

ELECTRICITY ACT
(CHAPTER 89A, SECTION 103)
ELECTRICITY (ELECTRICAL INSTALLATIONS)
REGULATIONS

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[1st January 2003]

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ELECTRICITY ACT

(CHAPTER 89A, SECTION 103)

ELECTRICITY (ELECTRICAL INSTALLATIONS) REGULATIONS

[1st January 2003]

PART I

PRELIMINARY

Citation

1. These Regulations may be cited as the Electricity (Electrical Installations) Regulations.

Definitions

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

"appliance" means any device which uses electricity for a particular purpose but does not include a luminaire or an independent motor;

"appropriate class", in relation to a licensed electrical worker, means a licensed electrical worker of the appropriate class as specified in the Electricity (Electrical Workers) Regulations (Rg 1).

"authorised high voltage switching engineer" means a licensed electrical engineer —

- (a) authorised by the Authority to operate a high voltage apparatus; and
- (b) employed or appointed by the licensee of the electrical installation of which the high voltage apparatus forms a part to be in charge of or to control such apparatus;

"building operation" has the same meaning as in the Factories Act (Cap. 104);

"circuit breaker" means a mechanical switching device capable of —

(a) making, carrying and breaking an electricity current under normal circuit conditions; and

(b) making and carrying for a limited time and breaking an electricity current under specified abnormal circuit conditions including a short circuit;

"competent person" means a person appointed by an authorised high voltage switching engineer to carry out work on a high voltage apparatus;

"danger" means danger to health or danger to life or limb —

(a) from shock, burn or other injury to persons (and animals where present); or

(b) from fire,

attendant upon the use of electricity;

"dead" , in relation to a high voltage apparatus, means its electric potential is at or about Earth potential and it is disconnected from any live electrical system;

"earthed" , in relation to any part of an electrical installation, means being effectually connected to the general mass of the Earth;

"extra-low voltage" means a voltage not exceeding 50V a.c. or 120V d.c., whether between conductors or between conductor and Earth;

"final circuit" means a circuit connected either directly to a device which utilises electricity, or indirectly to such a device by means of one or more socket outlets or other outlet points;

"high voltage apparatus" means an apparatus, in an electrical installation, whose designated voltage exceeds low voltage and includes any conductor, secondary and control wiring and equipment which form part of the apparatus;

"licensed electrical worker" means an electrical worker licensed under section 82 of the Act;

"live" , in relation to an electrical system or any part thereof, means a voltage exists between any conductor in the system and Earth or between any 2 conductors in the system;

"permit-to-work" means a declaration that every part of a high voltage apparatus on which work is to be undertaken is —

(a) dead, isolated and locked from all live conductors;

(b) discharged and effectively connected to Earth at all points of connection of supply of electricity to it or between such points and the points of work; and

(c) generally safe for work to be carried out thereon, and that is —

(i) made in a form approved by the Authority; and

(ii) signed and issued by an authorised high voltage switching engineer to a competent person appointed to carry out work on the high voltage apparatus;

"safety lock" means —

- (a) a device for locking off mechanically any shutter, barrier, door or gate of a high voltage apparatus, through which live parts may be accessed; or
- (b) a switching device, whether manually or remotely controlled, situated at those points of a high voltage apparatus where a circuit could be energised;

"Singapore Standard" means a standard or specification issued by the Standards, Productivity and Innovation Board;

"switch" means a mechanical switching device capable of making, carrying and breaking an electricity current under normal circuit conditions and carrying for a limited time an electricity current under specified abnormal circuit conditions including a short circuit;

"switchboard" means an assembly of switchgears but does not include switches in a final circuit;

"switchgear" means an assembly of main and auxiliary switches for operating, protecting and controlling an electrical installation or for regulating electricity supply to such installation;

"voltage" means —

- (a) an electro-motive force between any pair of conductors forming part of an electrical circuit or between any part of either conductor and Earth; and
- (b) in the case of alternating current, the virtual voltage or root mean square value (or the square root of the mean or average value of the squares of the instantaneous values) of the voltage during the complete cycle;

"work of engineering construction" has the same meaning as in the Factories Act (Cap. 104).

PART II

ELECTRICITY SUPPLY

Voltages for supply

3.—(1) The supply of electricity by an electricity licensee shall be by means of alternating current, at a nominal frequency of 50 hertz.

(2) The voltage of such supply shall be —

- (a) 66,000 volts, 3 phase 3 wires;
- (b) 22,000 volts, 3 phase 3 wires;
- (c) 6,600 volts, 3 phase 3 wires;
- (d) 400 volts, 3 phase 4 wires; or
- (e) 230 volts, single phase.

