND)

**THREE PHASE**

RED	-PHASE A
BLUE	-PHASE B

BLACK  
 WHITE OR GRAY  
 GREEN OR GREEN WITH ONE OR  
 MORE YELLOW STRIPES

-PHASE C  
 -(NEUTRAL)  
 -(GROUND).

**TABLE OF EQUIVALENTS FOR U.S., METRIC AND IMPERIAL  
 CONDUCTORS**

AMPS	U.S.			METRIC (MM)								IMPERIAL		AM PS		
	In conduit up to 3 cond.			Single conductor		PVC non-armoured		Single-core copper on tray		PVC sheathed cable		Steel wire armoured			Single core PVC	
	RUH THW RUH	RUH THW RUH	RHH XHHW RHH	RUH THW RUH	RUH THW RUH	1 Two cables	3 or 4 cables	1 Two cables	3 or 4 cables	1 Twin & earth	2 □Multi-core	2 Two wires	3 or 4 wires	2 Two wires	3 or 4 wires	
15	14	14	14	-	-	2.5	2.5	1.5	1.5	1.5	2.5	1.5	2.5	3/036	7/029	15
20	12	12	12	14	14	-	4	2.5	2.5	2.5	4	2.5	4	7/029	7/036	20
25	-	-	-	12	12	4	6	-	4	4	-	4	6	7/036	7/044	25
30	10	10	10	-	-	6	-	4	-	-	6	6	-	-	7/052	30
35	-	-	-	-	-	-	-	6	6	6	-	-	10	7/044	7/064	35
40	8	-	-	10	10	-	10	-	-	-	10	-	-	7/052	19/044	40
45	-	8	-	-	-	10	-	-	10	10	-	10	-	-	-	45
50	-	-	8	-	-	-	16	10	-	-	16	-	16	7/064	19/052	50
55	6	-	-	8	-	16	-	-	-	-	-	16	-	-	-	55
60	-	-	-	-	-	-	-	-	16	-	25	-	-	19/044	-	60
65	-	6	-	-	8	-	25	16	-	16	-	-	25	-	19/064	65
70	4	-	6	-	-	-	-	-	-	25	35	-	-	19/052	-	70
75	-	-	-	-	-	25	-	-	-	-	-	25	-	-	-	75
80	3	-	-	6	-	-	35	-	25	-	-	-	35	-	-	80
85	-	4	-	-	-	-	-	25	-	35	-	-	-	-	-	85
90	-	-	4	-	-	35	-	-	-	-	-	35	-	-	-	90
95	2	-	-	-	6	-	-	-	35	-	-	-	-	-	-	95
100	-	3	3	4	-	-	-	-	-	-	-	-	-	19/064	19/083	100
110	1	-	-	-	-	-	-	35	-	-	-	-	-	-	-	110
120	1/0	2	2	3	4	-	50	-	-	-	50	-	50	-	37/072	120
130	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	130
140	2/0	1/0	1	2	3	50	50	35	35	50	50	35	50	19/083	-	140
150	-	-	1/0	-	-	-	-	-	-	-	70	50	70	-	37/083	150
160	3/0	-	-	1	-	-	70	-	50	-	-	-	-	-	-	160

TABLE OF EQUIVALENTS CONTINUED

AMPS	U.S.					METRIC (MM)								IMPERIAL		AMP S
	In conduit up to 3 cond.			Single conductor		PVC non-armoured		Single-core copper on tray		PVC sheathed cable		Steel wire armoured		Single core PVC		
	RW THW RUH	RHW THW RUH	THHN XHHW RHH	RW THW RUH	RW THW RUH	Two cables 1Ø	3 or 4 cables	Two cables 1	3 or 4 cables 3	Twin & earth	Multi-core	Two wires 2	3 or 4 wires 3	Two wires	3 or 4 wires	
170	-	2/0	-	-	2	-	-	50	-	70	-	-	-	-	-	170
180	-	-	2/0	-	-	70	-	-	-	-	-	70	-	37/072	-	180
190	4/0	-	-	1/0	1	-	95	-	-	-	95	-	95	-	-	190
200	-	3/0	-	-	-	-	-	-	70	-	-	-	-	-	37/103	200
210	250	-	3/0	-	-	-	-	-	-	95	120	-	-	37/083	-	210
220	-	-	-	2/0	-	-	120	70	-	-	-	95	120	-	-	220
230	-	4/0	4/0	-	1/0	95	-	-	-	-	-	-	-	-	-	230
240	300	-	-	-	-	-	-	-	95	-	-	-	-	-	61/083	240
250	-	250	-	-	-	-	-	-	-	120	150	-	150	-	-	250
260	350	-	-	3/0	2/0	120	-	-	-	-	-	120	-	-	-	260
270	-	-	250	-	-	-	-	95	-	-	-	-	-	-	61/103	270
280	400	300	-	-	-	-	-	-	120	150	185	-	-	37/103	-	280
290	-	-	-	-	-	-	-	-	-	-	-	-	185	-	-	290
300	-	-	300	4/0	-	-	-	-	-	-	-	150	-	-	-	300
310	-	350	-	-	3/0	-	-	120	-	-	-	-	-	-	-	310
320	500	-	350	-	-	-	-	-	150	185	-	-	-	-	-	320
330	-	400	-	-	-	-	-	-	-	-	240	-	-	-	-	330
340	-	-	-	250	-	-	-	-	-	-	-	185	240	61/083	-	340
350	600	400	350	250	3/0	-	-	150	150	185	240	185	-	-	-	350
360	-	-	400	-	4/0	-	-	-	185	-	-	-	-	-	-	360
370	-	-	-	300	-	-	-	-	-	-	-	-	-	-	-	370
380	700	500	-	-	-	-	-	-	-	240	300	-	-	61/103	-	380
400	750	-	500	-	250	-	-	185	-	-	-	240	-	-	-	400
420	-	600	-	350	-	-	-	-	-	-	-	-	-	-	-	420
430	900	-	-	-	-	-	-	-	240	-	-	-	-	-	-	430
450	1000	700	600	400	300	-	-	-	-	300	-	300	400	-	-	450

