

No overhead electric lines shall come within 3 ft. of any other aerial wires or cables except where it may be permitted to pass either wires between other wires at a pole or support.

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 spans shall be as short as possible. The minimum height of the line shall be 20 ft. above the street-level.

SUPPORTS FOR OVERHEAD ELECTRIC LINES.

27. All overhead electric lines shall be carried at a minimum height of 18 ft. above the ground.

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 away 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 such supports shall be at least 4 (four) if of iron, steel, or reinforced concrete, and 6 (six) if of wood, taking into consideration all possible stresses, including wind-pressure at 30 lb. per square foot on plane surfaces and 18 lb. per square foot of diametrical plane for cylindrical surfaces.

LOCATION OF OVERHEAD LINES.

28. Except by permission of the Minister of Telegraphs, or subject to an agreement between the Post and Telegraph Department and the Council, all overhead electric-light pole lines shall be placed on the opposite side of the street to that on which any telegraph lines exist; and where the erection of the electric-light wires necessitates the alteration of any existing telegraph wires, and such alteration is approved by the Minister of Telegraphs, the expense of the alteration shall be borne by the Council.

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

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

TELEGRAPH AND TELEPHONE WIRE CROSSINGS.

29. Where electric lines are permitted to be supported on telegraph poles, all details of the support and of the insulation of the adjacent spans shall be approved by the Minister of Telegraphs, who may require such electric lines at any time to be removed from such telegraph poles, on reasonable notice and without compensation of any description.

Where overhead electric lines cross telegraph lines the electric lines shall be protected for the crossing-span with a triple covering of jute braiding and thoroughly compounded.

At telegraph crossings the electric wires shall be insulated as provided by clause 26, and shall cross over or under the telegraph wires as may be decided by the Minister of Telegraphs.

Efficient guard-wires, effectively earthed, shall be erected where electric wires intersect telegraph wires or cables, if so required by the Minister of Telegraphs.

Earth-wires, where led down poles, shall be protected by a casing for a distance of 8 ft. from the ground.

The cost of all necessary guard-wires and special provisions required to comply with this clause, or deemed to be necessary as a protection to telegraph or telephone wires generally, shall be borne by the Council, whether the telegraph lines are erected before or after the electric lines. In the latter case the Council, on receipt of notice from the local officer of the Telegraph Department that it is proposed to run a telegraph line along the route, shall forthwith make the necessary changes required to comply with this clause at any points at which electric lines already cross such routes.

RAILWAY CROSSINGS.

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

SERVICE CONNECTIONS TO OVERHEAD LINES.

31. Service lines from aerial lines shall be taken from insulators, and shall not be tapped off between insulators. They shall be led as directly as possible to insulators 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. from any part of the building shall be rubber-insulated.

MAINTENANCE.

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

LIGHTNING-ARRESTERS.

33. Where any portion of an electric line or any 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.

UNDERGROUND CONDUCTORS.

34. Underground conductors shall be thoroughly insulated, and shall be protected from mechanical damage by a wooden boxing or earthenware or stoneware conduit. They shall be laid, wherever possible, under the footpaths, and with a cover of at least 12 in. from the surface of the pavement. Where laid under the roadway this cover shall be increased to 2 ft.

All conduits, pipes, casings, and street boxes used as receptacles for electric lines shall be constructed of durable material, and shall be of ample strength to prevent damage from heavy traffic, and reasonable means shall be taken to prevent the accumulation of gas in such receptacles.

Where any underground line crosses or is in proximity to any metallic substance, special precaution shall be taken against the possibility of any electrical charging of the metallic substance from the line, or from any metallic conduit pipe or casing enclosing the line.

EARTHING CONDUITS.

35. All metal 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 connection throughout their whole length.

STREET BOXES.

36. The covers of street 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, 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.

37. 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 Council shall duly record the results of the tests of each main or section of a main, and forthwith forward a report thereof to the Resident Engineer of the Public Works Department at Stratford.

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 by the Council without delay. Every such circuit shall be tested for insulation at least once in every week, and the Council shall duly record the results of the tests, and forward a report thereof at the end of each month to the Resident Engineer of the Public Works Department at Stratford.

CONTINUITY OF SUPPLY.

38. From and after the time when the Council 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 that, for any purposes connected with the efficient working of the undertaking, the Minister may give permission to the Council 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.

39. 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 within 60 ft. of an electric line belonging to the Council the service shall be made free of cost.