33.—When any means or appliance for securing health or safety is provided under these Regulations for the use of any person, that person shall use the means or appliance.

34.—A person shall not wilfully misuse or interfere with any means or appliance provided under these Regulations for securing health, safety or welfare.

Sealed with the Official Seal of the Ministry of Labour for Northern Ireland this 12th day of April, 1945, in the presence of

(L.S.) *F. C. S. Moore,*
Assistant Secretary.

SPECIAL REGULATIONS, DATED 1ST DAY OF OCTOBER, 1945, MADE BY THE MINISTRY OF LABOUR UNDER SECTION 65 OF THE FACTORIES ACT (NORTHERN IRELAND), 1938.

1945. No. 113

The Ministry of Labour for Northern Ireland (hereinafter referred to as " the Ministry "), in pursuance of the powers conferred upon it by Section 65 of the Factories Act (Northern Ireland), 1938, (hereinafter referred to as " the Act ") and of all other powers enabling it in that behalf, hereby makes the following Special Regulations :—

PART I

Preliminary

1.—(1) These Regulations may be cited as the Electricity (Factories Act) Special Regulations (Northern Ireland), 1945, and shall come into force on the 19th day of November, 1945.

(2) The Regulations made by the Secretary of State on the 23rd December, 1908, under Section 79 of the Factory and Workshop Act, 1901 (**a**), for the generation, transformation, distribution and use of electrical energy in premises under the Factory and Workshop Acts, 1901 and 1907 (**b**), are hereby revoked so far as they relate to Northern Ireland.

2. These Regulations shall, subject to the provisions of Regulation 4 hereof, apply to the generation, transformation, conversion, switching, controlling, regulating, distribution and use of electrical energy in any factory and in any premises, place, process, operation or work to which the provisions of Part IV of the Act with respect to special regulations for safety and health are applied by that Act.

(**a**) 1 Edw. 7, c. 22.
(**b**) S. R. & O. 1908, No. 1312.

3. In these Regulations the following expressions* have the meanings hereby assigned to them respectively, that is to say :—

"*Pressure*" means the difference of electrical potential between any two conductors, or between a conductor and earth as read by a hot wire or electrostatic volt-meter.

"*Low-Pressure*" means a pressure in a system normally not exceeding 250 volts where the electrical energy is used.

"*Medium-Pressure*" means a pressure in a system normally above 250 volts, but not exceeding 650 volts, where the electrical energy is used.

"*High-Pressure*" means a pressure in a system normally above 650 volts, but not exceeding 3,000 volts, where the electrical energy is used or supplied.

"*Extra-high Pressure*" means a pressure in a system normally exceeding 3,000 volts, where the electrical energy is used or supplied.

"*System*" means an electrical system in which all the conductors and apparatus are electrically connected to a common source of electromotive force.

"*Conductor*" means an electrical conductor arranged to be electrically connected to a system.

"*Apparatus*" means electrical apparatus, and includes all apparatus, machines, and fittings in which conductors are used, or of which they form a part.

"*Circuit*" means an electrical circuit forming a system or branch of a system.

"*Insulating stand*" means a floor, platform, stand or mat
"*Insulating screen*" means a screen
"*Insulating boots*" means boots
"*Insulating gloves*" means gloves
} of such size, quality, and construction according to the circumstances of the use thereof, that a person is thereby adequately protected from danger.

"*Covered with insulating material*" means adequately covered with insulating material of such quality and thickness that there is no danger.

"*Bare*" means not covered with insulating material.

"*Live*" means electrically charged.

"*Dead*" means at, or about, zero potential, and disconnected from any live system.

"*Earthed*" means connected to the general mass of earth in such manner as will ensure at all times an immediate discharge of electrical energy without danger.

"*Sub-station*" means any premises, or that part of any premises, in which electrical energy is transformed or converted to or from pressure

* Printed in *italics*.

above medium pressure, except for the purpose of working instruments, relays, or similar auxiliary apparatus; if such premises or part of premises are large enough for a person to enter after the apparatus is in position.

"*Switchboard*" means the collection of switches or fuses, conductors, and other apparatus in connection therewith, used for the purpose of controlling the current or pressure in any system or part of a system.

"*Switchboard passage-way*" means any passage-way or compartment large enough for a person to enter, and used in connection with a switchboard when live.

"*Authorised person*" means (*a*) the occupier, or (*b*) a contractor for the time being under contract with the occupier, or (*c*) a person employed, appointed, or selected by the occupier, or by a contractor as aforesaid, to carry out certain duties incidental to the generation, transformation, conversion, switching, controlling, regulating, distribution, or use of electrical energy, such occupier, contractor, or person being a person who is competent for the purposes of the regulation in which the term is used.

"*Danger*" means danger to health or danger to life or limb from shock, burn, or other injury to persons employed, or from fire attendant upon the generation, transformation, conversion, switching, controlling, regulating, distribution, or use of electrical energy.