**TABLE OF EQUIVALENTS CONTINUED**

AMPS	U.S.						METRIC (MM)								IMPERIAL		AMPS
	In conduit up to 3 cond.			Single conductor			PVC non-armoured		Single-core copper on tray		PVC sheathed cable		Steel wire armoured		Single core PVC		
	RUW THW RUH	RHW THW RUH	THHN XHHW RHH	RUW THW RUH	RUW THW RUH		Two cables 1	3 or 4 cables	Two cables 1	3 or 4 cables 3	Twin & earth	Multi-core	Two wires 2	3 or 4 wires 3	Two wires	3 or 4 wires	
480	1250	800	700	-	-		-	-	240	-	-	-	-	-	-	-	480
500	-	-	750	-	350		-	-	-	300	-	-	-	-	-	-	500
520	1500	900	800	500	-		-	-	-	-	-	-	400	-	-	-	520
540	1750	1000	900	-	400		-	-	-	-	-	-	-	-	-	-	540
560	2000	1250	-	600	-		-	-	300	-	-	-	-	-	-	-	560
580	-	-	1000	-	-		-	-	-	-	-	-	-	-	-	-	580
620	-	1500	-	700	500		-	-	-	400	-	-	-	-	-	-	620
650	-	1750	1250	750	-		-	-	-	-	-	-	-	-	-	-	650
660	-	2000	-	800	-		-	-	400	-	-	-	-	-	-	-	660
700	-	-	1500	-	600		-	-	-	500	-	-	-	-	-	-	700
740	-	-	1750	900	700		-	-	-	-	-	-	-	-	-	-	740
770	-	-	2000	1000	750		-	-	-	-	-	-	-	-	-	-	770
800-	-	-	-	-	800		-	-	500	-	-	-	-	-	-	-	800
820	-	-	-	1000	800		-	-	500	630	-	-	-	-	-	-	820
870	-	-	-	1250	900		-	-	-	-	-	-	-	-	-	-	870
900	-	-	-	-	-		-	-	630	-	-	-	-	-	-	-	900
930	-	-	-	-	1000		-	-	-	-	-	-	-	-	-	-	930
980	-	-	-	1500	-		-	-	-	-	-	-	-	-	-	-	980

**TABLE OF EQUIVALENTS CONTINUED**

U.S.				METRIC (MM)										IMPERIAL								
In conduit up to 3 cond.			Single conductor	PVC non-armoured		Single-core copper on tray		PVC sheathed cable		Steel wire armoured		Single core PVC										
AMPS	RUH	THW	RHW	RUH	RUH	THW	XHHW	RHH	RUH	RUH	Two cables 1	3 or 4 cables	Two cables 1	3 or 4 cables 3	Twin & earth	Multi-core	Two wires 2	3 or 4 wires 3	Two wires	3 or 4 wires	AMPS	
1000	-	-	-	-	1750	1250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1000
1100	-	-	-	-	2000	1500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1100
1280	-	-	-	-	-	1750	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1280
1380	-	-	-	-	-	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1380

**AMBIENT TEMPERATURE CORRELATION FACTORS**

Wire type	25°C	35°C	(104°F) 40°C	(113°F) 45°C	(122°F) 50°C	(131°F) 55°C	60°C	65°C
Type TW			.82	.71	.58	.41	-	-
Type THW			.88	.81	.75	.67	.58	-
Type THHN			.90	.85	.80	.74	.67	.52
UK metric	1.06	.94	.87	.79	.71	.61	.5	.35
UK imperial	1.13	.86	.69	.47	-	-	-	-

Page 70-11	<b>CHAPTER I</b>
	<b>ARTICLE 100-DEFINITIONS</b> Delete the definition of “Qualified person” and substitute- “Qualified person. An Electrical Engineer or Electrician licensed under the Electricity Law No. 17 of 1974”.

Section 210-19(b)	<b>CHAPTER 2</b>
	<b>WIRING DESIGN &amp; PROTECTION</b>

	Delete "No. 8" in last line of first paragraph and substitute- "No. 6".
215-2-(b)	Delete subsection and substitute- "The feeder conductor shall not be less than No.4 AWG".
230-41-(b)-(3)	Delete this subsection.
320-43	Add the following paragraph- "Where non-metallic conduit is used it shall be equivalent to schedule 80 PVC and where conduit is laid on a rock surface it shall be protected by covering it with a minimum two inches of concrete, otherwise the conduit shall be buried to a minimum depth of 1'6". Where such conduit is attached to a pole it shall be protected by a metal covering or enclosed in an additional larger diameter P.V.C. pipe, over the first four feet from ground level as a protection against accidental damage."

Publication in consolidated and revised form authorised by the Governor in Council this day of , 1995.

Clerk of Executive Council.