AMENDMENTS TO CHAPTERS 1 TO 9 OF THE NATIONAL ELECTRICAL CODE (N.F.P.A. No. 70675)

	CHAPTER I ARTICLE 100 — DEFINITIONS
Page 70-11	Delete the definition of ''Qualified person'' and substitute —
	"Qualified person. An Electrical Engineer or Electrici licensed under the Electricity Law No. 17 of 1974".
	CHAPTER 2 WIRING DESIGN & PROTECTION
Section 210-19-(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 schedule 80 PVC and where conduit is laid on a rock surface shall be protected by covering it with a minimum two incl of concrete, otherwise the conduit shall be buried to minimum depth of 1'6". Where such conduit is attached to pole it shall be protected by a metal covering or enclosed an additional larger diameter P.V.C. pipe, over the first for feet from ground level as a protection against acciden damage."

Made in Council this 27th day of September, 1977.

JENNY MANDERSON Clerk of the Executive Council. CAYMAN ISLANDS



THE ELECTRICITY REGULATIONS, 1977

Price \$2.40

ore PVC	METRIC (M) PVC Single—core PVC or non-armoured copper on tray sheathed co	Single PVC Single—core PVC Steel wire
	Single—c	PVC Single—c

						AMPS	820	870	006	000	930	086	1000	1100	1980	1000	1380
IMBEDIAL	TUIN!	-core	PVC			wires											
TATOE	LIMILE	Single-core	P		Two	wire											
		wire	ured	3 or 4	wires	30											
		Steel wire	armoured	Two	wire	20											
	(MIMI)	PVC	non-armoured copper on tray sheathed cable		Multi-	core											
	METRIC (MM)	١d	sheathe	Twin	æ	earth core											
	MI	Single-core	on tray	3 or 4	cables cables cables cables	30	630										
		Single	copper	Two 3 or 4 Two 3 or 4	cables	10	200		620	000							
		PVC	noured	3 or 4	cables	30											
		P	non-ar	Two	cables	10											
		gle	conductor	RHW	THW	RUH	800	006	2	,	1000	ı	1950	1500		1750	2000
	 ∵	Single	conc	RUW			1000	1950	200	,	,	1500	1750	2000	2007		
			d.	THHN	XHHW	RHH											
		In conduit	up to 3 con			RUH											
		lul	dn	RUW		ÚF											
-						AMPS	068	020	010	3	930	080	1000	1100	0011	1280	1380

Wire type	<	Ç	(104°F)	(113°F)	(122°F)	(131°F)	J ₀ 09	7 ₉ 2
	25°C	35°C	40°C	45°C) ne	33 C	3	3
	ı	•	.82	.71	.58	.41	1	-
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		f	06:	.85	.80	.74	.67	.52
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NCED?	
ABLE OF ECCIVALENTS (CONTINCED)	
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-			rectricity		<i>g</i>		011	٠, .	, ,	•																								
			AMPS	250	260	270	280	230	300	310	320	330	340	350	360	370	380	400	420	430	450	480	200	520	540	260	280	620	650	099	200	740	270	800
PIAI	TUT	gle-core PVC	3 or 4 wires			61/103	•																								•			
IMPERIAL	T TIME	Single-core PVC	Two wire				37/103						61,083	}			61/103																	
		Steel wire armoured	3 or 4 wires	150	1	,	,	185	,	,		1	240								400				***********									
			Two wire		120	,	,	,	120	,	,	,	185	185	1		1	240	,	1	300		,	400										
		PVC sheathed cable	Multi- core	150	ı	,	185	,		1	,	240		240	1	,	300	,																
METRIC (MM)			Twin & earth	120			150				185	,		185	1	,	240	,	1	1	300													
METRIC		Single—core copper on tray	3 or 4 cables		,	,	120	,	,	,	150	,	,	150	185		ı		1	240	,	,	300	1	,	ı	•	400			200			-
MILE		Single copper	Two cables	'	ı	95			ı	120	1	ı	,	150	1	1	ı	185	ı	,	,	240	ı.	1	1	300	,	1	1	400	,		,	500
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		PV non-ari	Two cables	,	120																													
		Single conductor	RHW THW RUH	,	2/0	•	ı	1	,	3/0	•	,	,	3/0	470	ı		250	1	•	300	1	350	,	400	,	,	200	,	ı	009	200	750	800
8		Single	RUW TW UF	1	3/0	ı	ı	1	4/0	1	1		250	250	,	300	•	,	350	,	400	,	ı	200	,	009	3	200	750	008		<u>8</u>	1000	-
		l.	THHN XHHW RHH		1	250	ı	•	300		320	,	,	350	400	,	,	200	ı	,	009	200	750	908	006		1000	r	1250		1500	1750	2000	-
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		un dn	RUW TW UF	,	320	,	400	,		,	200	,	,	009	ı	,	200	750	,	006	1000	1250	,	1200	1750	2000								
•	•	•	AMPS	250	790	270	780	290	300	310	320	330	340	320	360	370	380	400	420	430	420	480	200	250	240	260	280	620	650	099	200	740	220	800