(3) The voltages referred to in paragraph (2) shall be subject to a variation of plus or minus 6%.

(4) Notwithstanding paragraphs (2) and (3), an electricity licensee may, with the approval of the Authority, supply electricity at voltages other than those specified in paragraph (2) and the variation specified in paragraph (3).

Request for supply

4.—(1) A person who requires a supply of electricity or a continuance of such a supply and who is not classified as a contestable consumer under the Electricity (Contestable Consumers) Regulations (Rg 4), shall make his request to a market support services licensee for a supply of electricity or a continuance of such a supply.

(2) Every request referred to in paragraph (1) shall be made in such form as may be provided by the market support services licensee, and shall be accompanied by such plans and specifications of the electrical installation for the conveyance, control and use of the supply of electricity, if any, as may be required by the market support services licensee.

(3) A person who requires a supply of electricity or a continuance of such a supply and who is classified as a contestable consumer under the Electricity (Contestable Consumers) Regulations shall —

(a) make arrangements with a retail electricity licensee for a supply of electricity or a continuance of such a supply if he wishes to purchase electricity from the retail electricity licensee;

(b) apply to the Authority for an electricity licence to trade in a wholesale electricity market, and make arrangements with a licensed operator of a wholesale electricity market for a supply of electricity or a continuance of such a supply if he wishes to purchase electricity from a wholesale electricity market directly; or

(c) make arrangements with a market support services licensee for a supply of electricity or a continuance of such a supply if he wishes to purchase electricity from a wholesale electricity market indirectly through a market support services licensee.

(4) The person referred to in paragraph (3) shall —

(a) make arrangements with the transmission licensee in respect of the provision of transmission services; and

(b) in the case of paragraph (3) (a) and (b), make arrangements with a market support services licensee in respect of the provision of market support services.

(5) The person referred to in paragraph (3) shall complete such forms and provide such plans and specifications of the electrical installation for the conveyance, control and use of the supply of electricity as may be required by the relevant electricity licensee.

(6) Where, at a time of the request or arrangement referred to in paragraph (1) or (3) —

(a) the premises for which a supply or a continuance of a supply of electricity is requested or arranged are already served by an electrical installation; and

(b) such electrical installation is owned by a person other than the person who made such request or arrangement,

the retail electricity licensee or market support services licensee, as the case may be, to whom the request or with whom the arrangement is made shall not procure or arrange for the supply of electricity or a continuance of such supply so requested or arranged unless it is satisfied that the owner of such electrical installation consents to the electrical installation being used for the purpose of the supply of electricity or a continuance of such a supply so requested or arranged.

(7) Where a retail electricity licensee is unable to continue to provide a supply of electricity or a continuance of such a supply to the person referred to in paragraph (3) who requested or arranged for such supply to be provided by the retail electricity licensee, the Authority may direct a market support services licensee to make arrangements for such person to purchase electricity indirectly from a wholesale electricity market at prevailing market prices for the continuance of such a supply of electricity.

Connection of electrical installation to supply line

5.—(1) Where a person requires a supply of electricity to be made to an electrical installation which is not connected to any supply line, he shall at his own expense arrange for the electrical installation to be —

- (a) inspected and certified fit by a licensed electrical worker of the appropriate class; and
- (b) where the installation is exempted from an electrical installation licence under section 71 of the Act, checked by the market support services licensee in accordance with the requirements of the Authority.

(2) No person shall connect or supply any electricity to the consumer's electrical installation, or permit such a connection or supply, unless —

- (a) the licensed electrical worker referred to in paragraph (1) (a) issues a Certificate of Compliance for the electrical installation in such form as may be approved by the Authority; and
- (b) for the purpose of paragraph (1) (b), the licensed electrical worker referred to in paragraph (1) (a) lodges a copy of the Certificate of Compliance with the market support services licensee.

(3) No person shall turn on the switchgear which controls the supply of electricity to the electrical installation referred to in paragraph (1) unless the person who made the request or arrangement referred to in regulation 4 (1) or (3) has obtained confirmation that his account with the market support services licensee will be activated for the purpose of turn on.

(4) A statement of turn on in such form as may be approved by the Authority shall be issued at the time of turn on of electricity by the person responsible for turning on the switchgear which controls the supply of electricity to the electrical installation referred to in paragraph (1).