"*Public Supply*" means the supply of electrical energy (*a*) by any statutory body, local authority, company, or person authorised by Act of Parliament or by Special Order granted and confirmed by the Ministry of Commerce for Northern Ireland to give a supply of electrical energy; or (*b*) otherwise under the regulations of the said Ministry of Commerce.

PART II

Exemptions

4.—(1) Nothing in Regulations 7, 8, 9, 12, 14, 15, 16, 20, 21, 22, 26, 27, 28, 29, 30, 31, 33, 34, 35 and 36 shall apply, unless on account of special circumstances the Ministry shall give notice to the occupier that this exemption does not apply—

(*a*) To any system in which the pressure does not exceed low pressure direct or 125 volts alternating;

(*b*) In any public supply generating station, to any system in which the pressure between it and earth does not exceed low pressure;

(*c*) In any above-ground sub-station for public supply, to any system not exceeding low pressure.

(2) Nothing in these Regulations shall apply to any service lines or apparatus on the supply side of the consumer's terminals, or to any

chamber containing such service lines or apparatus, where the supply is given from outside under the regulations of the Ministry of Commerce for Northern Ireland ; provided always that no live metal is exposed so that it may be touched.

(3) If the occupier can show, with regard to any requirement of these Regulations, that the special conditions in his premises are such as adequately to prevent danger, that requirement shall be deemed to be satisfied ; and the Ministry may by Order direct that any class of special conditions defined in the Order shall be deemed for the purposes of all or any of the requirements of these Regulations adequately to prevent danger, and may revoke such Order.

(4) Nothing in these Regulations shall apply to any process or apparatus used exclusively for electro-chemical or electro-thermal or testing or research purposes ; provided such process be so worked and such apparatus so constructed and protected and such special precautions taken as may be necessary to prevent danger.

(5) The Ministry may, by Order, exempt from the operation of all or any of these Regulations any premises to which any special rules or regulations under any other Act as to the generation, transformation, conversion, switching, controlling, regulating, distribution or use of electrical energy apply, and may revoke such Order.

(6) The Ministry may, if satisfied that safety is otherwise practically secured, or that exemption is necessary on the ground of emergency or special circumstances, grant such exemption by Order, subject to any conditions that may be prescribed therein ; and may revoke such Order.

(7) Nothing in these Regulations shall apply to domestic factories or domestic workshops.

(8) Nothing in these Regulations shall apply to apparatus, other than portable apparatus, forming part of the permanent electrical installation of a building, structure, ship or place by reason only that the apparatus, or the installation of which it forms a part, is used for the lighting of any building operation or work of engineering construction or work in a ship to which the provisions of Section 109 (2) or Section 110 of the Act apply or for the supply of electrical energy for the purposes of any such operation or work.

PART III

Duties

5. It shall be the duty of the occupier to comply with these Regulations, and it shall be the duty of all agents, workmen and persons employed to conduct their work in accordance with these Regulations.

6. All apparatus and conductors shall be sufficient in size and power for the work they are called upon to do, and so constructed, installed,

protected, worked and maintained as to prevent danger so far as is reasonably practicable.

7. All conductors shall either be covered with insulating material, and further efficiently protected where necessary to prevent danger, or they shall be so placed and safeguarded as to prevent danger so far as is reasonably practicable.

8. Every switch, switch fuse, circuit-breaker, and isolating link shall be :—(*a*) so constructed, placed, or protected as to prevent danger ; (*b*) so constructed and adjusted as accurately to make and to maintain good contact ; (*c*) provided with an efficient handle or other means of working, insulated from the system, and so arranged that the hand cannot inadvertently touch live metal ; (*d*) so constructed or arranged that it cannot accidentally fall or move into contact when left out of contact.

9. Every switch intended to be used for breaking a circuit and every circuit-breaker shall be so constructed that it cannot with proper care be left in partial contact. This applies to each pole of double-pole or multipole switches or circuit-breakers.

Every switch intended to be used for breaking a circuit and every circuit-breaker shall be so constructed that an arc cannot accidentally be maintained.

10. Every fuse, and every automatic circuit-breaker used instead thereof shall be so constructed and arranged as effectively to interrupt the current before it so exceeds the working rate as to involve danger. It shall be of such construction or be so guarded or placed as to prevent danger from over-heating, or from arcing or the scattering of hot metal or other substance when it comes into operation. Every fuse shall be either of such construction or so protected by a switch that the fusible metal may be readily renewed without danger.

11. Every electrical joint and connection shall be of proper construction as regards conductivity, insulation, mechanical strength and protection.

12. Efficient means, suitably located, shall be provided for cutting off all pressure from every part of a system, as may be necessary to prevent danger.

13. Efficient means suitably located shall be provided for protecting from excess of current every part of a system, as may be necessary to prevent danger.

14. Where one of the conductors of a system is connected to earth, no single-pole switch, other than a link for testing purposes or a switch for use in controlling a generator, shall be placed in such conductor or any branch thereof.