CAYMAN ISLANDS

ELECTRICITY REGULATIONS, 1977 ARRANGEMENT OF REGULATIONS

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Table of Equivalents

Ambient Temperature Correlation Factors

Amendments to N.E.C.

			AMPS	15	20	22	30	32	40	45	20:	22	09	65	20	75	80	32	8 :	S	100	110	120	130	140	061	700	170	081	061 062	200	210	220	230	240
RIAL	oros	C	3 or 4 wires	7/029	980/2	7/044	7/052	7/064	19/044		19/052			19/064			1				19/083		31/072		000/20	3//083					37/103			- 000	61/083
IMPERIAL	Cingle	Single core PVC	Two	3/036	_	2/036		7/044	7/052		7/064		19/044		19/052	ı			1		19/064		,	10 000	19/002				37/072		500,	32/083			
3		armoured	3 or 4 wires	2.5	4.0	0.9		10	ı		16.			72.			35.		1	,	,	1	20.	, 0	2 5	2	,	•	, ;	32	•		120	•	
	Ctool	armo	Two wire	1.5	2.5	4.0	0.9	,	ı	10.0		16.		ŧ		22.	ı	ı	32.	1	,	,		، د	8 8	3		,	2	,	1	, (32		
	٢	FVC sheathed cable	Multi- core	2.5	4.0	1	0.9	,	10.	ı	16.		22		32	,	1	ı			•	1	20.	٠ ;	ટ્ર દ	2	ı	ŧ	ı	38		120		,	,
	OM	r v sheathe	Twin & earth	1.5	2.5	4.0		0.9		10.				16.	25.	•	,	35.	ı	1	ı	ı	1	٠ i	20		İ	20				92			
TABLE OF EQUIVALENTS FOR U.S., METRIC (MM)	0.00	on tray	3 or 4 cables	1.5	2.5	4.0		0.9		10.			16.				22.	,		32.	ı	•		, ;	35	1	20	ı)	70	1	,	,	92
METRIC (MM)	0	copper on tray	Two cables	1.5	2.5		4.0	6.0			10.			16.				25.	1	,	ı	35.	ı	, ,	35	ı	,	20		ı	ı	ı	20	,	,
ME		PVC non-armoured	3 or 4 cables	2.5	4.0	0.9			10.		16.			22.			35.	·	ŧ		•		20.	۱ (20		20		,	95	1	1	120		
ALENI		PVC non-armo	Two cables	2.5		4.0	0.9			10.		16.				25.	,		35	ı	1	ı		, ,	20	3	•	,	20	٠	,		,	92	ı
E&010		Single conductor	RHW THW RUH		14	12			10.					œ						9			4		က	,		2		_	,	ı	ı	12	ı
S. S. C.		Single	RUW TW		14	12			10.			œ.					9				4	ı	ဗ	ı	7	,		ı	,	1/0	ı	•	2/0	,	
SII	5	nd.	THHN XHHW RHH	14	12		10				8				9				4	ı	က	,	2	,		120		,	2/0	ı	,	3%		4/0	,
];	In conduit up to 3 conc	RHW THW RITH	14	17		10		,	8	ı		,	9	1	ı	ı	4		1	က	,	7	1	1%		•	2/0	٠	,	3/0	•		4/0	,
	,	up t	RUW TW UF	4	12	,	10		∞	, ,	ı	9	•	'	7		က		ı	2		-	2		20		3/0	,	1	4/0		250	,	,	300
,			AMPS	15	20	25	308	35	40	45	20	55	09	65	70	122	80	85	06	95	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240

The Electricity Regulations, 1977 - 21

WHITE

— (NEUTRAL)

GREEN OR GREEN WITH ONE OR MORE YELLOW STRIPES

-- (GROUND)

THREE PHASE

RED	— PHASE A
BLUE	— PHASE B
BLACK	— PHASE C
WHITE OR GRAY	(NEUTRAL)
GREEN OR GREEN WITH ONE	
OR MORE YELLOW STRIPES	-(GROUND).