(5) The statement of turn on referred to in paragraph (4) shall be acknowledged by the following persons:

(a) in the case of an electrical installation which is exempted from an electrical installation licence under section 71 of the Act —

- (i) the licensed electrical worker of the appropriate class responsible for the design and installation of the electrical installation; and
- (ii) the person who made the request or arrangement referred to in regulation 4 (1) or (3); and

(b) in the case of any other electrical installation —

- (i) the licensed electrical worker of the appropriate class responsible for the design and installation of the electrical installation;
- (ii) the licensed electrical worker of the appropriate class who is employed or appointed to operate, be in charge of or control the electrical installation; and
- (iii) the person who made the request or arrangement referred to in regulation 4 (1) or (3).

Meters

6.—(1) The transmission licensee shall specify the point at which every supply line shall terminate in any premises which is or is to be supplied with electricity.

(2) At every point in the premises at which a supply line terminates, the person who made the request or arrangement referred to in regulation 4 (1) or (3) shall provide and maintain such meter boards and accessories as the transmission licensee may require.

(3) The transmission licensee or its agent shall provide, install and maintain an electricity meter at a meter board in accordance with such standards as may be determined by the Authority.

(4) If a consumer disputes the accuracy of any electricity meter with regard to the electricity supplied to him through that meter and such dispute cannot be resolved between the consumer and the transmission licensee, the matter shall be referred to the Authority whose decision shall be final.

Modification to electrical installation, etc.

7.—(1) Where a consumer —

(a) carries out or causes to be carried out any modification of any electrical installation which is connected to a supply of electricity; or

(b) installs or causes to be installed any high voltage apparatus or high voltage cable in any electrical installation which is connected to a supply of electricity,

he shall at his own expense arrange for the electrical installation so modified or the high voltage apparatus or high voltage cable so installed to be —

(i) inspected, tested and certified fit by a licensed electrical worker of the appropriate class; and

(ii) where the electrical installation is exempted from an electrical installation licence under section 71 of the Act, checked by the market support services licensee.

(2) The consumer referred to in paragraph (1) shall not use, work or operate the electrical installation, high voltage apparatus or high voltage cable referred to in that paragraph, or permit any person to use, work or operate such installation, high voltage apparatus or high voltage cable until paragraph (1) has been complied with.

Testing of electrical installation

8. The Authority may require a consumer to engage a licensed electrical worker of the appropriate class to inspect and test any electrical installation used, worked or operated by the consumer and submit the inspection and test results to the Authority at such intervals as the Authority may determine, and the consumer shall comply with such requirement at his own expense.

Adjustments to electrical installation when interfering with supply to other consumers, etc.

9.—(1) Where the transmission licensee determines that an electrical installation causes or is likely to cause undue interference with the supply of electricity to any other consumer or electrical installation, the transmission licensee may require the consumer who uses, works or operates the first-mentioned electrical installation to employ or appoint such licensed electrical worker of the appropriate class as may be authorised by the Authority to make such adjustments or alterations to the electrical installation as the transmission licensee considers necessary.

(2) The consumer shall comply with the requirement under paragraph (1) at his own expense.

Power to disconnect

10.—(1) In addition to any penalty which may be imposed under these Regulations or otherwise, where regulation 7, 8 or 9 is not complied with, the electricity licensee may in accordance with section 39 of the Act discontinue or refuse to connect the supply of electricity to that electrical installation.

(2) Where a consumer purchases electricity, directly or indirectly, from a wholesale electricity market for his premises and the consumer fails to pay any charges owed to the market support services licensee providing market support services to that consumer, the market support services licensee may —

(a) direct the transmission licensee to disconnect the supply of electricity to such premises from the transmission system; and

(b) where such premises are connected indirectly to the transmission system through an electrical installation, disconnect the supply of electricity to such premises from such electrical installation.

Failure of supply to consumers

11.—(1) If at any time a supply of electricity to a consumer's premises which is connected directly to the transmission system of the transmission licensee should fail, the transmission licensee shall attend to the failure at the request of the consumer.

(2) No charge shall be made for any rectification of the failure of the supply if the failure is due to a fault in any part of the transmission system of the transmission licensee.

(3) If the failure of such supply is due to some cause other than the cause referred to in paragraph (2), the transmission licensee may —

(a) refuse to rectify the failure; and

(b) charge the consumer a reasonable fee to recover his cost for attending to such failure and the consumer shall render payment of the fee to the transmission licensee upon demand.

(4) Where the transmission licensee refuses to rectify the failure of the supply under paragraph (3) (a), the consumer shall employ or appoint a licensed electrical worker of the appropriate class to rectify the failure.

