

Where an aerial line crosses a street the angle between the line and the direction of the street at the place of crossing shall not be less than 60 degrees, and the span shall be as short as possible.

Where an aerial line crosses or is in proximity to any metallic substance, precautions shall be taken by the licensee against the possibility of the line coming into contact with the metallic substance by breakage or otherwise.

No overhead low-pressure electric line shall come within 2 ft. of any aerial wires or cables belonging to another authority, except where it may be permitted to pass either set of wires between other wires at a pole or support.

Electric lines at low pressure shall be covered throughout with triple braiding impregnated with waterproof compound; provided that where circumstances permit the lines may, with the consent of the Minister, be bare.

An aerial line shall not be permitted to remain erected after it has ceased to be used for the supply of energy, unless the licensee intends within a reasonable time again to take it into use.

SUPPORTS FOR OVERHEAD ELECTRIC LINES.

7. All overhead electric lines at low pressure shall be carried at a minimum height of 18 ft. above the ground, except at road-crossings, where the minimum height shall be 20 ft.

An aerial wire shall not in any part thereof come within 5 ft. measured horizontally, or 7 ft. measured vertically, from any part of any building or erection other than a support for the line, except where brought into a building for the purpose of supply.

All aerial wires shall be attached to suitable insulators, carried on cross-arms of suitable material and cross-section, and they shall be so attached to the insulators or guarded that they cannot fall from the support. Conductors covered with insulating material shall be so attached that their insulation shall not be impaired where they are secured to the insulator.

Every support for an aerial line shall be of durable material, and properly strengthened against forces due to wind-pressure, change of direction of line, and unequal length of span. The factor of safety of supports shall be four in the case of steel, iron, or ferro-concrete, and six in the case of wood, taking into account all possible stresses, including a wind-pressure of 30 lb. per square foot of plane surface and 18 lb. per square foot of diametral plane upon cylindrical surfaces.

The distance between electric distribution-line supports shall not exceed 150 ft., except by approval of the Minister.

LOCATION OF OVERHEAD LINES.

8. Except by permission of the Minister of Telegraphs, or subject to an agreement between the Post and Telegraph Department and the licensee, all overhead electric lines shall be placed on the opposite side of the road or street to that on which any telegraph lines exist; and where the erection of the electric lines necessitates the alteration of any telegraph lines, and such alteration is approved by the Minister of Telegraphs, the cost of the alteration shall be borne by the licensee.

In running the lines authorized by this license through or along any road where no telegraph line exists the licensee shall keep to one side of the road, and in running wires to the opposite side of the road the licensee shall arrange so as to interfere as little as possible with the route of any future telegraph lines.

RAILWAY CROSSINGS.

9. No work of any nature shall be erected or constructed upon, over, or under any part of the New Zealand Government railways until the licensee has obtained the consent of the Minister of Railways thereto, as required by section 4 of the Government Railways Amendment Act, 1910 (No. 2).

POST AND TELEGRAPH WIRE-CROSSINGS.

10. At telegraph crossings the electric lines shall pass over or under the telegraph wires or cables as may be decided by the Minister of Telegraphs, and shall be at least 2 ft. distant. Where it is impracticable to cross above or below, the electric lines may be taken through; but when permitted to be taken through, the crossing shall be made at a pole in manner to be approved by the Minister of Telegraphs.

Where electric lines and telegraph lines intersect, the latter shall be suitably insulated if deemed necessary; and when the crossing is above and near a pole the spans on each side of the pole may be insulated. This insulation shall be effected at the expense of the licensee in cases where the telegraph lines existed previously to the erection of the electric lines.

Where electric lines and telegraph lines intersect, the former shall be covered with weather-proofed triple braiding as prescribed in clause 6.

Where deemed necessary efficient guard-wires, effectively earthed, shall be erected in a manner to meet with the approval of the Minister of Telegraphs at all crossings or places where electric lines intersect telegraph lines, or at any place where such protection may be considered necessary.

The licensee shall bear the expense of such guard-wires in all cases where an electric line intersects any telegraph line previously existing.

Earth wires where led down poles shall be encased for a distance of 8 ft. from the ground.

ELECTRIC LINES ON TELEGRAPH POLES.

11. Where electric lines are permitted to be supported on telegraph poles all details of the supports and of the insulation shall be approved by the Minister of Telegraphs, who may, on giving to the licensee reasonable notice in that behalf, require the licensee to remove such electric lines at any time from such telegraph poles, and without payment of any compensation to the licensee.

SERVICE CONNECTIONS FACILITIES.

12. Where electric lines are on one side of the road and electric telegraph lines on the other, and service is required to be given from either to the other side of the road, the licensee and the Minister of Telegraphs shall give to each other reasonable facilities as far as possible to effect supply.

SERVICE CONNECTIONS FROM AERIAL LINES.

13. Service lines shall be taken direct from line-insulators to insulators supported and firmly attached to some portion of the consumer's premises which is not accessible to any person without the use of a ladder or other special appliance. Every portion of any service line which is outside a building and is within 7 ft. of any part of the building shall be rubber insulated.

MAINTENANCE.

14. Every aerial line, including its supports, its conductors, and their insulating covering, and all structural parts and electrical appliances and devices belonging to or connected with the line, shall be duly and efficiently maintained by the licensee as regards both electrical and mechanical conditions.

LIGHTNING-ARRESTERS.

15. Where any portion of any electric line or support for an electric line is exposed in such a position as to be liable to injury from lightning, it shall be efficiently protected against such liability.

EARTHING CONDUITS.

16. All metallic conduits, pipes, or casings containing an electric line shall be efficiently earthed, and shall be so jointed and connected across all street boxes and other openings as to make good electrical contact throughout their whole length.

INSULATION OF ELECTRIC MAINS.

17. 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 pressures being at least 500 volts; and the licensee shall duly record the results of the tests of each main or section of a main, and forthwith forward a report thereon to the Public Works Engineer at present stationed at Taumarunui.

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 licensee shall duly record the results of the tests.

SERVICE CONNECTIONS.

18. The licensee 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 licensee 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