

*Street Boxes.*

22. The covers of street cable-boxes shall be so secured that they cannot be opened except by means of a special appliance. Street boxes shall be either filled solid with cable compound or oil, or if not so filled shall be inspected from time to time for the presence of gas, and suitable action shall be taken to check its influx and accumulation.

*Insulation of Electric Mains.*

23. Every main, either overhead or underground, shall be tested for insulation after having been placed in position and before it is used for the purposes of supply, the testing pressure being at least 500 volts; and the Board shall duly record the results of the tests of each main or section of a main, and forthwith forward a report thereon to the District Engineer of the Public Works Department at Auckland.

The insulation of every complete circuit used for the supply of energy, including all machinery, apparatus, and devices forming part of or in connection with such circuit, shall be so maintained that the leakage current shall not under any conditions exceed one-thousandth part of the maximum supply current. Every leakage shall be remedied without delay. Every such circuit shall be tested for insulation at least once in every month, and the Board shall duly record the results of the tests and forward a report thereof at the end of each month to the District Engineer of the Public Works Department at Wellington: Provided that where any part of any electric circuit is connected with earth, the provisions of this regulation shall not apply to that part of that circuit so long as the connection with earth exists.

*Continuity of Supply.*

24. From and after the time when the Board commences to supply energy in pursuance of this license it shall maintain continuously sufficient power for the use of all the consumers for the time being entitled to be supplied; provided also that, for any purposes connected with the efficient working of the undertaking, the Minister may give permission to the Board to discontinue the supply at such intervals of time and for such periods as he may think expedient. When the supply is so discontinued public notice shall be given, when practicable, of such discontinuance and of the probable duration thereof.

*Supply to Consumers.*

25. The owner or occupier of any premises within the area of supply included in the license shall be entitled to a supply of electrical energy on the following conditions:—

(a.) If such premises are situated within 60 ft. of the boundary of any street in which an electric distribution-line belonging to the Board exists, the service shall be made free of cost.

(b.) If such premises are more than 60 ft. distant from such street boundary, the Board shall run the necessary lines for a distance of 60 ft. free of charge, and the consumer shall pay the cost of the service wires for the balance of the distance.

(c.) If the plant or mains of the Board are insufficient to supply the applicant with electrical energy the service may, with the consent of the Minister, be postponed for a period not exceeding twelve months; otherwise services shall be made within twenty-eight days of the application.

(d.) Every consumer within any part of the area included in the license shall be entitled to a supply of electrical energy on the same terms on which any other consumer in such part of the area is entitled under similar circumstances to a corresponding supply.

(e.) If the nature of the proposed consumption of energy by any applicant is such as is likely to seriously interfere with the maintenance of the constant pressure on the line in accordance with clause 4 the Board may, with the approval of the Minister, require the consumer to instal such apparatus as shall enable the conditions of clause 4 to be complied with.

(f.) The Board may require services to be wired or installed by competent tradesmen, but no preference shall be given to services wired or installed by any individual contractor or firm of contractors.

(g.) If payment by any consumer is delayed more than thirty days after the date of rendering a correct account the supply of electricity to such premises may be cut off without notice, and need not be restored until all arrears are paid.

*Service Connections.*

26. The Board shall be responsible for all electric lines or wires, fittings, and apparatus belonging to it or under its control which may be upon a consumer's premises being maintained in a safe condition and in all respects fit for supplying energy.

In delivering the energy to a consumer's terminals the Board shall exercise all due precautions so as to avoid risk of causing fire on the premises.

A suitable safety-fuse or other automatic circuit-breaker shall be inserted in each service line within a consumer's premises as close as possible to the point of entry, and contained within a suitable locked or sealed receptacle of fire-proof construction.

All electric wires and apparatus on a consumer's premises, except such parts as require to be earthed, shall be highly insulated and suitable for the voltage at which the supply is given. They shall be thoroughly protected against injury to the insulation or access of moisture. All electric wires shall be so fixed and protected as to prevent the possibility of electrical discharge to any adjacent metallic substance.

The maximum permissible current in any conductor shall not exceed the value permitted under the rules of the Institution of Electrical Engineers of Great Britain.

*Installation on Consumers' Premises.*

27. The Board shall not connect the wires and fittings on a consumer's premises with its mains, or in the case of premises already connected continue the supply from its mains, unless it is reasonably satisfied that the requirements of this license are complied with, that the wiring and fittings are suitable for the voltage at which supply is given, that the installation is in accordance with the rules of the Council of Fire Underwriters' Associations of New Zealand, and that the connection or continuance of supply would not cause a leakage from those wires and fittings exceeding one-thousandth part of the maximum supply current to the premises.

For the purpose of satisfying itself that the requirements of this license are being observed in so far as they apply to wires on consumers' premises, the Board may require that notice must be served upon it of the intention to instal wires, fittings, lamps, motors, or other apparatus on any such premises, and may inspect and test the same during any reasonable hours while the installation of such is in progress.

*Testing Consumer's Installation.*

28. If the Board is reasonably satisfied, after making all proper examination on the completion of the installation, by testing or otherwise, that the wiring and fittings are not suitable for the voltage being employed, or that a leakage exists at some part of a circuit of such extent as to be a source of danger, and that such leakage does not exist at any part of the circuit belonging to the Board, or that any other requirements of this license are not being complied with, then and in such case any officer of the Board duly authorized by it in writing may, for the purpose of discovering whether the leakage exists at any part of a circuit within or upon any consumer's premises, or whether the wiring is suitable and the general requirements of the license are complied with, by notice require the consumer, at some reasonable time after the service of a notice, to permit him to inspect and to test the wires and fittings belonging to the consumer forming part of the circuit.

If on such testing and inspection the officer discovers a leakage from the consumer's wires exceeding one ten-thousandth part of the maximum supply current to the premises, or that the requirements of this license are not properly conformed to, or if the consumer does not give all due facilities for inspecting and testing, the Board shall either not commence the supply or shall forthwith discontinue the supply of energy to the premises in question, giving immediate notice to the consumer of its reasons for not commencing or for discontinuing the supply, and in either case supply shall not be given until the Board is reasonably satisfied that the installation is in conformity with the requirements of this license.

If any consumer is dissatisfied with the action of the Board in refusing to give, or in discontinuing, or in not recommencing the supply of energy to his premises, the wires and fittings of that consumer may, on his application to the Minister and on payment of the cost, be inspected and tested by the Inspecting Engineer. This provision shall be endorsed on every notice given under the provisions of either of the preceding paragraphs.

*Motor Installations.*

29. The frame of all motors supplied at 230 or 460 volts shall be connected to an efficient earth by a copper conductor in accordance with the rules of the Institution of Electrical Engineers of Great Britain. All metal casings of switches, resistances, fuses, cables, and wires shall be efficiently earthed in a similar manner.

Every motor of  $1\frac{1}{2}$  horse-power or over must be controlled by an efficient quick-break ironclad switch suitable to prevent arcing, and conveniently placed so that the person in charge of the motor can cut off wholly the supply from the motor and all devices in connection therewith.

Efficient fuses or other automatic cut-out must be provided to efficiently protect the conductors on each circuit from excess of current.