PART III

ELECTRICAL INSTALLATIONS

Person responsible for electrical installation

12.—(1) For the purposes of regulations 16, 17 (2), (4), (8) and (9) and 19, the person responsible for the electrical installation shall be as follows:

(a) for an electrical installation other than a supply installation —

(i) in the case of an electrical installation under the control of the consumer of electricity supplied through such electrical installation or a licensed electrical worker employed or appointed by him, the consumer; or

(ii) in any other case, the person having control of the electrical installation; and

(b) for a supply installation, the owner of such supply installation.

(2) The person responsible for the electrical installation shall at his own expense, employ or appoint a licensed electrical worker of the appropriate class to carry out proper maintenance on the electrical installation so that the electrical installation or any part thereof can be operated or used safely and efficiently without causing any undue interference to the transmission system.

All apparatus, etc., to be of requisite standards

13.—(1) The licensed electrical worker responsible for the installation of any electrical installation in, on, over or under any premises shall ensure that every wire, electricity cable, fitting and apparatus in such electrical installation complies with the requirements of the relevant Singapore Standard or with such other standard as the Authority may determine.

(2) The licensed electrical worker responsible for the installation of any electrical installation in, on, over or under any premises shall ensure that such electrical installation complies with the Singapore Standard CP 5 Code of Practice for Electrical Installations or with such other standard or code of practice as the Authority may determine.

(3) The licensed electrical worker responsible for the installation of any electrical installation in, on, over or under any premises shall, if such installation is to be used for building operations or works of engineering construction, ensure that such installation complies with the Singapore Standard CP 88 Code of Practice for Temporary Electrical Installations — Part 1: Construction and Building Sites, or with such other standard or code of practice as the Authority may determine.

(4) The licensed electrical worker responsible for the installation of any electrical installation in, on, over or under any premises shall, if such installation is to be used for a trade-fair, a mini-fair, an exhibition or an amusement park or for decorative lighting for a festive, religious or commercial event, ensure that such installation complies with the Singapore Standard CP 88 Code of Practice for Temporary Electrical Installations — Part 2: Festive lighting, trade fairs, mini-fairs and exhibition sites, or with such other standard or code of practice as the Authority may determine.

Cable with aluminium conductors not to be used in domestic electrical installation

14. No person shall use an electricity cable with aluminium conductors in any electrical installation used, whether wholly or partly, for domestic purposes.

Cable for concealed wiring in installation

15.—(1) Where concealed wiring is installed in an electrical installation at a depth of less than 50 mm from the surface, no person shall use for such concealed wiring a non-metallic sheathed electricity cable or non-sheathed electricity cable without any metallic conduit or trunking protecting for such cable.

(2) Where concealed wiring is installed in an electrical installation at a depth of 50 mm or more from the surface, a person may use for such concealed wiring without any mechanical protection —

- (a) a sheathed and polyvinylchloride insulated cable; or
- (b) any other electricity cable approved by the Authority.

(3) Where an electricity cable referred to in paragraph (1) or (2) is used in the manner described in that paragraph, the person using the electricity cable shall ensure that the electrical installation is controlled by a high-sensitivity direct-acting residual current circuit breaker.

(4) No person shall make any alteration to any premises or carry out or cause to be carried out any work which would affect the electrical installation in the premises in such a manner that the subsequent use of such electrical installation might endanger any person or property unless he has —

- (a) taken due care to ascertain the existence of any electricity supply to the premises and the location of any concealed wiring within the premises;
- (b) taken the necessary precautions to ensure that the alteration work will not cause any damage to the concealed wiring within the premises; and
- (c) checked and verified that the residual current circuit breaker controlling the electrical installation can operate satisfactorily by switching off and on again the said residual current circuit breaker at the end of each day's work or alteration to the premises and there is no sign of leakage of electricity in the premises.

Authority may require use of high-sensitivity residual current circuit breaker

16. The Authority may at any time require the use of a high-sensitivity residual current circuit breaker or the adoption of other safety measures for such electrical installations or class of electrical installations as it may determine, and the person responsible for such electrical installation shall comply with such requirement within such time and in such manner as the Authority may specify.

