

(2) Where a pole is located adjacent to the building the wires between the top of the pole and the inside of the building shall be enclosed in galvanized conduit, which shall be earthed, turned down outside at least 45° and fitted with a bell-mouth.

(3) Every aerial electric line at high pressure which is outside of and attached to a building shall be effectively covered with vulcanized-rubber of not less than 600 megohm grade in the whole of the span between the building and the nearest pole.

42-33. Every aerial earthed neutral or middle conductor may be bare, and the earthed neutral of a star-connected medium pressure or any lower pressure system may, without the use of an insulator be attached to its support, other than a building, by a clamp of an approved type.

42-34. (1) A conspicuous, durable notice, reading, "Danger—Live Wires" or any equivalent suitable approved warning shall be affixed to poles or other supports carrying a high pressure bare conductor, or an extra-high pressure conductor.

(2) Such notice shall be fixed on not less than one pole or other support in five, and on every pole or other support at a telegraph, street, or railway crossing.

42-35. A notice as prescribed by clause (1) of the last preceding regulation shall be affixed to every pole, tower, or other support which carries any bare conductor (at any pressure) other than a bare neutral or middle conductor where such pole, tower, or other support is capable of being readily climbed without a special appliance.

42-36. The notices prescribed by Regulations 42-34 and 42-35 hereof shall:—

(a) Where the line is erected on the side of a street be so fixed that they are plainly visible from the street; and

(b) Be fixed at a uniform height of not less than 6 ft. or more than 12 ft. from the ground-level.

42-37. The erection and use of a bare high pressure or any lower pressure electric lines shall be subject to the following conditions:—

(a) When in the opinion of the Minister it is necessary in the interests of the public safety that the use in any place of a bare electric line shall be discontinued, the licensee shall, upon receiving notice from the Minister and within such time as he may fix, substitute therefor an electric line covered in the manner prescribed by Regulations 42-31 and 42-32 hereof; and

(b) Where a telegraph-line is affected the bare electric line shall also be subject to the conditions prescribed by Regulation 45-05 hereof with respect to the protection of telegraph wires; and

(c) The licensee shall observe such special conditions as the Minister may see fit to impose.

42-38. Where a railway communication-line or signal-wire is affected the electric line shall comply with the conditions prescribed by Regulation 46-15 hereof.

MEDIUM PRESSURE OR ANY LOWER PRESSURE, HIGH PRESSURE, AND EXTRA-HIGH PRESSURE ON SAME POLES.

42-51. Where medium pressure or any lower pressure and high pressure aerial electric lines; or medium pressure or any lower pressure and extra-high pressure aerial electric lines; or high pressure and extra-high pressure aerial electric lines; or all three systems are carried on the same poles, or supports, the following conditions shall apply:—

(a) The extra-high pressure shall not exceed 35,000 volts between phases; and

(b) Each earth-connection for the neutral point of high pressure or extra-high pressure systems shall consist of two independent leads to separate sets of earth-plates or earth-pipes connected in parallel; or, if town water-supply pipes are used for earthing purposes, the two independent leads shall be connected to such pipes at two points not less than 12 in. apart; and

(c) The resistance of each earth-connection shall comply with the requirements of Regulation 51-01 hereof; and

(d) The wires shall be placed as follows:—

(i) No medium pressure or lower pressure wire shall be above the level of any high pressure or extra-high pressure wire; and

(ii) No high pressure wire shall be above the level of any extra-high pressure wire; and

(iii) No medium pressure or any lower pressure wire shall be on the same level as any extra-high pressure wire.

Provided that where aerial lines cross any other separately owned aerial line, in accordance with Regulation 41-33 hereof the whole sets of lines of each owner shall be kept together, and shall pass as a whole either over or under the other owner's sets of lines.

COMMUNICATION-LINES ON ELECTRIC LINE POLES.

42-61. Every aerial communication-line (other than that of the Post and Telegraph Department) supported on poles or other supports carrying an electric line shall be of wire having a cross-sectional area of not less than 0.007 square inch (1/104 in. No. 12 S.W.G. 7/036 in. or 7/20 S.W.G.).

42-62. Where the induced pressure on the communication-line exceeds 650 volts such line shall for the purpose of clearance be deemed to be a high pressure electric line, and the clearance from other lines and ground-level shall be provided in accordance with the relevant requirements of Regulations 41-21 to 41-65 (both inclusive) hereof.

42-63. The minimum clearance between ground-level and any point of the span of the communication-line supported on poles or other supports carrying electric lines shall, subject to the requirements of the last preceding regulation, be 18 ft. on any street and 16 ft. in any other place.

42-64. Every telephone used on a communication-line supported on poles or other supports carrying an electric line shall be suitably guarded against lightning and shall be protected by cut-outs.

42-65. Where the communication-line is supported on poles or other supports carrying a high pressure or extra-high pressure electric line such arrangement shall be made as will prevent the possibility of any person using the telephone being injured as the result of any such electric line coming into contact with the communication-line or as the result of leakage or induction.

REMOVAL OF LINES.

42-71. Every aerial electric line (including a communication-line) shall be dismantled and removed within six months after it has ceased to be used for the supply of electrical energy or for communication purposes (as the case may be), unless written permission is obtained from the Chief Electrical Engineer for it to remain. The Chief Electrical Engineer, in giving permission, may lay down such conditions as he thinks necessary to secure the safety of employees and of the public from personal injury by reason of such lines.

42-72. If at any time it is deemed by the Minister to be detrimental to the public safety for overhead conductors, or any particular class of conductors, or any particular conductor to remain, the licensee shall, at his own expense, upon receipt of a notification to that effect from the Minister and within such time as the Minister specifies in such notification, replace such conductors by underground conductors.

PART 43.—UNDERGROUND CONDUCTORS.

CONDUCTORS.

43-01. Underground electric lines shall be thoroughly insulated, and shall be protected from mechanical injury by steel-armouring, wooden boxing, or earthenware, stoneware, concrete, iron, or fibre conduits or pipes. They shall be laid, wherever possible, under footpaths, and when so laid shall be not less than 9 in. underground. Where laid under any place used by vehicles they shall be laid not less than 2 ft. underground or be otherwise suitably protected.

43-02. Except by permission of the Minister of Telegraphs, all underground electric lines shall be placed on the same side of the street as aerial electric lines, and on the opposite side of the street to that on which underground or aerial telegraph-lines exist.

43-03. All conduits, pipes, casings, and street-boxes used as receptacles for underground electric lines shall be constructed of durable material, and shall be of ample strength to prevent injury from heavy traffic; and reasonable means shall be taken to prevent the accumulation of gas in such receptacles.

43-04. Where any underground electric line crosses or is in proximity to any metallic substance, special precautions shall be taken by the licensee against the possibility of any electric charging of the metallic substance from the electric line, or from any metallic conduit, pipe, or casing enclosing such line.

43-05. Where any underground electric line is brought through the surface of the ground and is accessible to any unauthorized person it shall, unless steel-armoured, be completely enclosed in a protecting pipe or be boxed in as approved by the Inspecting Engineer for a height of at least 8 ft. above the ground-level.

43-06. Every underground electric line placed in a tunnel or subway not in the sole occupation of the licensee shall be insulated, and, where necessary, protected by an earthed metallic sheath or enclosed in an earthed metal pipe.

43-07. Where any high pressure or extra-high pressure electric line is laid beneath the surface of the ground efficient means shall be taken to render it impossible that the surface of the ground or any other electric line or conductor shall become charged by leakage from the high pressure or extra-high pressure electric line.