CAYMAN ISLANDS

THE ELECTRICITY LAW (Law 17 of 1974)

ELECTRICITY REGULATIONS, 1977

PARTI

In exercise of the powers conferred upon the Governor in Council by section 21 of the above Law, the following Regulations are hereby made.

Citation.

1. These Regulations may be cited as the Electricity Regulations, 1977.

Interpretation.

2. In these Regulations, unless the context otherwise requires —

"accessory" means a device such as an adaptor 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 by the Governor, 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;

"inflammable" means capable of being readily ignited;

"Law" means Electricity Law;

"live" or "alive" in relation to a conductor means its condition when a potential difference exists between it and ground;

"N.E.C." means Chapters 1-9 (both inclusive) of the National Electrical Code 1975 Edition (N.F.P.A. No. 70 of 1975) published by the National Fire Protection Association in the U.S.A., which chapters including definitions contained therein, but subject to any specific modification mentioned herein have application to these Regulations;

"non-reversible" in respect of any accessory device in the nature of an adaptor, or a plug and socket, for connecting apparatus, means so constructed and installed that the respective conductors between such adaptor, 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 sub-station, 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;

"switchgear" means any apparatus for controlling the distribution of electrical energy, or for controlling or protecting electrical circuits machines, or other apparatus; and

section 2 applies.

PART II. — Application, Modification and Exemption

Application.

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

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,

Examiners who, at their discretion may grant a licence to the applicant providing they are satisfied with the following —

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

Students.

64. The student must be taking a prescribed course of engineering at a university or technical college.

Unauthorised work to be stopped.

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.

PART X

Application of the U.S. National Electrical Code.

66. The National Electrical Code (N.E.C.) 1975 Edition (N.F.P.A. No. 70 of 1975) published by the National Fire Protection Association (U.S.A.) chapters 1 to 9 (inclusive) modified as follows has application in the Islands subject to the power of the Governor from time to time to make alterations by regulation in accordance with section 21.

General

Buried cable.

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.

Aluminium 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.

British Standards.

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.

Colour code.

70. All circuits in any installation shall be coloured in accordance with the following colour code —

SINGLE PHASE

-- (LIVE)

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 applicant's qualifications and fitness for a licence under these Regulations shall issue a licence to such applicant.

Duration of licences.

58. Every such licence shall be in force for one year from the date of its issue, and may be renewed from year to year subject to such fees as specified in regulation 48(4) (m) thereof being paid to the Treasury, and the receipt with the licence forwarded to the Board of Examiners. Such renewal shall be accepted at the discretion of the Board of Examiners upon their being satisfied of the continued fitness of the licensee.

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. Categories of

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

except as provided in regulation 62.

- (2) 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.
- (3) Persons not qualified as required for an electrical engineer's 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 required to satisfy the Board that they are familiar with the Law and Regulations.
- (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

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.

Connection, inspection and testing etc.

- 4. (1) Subject to subpregulation (2) where an undertaker is empowered to supply electrical energy to any consumer, such undertaker shall not connect with such supply any new installation on a consumer's premises unless such installation or any completed part thereof has been inspected, tested and certified pursuant to regulations 55 and 56.
- (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.

Hazardous installations. 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.

Compliance wit regulations. 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.

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 Regularions 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 to 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.

Modification of requirements.

- 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.
- (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.

Change overs.

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.

PART III - General

Approval of other methods.

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.

Prohibited work

16. 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.

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 installing 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 con-

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 Article 250 of the N.E.C.

Ground resistance tests.

 $53. \;\;$ Ground resistance tests will be made in accordance with Article 250 of the N.E.C.

Moulded in sulation.

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

PART VIII. — Certification

Issue of certificate.

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.

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.

Special connections.

- 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: 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

Qualification of licensees.

57. 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 of Examiners. Such application shall set out in full the name, age and

PART VII. — Testing

Testing of installation etc.

- 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.
 - (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

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

Assembly and repair.

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

Reporting of accidents.

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.

Service of notices.

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.

PART IV — Penalties

Breach regulations. 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.

Suspension of licences.

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.

Employment of unlicensed elec27. Whoever employs an unlicensed person for carrying out electrical installations is guilty of an offence and liable on summary conviction to a fine not

tricians.

exceeding \$500.

Penal.

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 \$500 and a daily penalty not exceeding \$100 per day in the event of a continuing offence.

PART V. — Permits for Wiring Work

Approvals.