Switchboard

17.—(1) The licensed electrical worker responsible for the installation of an electrical installation shall ensure that the general arrangement of every switchboard of that electrical installation shall, so far as is reasonably practicable, be such that —

- (a) all parts which need to be adjusted or handled in the course of operation or maintenance of the electrical installation are readily accessible;
 - (b) the course of all conductors can be readily traced;
 - (c) a clearly drawn diagram of the circuit of such electrical installation is displayed near the switchboard;
 - (d) all conductors not intended for connection to such electrical installation are separated or kept well apart and are readily distinguishable from those that form part of the electrical installation; and
 - (e) all bare conductors are so placed or protected as to prevent any danger arising from accidental contact with any of them.
- (2) Where a switchboard of an electrical installation is not located in an area set apart as a switchroom, the person responsible for such electrical installation shall ensure that the switchboard is securely fenced or enclosed.
- (3) No person other than a licensed electrical worker shall enter any part of an area set apart as a switchroom or any area which is fenced or enclosed in the manner stated in paragraph (2).
- (4) The person responsible for the electrical installation shall ensure that a notice which complies with the requirements of paragraph (5) is placed in a conspicuous position near every switchboard.
- (5) The notice referred to in paragraph (4) shall —
- (a) be made of durable material;
 - (b) have the word "DANGER" and the operating voltage of the switchboard inscribed —
 - (i) in block characters of at least 30 millimetres high and 5 millimetres wide;
 - (ii) in the English, Malay, Chinese and Tamil languages; and
 - (iii) in black against a yellow background; and
 - (c) be maintained in a clear and legible condition at all times.
- (6) The licensed electrical worker responsible for the installation of an electrical installation shall ensure that —
- (a) all apparatuses pertaining to any switchboard of the electrical installation that must be handled in the course of operation or maintenance of the electrical installation are, so far as is reasonably practicable, placed or arranged so that the apparatuses can be operated from a working platform of the switchboard; and
 - (b) all measuring instruments and indicators connected with the apparatuses are, so far as is reasonably practicable, placed so that the measuring instruments and indicators can be observed from the working platform.
- (7) If the apparatuses, measuring instruments and indicators referred to in paragraph (6) are to be operated or observed from any other place, the licensed electrical worker referred to in that paragraph shall take adequate precautions to prevent danger.
- (8) The person responsible for an electrical installation shall provide either a working platform for the switchboard of such electrical installation or a passage leading thereto.
- (9) The person referred to in paragraph (8) shall ensure that the working platform or passage referred to in that paragraph is —
- (a) of sound construction and has a firm and even floor;

(b) of adequate height and width to facilitate the safe operation or maintenance of the switchboard; and

(c) properly maintained and kept free from any obstruction.

(10) The licensed electrical worker responsible for the installation of any electrical installation shall ensure that there is adequate clear space around every outer edge of the front, sides and back of the switchboard of the installation to enable the safe operation, inspection, testing and maintenance of the installation.

High voltage switchboard

18. The licensed electrical worker responsible for the installation of an electrical installation which has a high voltage switchboard shall ensure that —

(a) every high voltage conductor of such switchboard which is within touching distance of a person standing on a working platform of such switchboard or a passage leading thereto is so placed or protected as to prevent danger from arising;

(b) all metal cases of every apparatus, device, indicator and other instrument of such switchboard which is capable of being operated at high voltage are earthed; and

(c) all metal handles of every high voltage switch of such switchboard, and, where necessary to prevent danger from arising, all metal gears for operating the switch of such switchboard, are earthed.

Adequate lighting where apparatus installed

19. The person responsible for an electrical installation shall provide adequate lighting in every place where an apparatus of such electrical installation is installed if periodic servicing is required to be carried out on such apparatus.

Use of auto-transformers

20.—(1) When installing an auto-transformer in an electrical installation, a licensed electrical worker shall take suitable measures to ensure that —

(a) the lower voltage system in such auto-transformer will not be accidentally charged above its designated voltage during the use of such auto-transformer by leakage from or contact with the higher voltage system of the electrical installation; and

(b) the voltage between any part of the lower voltage winding of such auto-transformer and Earth shall not, at any time during the use of such auto-transformer, exceed the voltage between the terminals of the lower voltage winding of such auto-transformer.

(2) No person shall use an auto-transformer to supply electricity to —

(a) a socket-outlet;

(b) a portable appliance, unless the auto-transformer is contained therein;

(c) an electric toy; or

(d) any extra-low voltage circuit.

Instructions for treatment of electric shock

21.—(1) A consumer of electricity supplied to —

(a) any premises which come within the meaning of "factory" under the Factories Act (Cap. 104);

(b) any premises where electricity is generated, transformed or used at high voltages;

(c) any premises where an electrical installation which is not exempted from an electrical installation licence under section 71 of the Act is placed or installed; and

(d) such other premises as the Authority may direct, shall post and maintain in a conspicuous part of the premises instructions in the English language and in either the Malay, Chinese or Indian language, as to the proper mode of treating persons suffering from electric shock.

(2) The consumer of electricity supplied to premises referred to in paragraph (1) shall ensure that all persons employed therein or who are otherwise there with his authority or permission understand and are familiar with the instructions referred to in that paragraph.

