

which may be upon a consumer's premises, being maintained in a safe condition and in all respects fit for supplying energy.

49. 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.

50. The maximum working-current in any conductor shall not exceed 1,000 amperes per square inch of section.

51. All electric lines and apparatus on a consumer's premises, excepting such parts as are required to be connected to earth, shall be highly insulated, and be suitable for the voltage at which supply is being given. They shall be thoroughly protected against injury to the insulation and against the access of moisture, and any metal forming part of the electric circuit shall not, unless efficiently connected with earth, be exposed so that it can be touched. All electric lines shall be so fixed and protected as to prevent the possibility of electrical discharge to any adjacent metallic substance.

52. The licensee shall fix, where the service mains terminate on any premises, double-pole well-protected fuses of at least 2 in. clear break. The consumer shall also place, as near to the entrance-fuses as may be practicable, double-pole main switches of ample carrying-capacity, well insulated, with quick break of sufficient clearance to prevent arcing.

53. The wiring shall be done from distributing-boards, which shall be of incombustible material. Suitable fuses on each pole fitted to engage in spring clips shall be placed on these boards, so that it shall be possible to disconnect any or all circuits from the supply. If double-pole switches are used on the distributing-board circuits, fuses need not then be of the type to engage in spring clips.

54. The covers of fuses, switches, and plugs should be of efficient porcelain or other incombustible non-conducting material, or of rigid metal lined with vitreous enamel or such-like substance. All metal parts liable to be touched must be effectively insulated from the electrical circuit.

55. There must be an approved porcelain bridge or other efficient insulation between the terminals of lamp-holders, and where lamp-holders are liable to be handled by persons making good earth contact they shall be provided with non-conducting covers. Not more than three amperes shall be controlled by each sub-switch.

56. The insulation of conductors used for interior wiring shall be of vulcanized rubber of not less than 600-megohms-per-mile grade, or of other approved material suitably protected. Concentric conductors may be used, and their insulation resistance shall not be less than that required for separate conductors.

57. All arc lamps shall be so guarded as to prevent pieces of ignited carbon or broken glass falling from them, and shall not be used in situations where there is any danger of the presence of explosive dust or gas.

58. Arc lamps used in any street for public lighting shall be so fixed as not to be in any part at a less height than 10 ft. from the ground.

59. Arc lamps used in any street for private lighting shall be so fixed as not to be in any part at a less height than 8 ft. from the ground, and shall be so screened as to prevent risk of contact with persons.

60. Arc lamps must be insulated from earth and be fixed so that they cannot swing into contact with any substance, metallic or otherwise, that might connect them to earth. Resistances for the regulation of arc lamps, if exterior to the lamp, shall be mounted on incombustible bases, shall be so placed that they cannot by conduction or radiation set fire to any contiguous materials, and shall be of ample size to safely carry the maximum current that will normally flow through them. Each arc-lamp circuit shall be provided with a fuse on each pole. Interior arc lamps shall also be provided with a switch on each circuit.

61. The frame of all motors shall be connected to an efficient earth by a copper conductor, which shall not be less than 0.023 square inches in sectional area. All metal casings of switches, resistances, fuses, cables, and wires shall be efficiently earthed in a similar manner.

62. Every motor must be controlled by an efficient double-pole quick-break 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.

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

64. Every precaution shall be taken in choosing positions for and in the wiring and setting-up of motors, and the necessary devices in connection therewith, so that there shall be no danger of fire being caused by their normal or abnormal action, or of shock being sustained in the ordinary handling thereof.

65. Terminals of motors supplied must be so guarded that they cannot be accidentally touched or short-circuited.

66. The insulation resistance of each motor-circuit, including all devices necessary for the working of the motor, shall be not less than 1 megohm to earth when all metal parts that are required to be connected to earth are so connected.

67. A printed notice shall be fixed in a conspicuous position at every motor and switchboard forbidding unauthorized persons to touch the motors or apparatus.

68. The licensee 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, so far as applicable, are being complied with, that the wiring and fittings are suitable for the voltage at which supply is being given, and that the connection or continuance of supply would not cause a leakage from those wires and fittings exceeding one ten-thousandth part of the maximum supply current to the premises; and where the licensee declines to make such connection or to continue supply it shall serve upon the consumer a notice stating its reasons for so declining.

69. If the licensee is reasonably satisfied, after making all proper examination by testing or otherwise, that the wiring and fittings are not suitable for the voltage being employed, 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 licensee, or that any other requirements of this license, so far as they apply to the consumer's premises, are not being complied with, then and in such case any officer of the licensee duly authorized by him 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 this license are complied with, by notice require the consumer, at some reasonable time after the service of the notice, to permit him to inspect and test the wires and fittings belonging to the consumer and 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 inspection and testing, the licensee shall forthwith discontinue the supply of energy to the premises in question, giving immediate notice of the discontinuance to the consumer, and shall not recommence the supply until he is reasonably satisfied that the cause of leakage has been remedied and that the installation is in conformity with these conditions.

70. If any consumer is dissatisfied with the action of the licensee 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 of such inspection, be inspected and be tested for the existence of leakage by the Inspecting Engineer.

This provision shall be indorsed on every notice given under the provisions of either of the two last preceding clauses hereof.

71. From the time when the licensee commences to supply energy through any distributing-main, and during the continuance of this license, he shall maintain during such portion of each day as he from time to time determines, sufficient power for the use of all the consumers for the time being entitled to be supplied from such main; provided that, for any purposes connected with the efficient working of the undertaking, the Minister may give permission to the licensee to discontinue the supply at such intervals and for such periods as he thinks expedient. When the supply is so discontinued, public notice shall be given, when practicable, of such discontinuance, and of the probable duration thereof.

72. The variation of pressure at any consumer's terminals shall not under any conditions exceed 4 per cent. above or below the normal pressure at which he is being supplied.

73. The licensee shall not use the said electric lines, or permit the same to be used, for any purpose until the Minister has given him notice in writing that he has received from the Inspecting Engineer a certificate that the works hereby authorized have been satisfactorily carried out.

74. The Minister may at any time order an inspection to be made of the lines and wires of the licensee. If any defect is found to exist it must be remedied forthwith; and if serious in the opinion of the Inspecting Engineer the Minister may, on receipt of the report, direct the licensee to at once cease transmitting energy either over the whole of the lines and wires, or over any part thereof, as to him may seem fit, until such defect is repaired or remedied. The cost of such inspections shall be borne by the licensee.

75. After the supply of energy has begun, not less than fourteen days' notice in writing shall be given to the Resi-