- 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, on receipt of an application under subregulation (1) describing the proposed work, signify approval or disapproval, as the case may be, as soon as possible, but in any case not more than fourteen days from the receipt of the application.

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.

Inspection after completion.

33. 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.

Temporary supply.

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

\$25.00 \$ 5.00 \$ 5.00	4.20 per hour or 21.00 per day with a minimun charge of 4.20 .	20c per mile for inspection, originating from the Post Office at George Town. Two or more in spections to be carried out for the same Electrical Contractor on the same premises under or mile apart are only subject to one mileage fee, distance being considered to the farthest point ar measured along the route. Only one mileage charge shall be made for each premises inspected any one time.
(m) For renewal of registration of licence Electrical Engineer Electrician Lineman	(n)Technical Services not especially mentioned above	(o)Out of Town.

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Over 2000 KVA	\$20.00	For each report on and test of an existing installation of electric light or power or voltage recording of 24 hours \$6.30 with appropriate mileage charge.	Boards supplying not more than two circuits—\$1.00 per inspection per Board or Distribution panel. Boards or Panels supplying more than two circuits require a fee of .30c for each additional circuit emanating from the Board or Panel.	Receipts for payment of fees must accompany such requests for interim inspections with appropriate mileage added. Mileage fee only is charged for final inspection.	For settling matters in dispute affecting contracts or financial disagreements or other arbritration by personnel of the inspectorate, a charge of \$2.10 per hour.		
W		ng inst approp	ircuits ipplyin manati	acco.	ting cc		·
1000- 2000 KVA	\$15.00	n existi 30 with	n two canels surrent	s must ileage a	e affec		
500- 1000 KVA	\$12.00	nd test of ar 24 hours \$6.	t more that toards or Pa dditional ci	Receipts for payment of fees must accompany inspections with appropriate mileage added. Mileage inspection.	s in disput by personn		
100- 500 KVA	\$8.00	report on a	upplying no on panel. B for each a	for paym is with app	ng matter rbritration	each	
Up to 100 KVA	\$5.00	For each	Boards su Distributi fee of .30c	Receipts inspection.	For settli or other a	\$4.20 ez	\$25.00 \$ 5.00 \$ 5.00
Size	Fee	Fee	Fee				
(f) Transformer other stations		(g)Customer's request for inspection	(h) Separate Meter Boards or Removal of Meter Boards or distribution Panels.	(i) Interim of Ceiling Inspections	(j) Arbitration in disputes arising between contractor and consumers or other parties.	(k) For testing of Electric Meters	1) For registration and/or examination Electrical Engineer Electrician

permanent supply has been connected.

Temporary wiring.

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.

Period for tem-

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.

Conditions 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.

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 to be removed.

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 cases 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

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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

Manholes.

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

Traps.

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.

Admission to premises.

- 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.
- (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

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 the scale in sub-regulation (4).
- (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 electrican 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.

FEES

	Points	1-5	6-9	10-25	26-100	101-250	251-500	501-1000	
(a) 120 Volts Ceiling outlets double or single convenience outlets Bell transformer capacitators Neon Light Transformer.	Fee	\$1.00	\$2.00	\$3.00	\$4.00	\$6.00	\$10.00	\$20.00	
(h)Temporary supply for	Points	1-5	6-9	10-25	26-100	101-250	251-500	501-1000	
ints for	Fee	\$1.00	\$1.00	\$1.50	\$2.00	\$3.00	\$5.00	\$10.00	
	Poles	1-5	6-9	10-50	51-100	over 100			
(c) Overhead lines	Fee	\$2.50	\$5.00	\$10.00	\$20.00	\$40.00			
i	Points	1-5	6-9	10-50	51-100	101-250	251-500	501-1000	
(d)240 Voit single phase supply; Cookers Water heaters Transformers	Fee	\$1.50	\$3.50	\$4.50	\$6.00	\$10.00	\$20.00	\$40.00	
Lighting Points Sterilizers AC lights			OR CI\$1.001	oer point w	hen additio	OR CI\$1.00 per point when additional to existing installation under inspection	ng installa	tion under i	nspection
(e) Electric motors (in H.P.) Flec Generators (in KVA)	Size	Up to 5 H.P.	6 to 25 H.P.	26-50 H.P.	51-100 H.P.	Over 100 H.P.			
	For first three	\$2.00	\$3.00	\$4.00	\$8.00				
	(3) mts for ea. Unit	\$1.00	\$1.50	\$2.00	\$3.00	\$4.00			

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