Supply installation to be operated and used safely

22.—(1) No person shall operate or use, or permit the operation or use of, any supply installation in any premises in a manner that is likely to cause any danger to the public.

(2) If the Authority considers that the operation or use of any supply installation in any premises is likely to cause any danger to the public, the Authority may by notice in writing require the person operating or using, or permitting the operation or use of, the supply installation to cease the operation or use, or to prevent the operation or use, as the case may be, of the supply installation.

(3) If the notice referred to in paragraph (2) is not complied with, the Authority may switch the supply installation off, or otherwise disable the operation of the supply installation.

PART IV

WORK ON HIGH VOLTAGE APPARATUS

Work to be carried out or supervised by authorised high voltage switching engineer or by competent person

23.—(1) An authorised high voltage switching engineer shall ensure that any work required to be performed on a high voltage apparatus over which he is in charge or has control of shall be carried out or supervised either by himself or by a competent person appointed by him.

(2) The authorised high voltage switching engineer shall ensure that every competent person he appoints to carry out or supervise the work is a licensed electrical worker of the appropriate class.

Duties of authorised high voltage switching engineer before commencement of work

24.—(1) An authorised high voltage switching engineer shall ensure that no work is carried out on any high voltage apparatus or part thereof unless —

(a) every part of such apparatus on which work is to be carried out is —

(i) dead;

(ii) isolated and locked from live conductors;

(iii) discharged and effectively connected to Earth at all points of connection of supply of electricity to it or between such points and the points of work;

(iv) effectively screened off from all live parts to prevent danger; and

(v) generally safe for work to be carried out thereon;

(b) a notice warning against any interference with live apparatus, in a form approved by the Authority, is affixed at every point where such apparatus can be made live;

(c) a notice in accordance with regulation 17 (5) is affixed at a conspicuous position of every part of the high voltage apparatus on which work is not to be carried out; and

(d) where work is to be carried out by one or more competent persons, he has issued a permit-to-work to every competent person and each competent person has read, understood and signed all copies of the permit-to-work issued to him.

(2) The authorised high voltage switching engineer shall retain one copy of every permit-to-work referred to in paragraph (1) (d) signed by him and every competent person appointed to carry out the work.

(3) No person shall move or remove anything set up to screen off the high voltage apparatus or any part thereof under paragraph (1) (a) (iv), or any of the notices referred to in paragraph (1) (b) and (c), except by or with the consent of and under the supervision of the authorised high voltage switching engineer.

(4) The keys of all safety locks shall be kept by the authorised high voltage switching engineer during the course of the work.

Duties of authorised high voltage switching engineer upon completion of work

25.—(1) Upon completion of any work, the authorised high voltage switching engineer shall ensure that —

(a) all tools, including any temporary local earthing connections, are removed from the premises where the high voltage apparatus is located; and

(b) where the work is carried out by one or more competent persons, every such competent person signs the completion of work portion of the permit-to-work issued to him and returns the permit-to-work to the authorised high voltage switching engineer for cancellation.

(2) On receipt of the signed statement of completion of work referred to in paragraph (1) (b) from every competent person appointed to carry out the work, the authorised high voltage switching engineer shall immediately cancel the permit-to-work by specifying the date and time of cancellation in the original and all copies of the permit-to-work.

Where apparatus connected to source of supply of electricity outside control of authorised high voltage switching engineer

26.—(1) Where work is to be carried out on a high voltage apparatus or any part thereof connected to a source of supply of electricity which is under the control of a person other than the authorised high voltage switching engineer in charge or in control of such high voltage apparatus, the authorised high voltage switching engineer shall, in addition to the requirements set out in regulations 23, 24 and 25, before commencing work, obtain a certificate from the person having control of such source of electricity that the electricity supply from such source has been disconnected from such high voltage apparatus and will not be reconnected without the prior written agreement of the authorised high voltage switching engineer.

(2) The certificate referred to in paragraph (1) shall be in such form as may be approved by the Authority.

(3) The person issuing the certificate referred to in paragraph (1) shall ensure that —

(a) electricity supply from the source of electricity under his control is disconnected from the high voltage apparatus referred to in paragraph (1) before issuing such certificate, and will not be reconnected without the prior written agreement of the authorised high voltage switching engineer; and

(b) the source of electricity under his control is isolated and locked to prevent any inadvertent reconnection of electricity supply to the high voltage apparatus referred to in paragraph (1).

PART V

LICENSING OF ELECTRICAL AND SUPPLY INSTALLATIONS

Licence to use or operate electrical or supply installation

27. Subject to these Regulations, the Authority may grant an electrical or supply installation licence or a renewal of such licence upon payment of the appropriate fee specified in the Schedule.

Application for licence or renewal of licence

28.—(1) An application for the grant of an electrical or supply installation licence or a renewal of such licence shall be made through the licensed electrical worker of the appropriate class employed or appointed by the applicant and approved by the Authority to operate or be in charge of or to control the electrical or supply installation, as the case may be.

(2) Every application shall be made in such form as may be provided by the Authority together with the payment of the appropriate fee specified in the Schedule.

(3) An application for the renewal of an electrical or supply installation licence shall be made to the Authority not later than one month prior to the date of expiry of the licence.

(4) No electrical or supply installation licence or a renewal of such licence shall be granted by the Authority unless the licensed electrical worker has —

- (a) declared to the Authority that he is employed or appointed by the applicant and he consents to operate or be in charge of or to control the electrical or supply installation, as the case may be;
- (b) inspected and tested the electrical or supply installation, as the case may be;
- (c) issued a Certificate of Fitness in respect of the electrical or supply installation in such form as may be provided by the Authority;
- (d) submitted a schematic single-line wiring diagram of the installation to the Authority or, where the licensed electrical worker is unable to submit the diagram, a written undertaking in such form as may be provided by the Authority; and
- (e) given a written undertaking to the Authority to inspect the electrical or supply installation at such regular intervals as may be required by the Authority and after each inspection submit an inspection report to the Authority.

(5) For the purposes of the declaration referred to in paragraph (4) (a), the licensed electrical worker shall keep proper documentation regarding his employment or appointment and shall produce such documentation to the Authority as may be required by the Authority.

(6) The Authority may, in its discretion, reject an application for an electrical or supply licence or a renewal of such licence from any person whose electrical or supply licence was previously cancelled or suspended.

Fee not refundable

29. Where an application for the grant of an electrical or supply installation licence or a renewal of such licence is not approved, the fee paid shall not be refunded to the applicant.

Licence to subject to conditions, etc.

30. An electrical or supply installation licence or a renewal of such licence granted under these Regulations shall be —

- (a) valid for the period stated therein unless it is earlier revoked or suspended in accordance with section 76 of the Act; and
- (b) subject to such conditions as the Authority may, from time to time, determine.

Notification to Authority of change of address

31. Every holder of an electrical or supply installation licence who changes his address shall immediately notify the Authority in writing of his new address.

Duty of licensed electrical worker

32.—(1) The Authority may, upon approval of the application for a grant of an electrical or supply installation licence or a renewal of such licence, notify the licensed electrical worker to retrieve and print the electronic record of the electrical or supply installation licence.

(2) Upon receiving the notification mentioned in paragraph (1), the licensed electrical worker shall print the electrical or supply installation licence and deliver the licence to the applicant within 7 days from receipt of the notification or such other period as the Authority may determine.

Display of licence

33.—(1) The electrical or supply installation licence shall be displayed by the applicant in a conspicuous position at the electrical or supply installation to which the licence relates.

(2) A copy of the schematic single-line wiring diagram submitted by the licensed electrical worker under regulation 28 (4) (d) shall be displayed in a conspicuous position next to the main incoming switchboard.

Reduction of period of suspension

34. The Authority may at any time and for such reason as it thinks sufficient, reduce the period for which an electrical or supply installation licence has been suspended under section 76 of the Act.

Replacement licence

35. If the Authority is satisfied that any electrical or supply installation licence granted by it has been lost, destroyed or defaced, the Authority may, upon payment of the appropriate fee specified in the Schedule, grant a replacement licence.

Licensee to inform Authority of cessation of employment by him of licensed electrical worker

36.—(1) Where any person holding an electrical or supply installation licence ceases for any reason to employ or to have a licensed electrical worker to operate or be in charge of or to control the electrical or supply installation in respect of which a licence has been granted to him, he shall immediately —

(a) inform the Authority of the cessation; and

(b) with the approval of the Authority, employ or appoint another licensed electrical worker of the appropriate class to operate or be in charge of or to control the electrical or supply installation.

(2) If any licensed electrical worker employed or appointed by a person holding an electrical or supply installation licence to operate or be in charge of or to control an electrical or supply installation is, owing to illness, absence or other cause, for the time being unable to perform his duties in respect of the electrical or supply installation, the person holding the electrical or supply installation licence shall immediately —

(a) inform the Authority of such inability of the licensed electrical worker to perform his duties; and

(b) with the approval of the Authority, employ or appoint another licensed electrical worker of the appropriate class to operate or be in charge of or to control the electrical or supply installation for the period in respect of which that the first-mentioned licensed electrical worker is unable to perform his duties.

(3) The approval of the Authority under paragraphs (1) (b) and (2) (b) shall be subject to such conditions as may be determined by the Authority.

(4) The Authority shall, upon being informed by the holder of an electrical or supply installation licence under paragraph (1) (a) or (2) (a), record in the register maintained under regulation 38

that the licensed electrical worker concerned has ceased or is temporarily unable, as the case may be, to operate or be in charge of or to control the electrical or supply installation in respect of which the licence is granted.

(5) The Authority shall record in the register maintained under regulation 38 the particulars of the licensed electrical worker whose employment or appointment by the holder of an electrical or supply installation licence under paragraph (1) (b) or (2) (b) has been approved by the Authority.

Production of electrical or supply installation licence and giving of information to authorised officer

37. An authorised officer may require the person responsible for an electrical or supply installation to do all or any of the following acts and things, and such person shall do the acts or things so required at such reasonable time and place as the authorised officer may require:

- (a) produce for the inspection of the authorised officer any electrical or supply installation licence held by him;
- (b) inform the authorised officer whether or not he holds a valid electrical or supply installation licence; and
- (c) attend at such office of the Authority as the authorised officer may specify and, on so attending —
 - (i) give any information or evidence which the Authority may require of him for any purpose of these Regulations; or
 - (ii) produce to the Authority for inspection and verification any electrical or supply installation licence which he has informed the authorised officer that he holds but which he did not produce to the authorised officer on a demand being made therefor.

Register of electrical and supply installation licences

38. The Authority shall maintain a register of electrical and supply installation licences granted under these Regulations, to be called the Register of Electrical and Supply Installation Licences, which shall contain the following particulars:

- (a) the full name and address of every holder of an electrical or supply installation licence as set out in the application form for the licence granted to him;
- (b) the date of grant and the number of the licence;
- (c) the dates of grant and expiry of, and a brief statement of the reasons for any cancellation or suspension of or refusal to renew, any previous licence granted to the person responsible for the electrical or supply installation;
- (d) the name and address of the licensed electrical worker employed or appointed by the holder of the electrical or supply installation licence to operate or be in charge of or to control the electrical or supply installation; and
- (e) such other particulars as the Authority thinks fit.

Information from register of electrical and supply installation licences

39. The Authority shall, upon the written request of any person and accompanied by payment to the Authority of the appropriate fee specified in the Schedule, furnish information to that person in writing as to whether or not any person is a holder of an electrical or supply installation licence.

PART VI

MISCELLANEOUS

Penalties

40.—(1) Any person who contravenes regulation 7, 8, 9, 12 (2), 13, 14, 19, 22 (1) or (2), 23, 24, 25, 26 or 33 shall be guilty of an offence and shall be liable on conviction to a fine not exceeding \$5,000 and, in the case of a continuing offence, to a further fine not exceeding \$150 for every day or part thereof during which the offence continues after conviction.

(2) Any person who contravenes regulation 15 (4) shall be guilty of an offence and shall be liable on conviction to a fine not exceeding \$ 5,000 or to imprisonment for a term not exceeding 6 months or to both.

(3) The holder of an electrical or supply installation licence who fails to comply with regulation 31 or 36 (1) or (2) shall be guilty of an offence and shall be liable on conviction to a fine not exceeding \$5,000.

(4) Any person who, having been required under regulation 37 by an authorised officer or by letter from the Authority to —

(a) produce his licence at any time and place;

(b) attend at an office of the Authority;

(c) give any information or produce any evidence; or

(d) do any other act or thing required of the licensee under these Regulations, does not do that act or thing at the required time and place, shall be guilty of an offence and shall be liable on conviction to a fine not exceeding \$5,000 or to imprisonment for a term not exceeding 12 months or to both.

THE SCHEDULE

Regulations 27, 28 (2), 35 and 39

FEES

1. Fee payable for the grant or renewal of a licence to use or operate an electrical installation for a period of 12 months	\$100
2. Fee payable for the grant or renewal of a licence to use or operate a supply installation for a period of 12 months	\$150
3. Fee payable for the grant of a licence to use or operate an electrical installation or a supply installation for a period of 3 months	\$ 50
4. Fee payable for a replacement licence	\$21.40
5. Fee payable for information as to whether or not a person is a holder of a licence to use or operate any electrical or supply installation	\$ 5

Note:

Items 4 and 5 are inclusive of goods and services tax chargeable under the Goods and Services Tax Act (Cap. 117A) on the supply of goods or services in respect of which such fee is payable.

[G.N. Nos.S 657/2002;S 587/2003]