1991 No. 13

HEALTH AND SAFETY

Electricity At Work Regulations (Northern Ireland) 1991

Made . . . . . *14th January 1991*

Coming into operation—
for the purposes of Part III and regulations 29 and 30, in so far as they relate to Part III, regulation 32(1), (2) and (5) and Schedules 1 and 2 *11th March 1991*
for all other purposes *6th January 1992*

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The Department of Agriculture, the Department of Economic Development, the Department of the Environment and the Department of Health and Social Services acting jointly as the Department concerned(**a**), in exercise of the powers conferred by Articles 17(1) to (6) and 55(2) of, and paragraphs 1(1) and (2), 5(2), 8, 10, 11, 13, 14(1), 15, 19 and 20(*b*) of Schedule 3 to, the Health and Safety at Work (Northern Ireland) Order 1978(**b**) (''the 1978 Order''), and of every other power enabling them in that

(**a**) *See* Article 2(2) of S.I. 1978/1039 (N.I. 9)
(**b**) S.I. 1978/1039 (N.I. 9)

behalf, after consultation in accordance with Article 46(1) of the 1978 Order with the Health and Safety Agency for Northern Ireland and such other bodies as appeared to them to be appropriate, hereby make the following Regulations:—

PART I

INTRODUCTION

Citation and commencement

1. These Regulations may be cited as the Electricity at Work Regulations (Northern Ireland) 1991 and shall come into operation—

(*a*) for the purposes of Part III and regulations 29 and 30, in so far as they relate to Part III, regulation 32(1), (2) and (5) and Schedules 1 and 2, on 11th March 1991;

(*b*) for all other purposes on 6th January 1992;

Interpretation

2. In these Regulations—

"approved" means approved in writing for the time being by the Department for the purposes of these Regulations or conforming with a specification approved in writing by the Department for the purposes of these Regulations;

"circuit conductor" means any conductor in a system which is intended to carry electric current in normal conditions, or to be energised in normal conditions, and includes a combined neutral and earth conductor, but does not include a conductor provided solely to perform a protective function by connection to earth or other reference point;

"conductor" means a conductor of electrical energy;

"danger" means risk of injury;

"Department" means the Department of Economic Development;

"electrical equipment" includes anything used, intended to be used or installed for use, to generate, provide, transmit, transform, rectify, convert, conduct, distribute, control, store, measure or use electrical energy;

"firedamp" means any flammable gas, or any flammable mixture of gases, occurring naturally in a mine;

"injury" means death or personal injury from electric shock, electric burn, electrical explosion or arcing, or from fire or explosion initiated by electrical energy, where any such death or injury is associated with the generation, provision, transmission, transformation, rectification, conversion, conduction, distribution, control, storage, measurement or use of electrical energy;

"mine" has the meaning assigned to it by section 156 of the Mines Act (Northern Ireland) 1969(**a**);

(**a**) 1969 c. 6 (N.I.)

"safety-lamp mine" means—

(*a*) any coal mine; or

(*b*) any other mine in which—

(i) there has occurred below ground an ignition of firedamp; or

(ii) more than 0.25% by volume of firedamp is or has been found on any occasion at any place below ground in the mine;

"system" means an electrical system in which all the electrical equipment is, or may be, electrically connected to a common source of electrical energy, and includes such source and such equipment.

Persons on whom duties are imposed by these Regulations

3.—(1) Except where otherwise expressly provided in these Regulations, it shall be the duty of every—

(*a*) employer and self-employed person to comply with the provisions of these Regulations in so far as they relate to matters which are within his control;

(*b*) manager of a mine to ensure that all requirements or prohibitions imposed by or under these Regulations are complied with in so far as they relate to the mine of which he is the manager and to matters which are within his control; and

(*c*) owner, occupier or agent of a quarry to ensure that all requirements and prohibitions imposed by or under these Regulations are complied with in so far as they relate to the quarry or part of a quarry of which he is the owner, occupier or agent and to matters which are within his control.

(2) It shall be the duty of every employee while at work—

(*a*) to co-operate with his employer so far as is necessary to enable any duty placed on that employer by the provisions of these Regulations to be complied with; and

(*b*) to comply with the provisions of these Regulations in so far as they relate to matters which are within his control.

(3) In this regulation "owner", "occupier", "agent" and "quarry" have the meanings respectively assigned to them by Article 2(2) of the Quarries (Northern Ireland) Order 1983(**a**).

PART II

GENERAL

Systems, work activities and protective equipment

4.—(1) All systems shall at all times be of such construction as to prevent, so far as is reasonably practicable, danger.

(2) Such maintenance of systems as is necessary to prevent danger must, so far as is reasonably practicable, be provided.

(**a**) S.I. 1983/150 (N.I. 4)

(3) Every work activity, including operation, use and maintenance of a system and work near a system, shall be carried out in such a manner as not to give rise, so far as is reasonably practicable, to danger.

(4) Any equipment provided under these Regulations for the purpose of protecting persons at work on or near electrical equipment shall be suitable for the use for which it is provided, be maintained in a condition suitable for that use, and be properly used.

Strength and capability of electrical equipment

5. Electrical equipment shall not be put into use where its strength and capability may be exceeded in such a way as may give rise to danger.

Adverse or hazardous environments

6. Electrical equipment which may reasonably foreseeably be exposed to—

(*a*) mechanical damage;

(*b*) the effects of the weather, natural hazards, temperature or pressure;

(*c*) the effects, of wet, dirty, dusty or corrosive conditions; or

(*d*) any flammable or explosive substance, including dusts, vapours or gases,

shall be of such construction or so protected as to prevent, so far as is reasonably practicable, danger arising from such exposure.

Insulation, protection and placing of conductors

7. All conductors in a system which may give rise to danger shall either—

(*a*) be suitably covered with insulating material and, where necessary protected so as to prevent, so far as is reasonably practicable, danger; or

(*b*) have such precautions taken in respect of them (including, where appropriate, their being suitably placed) as will prevent, so far as is reasonably practicable, danger.

Earthing or other suitable precautions

8. Precautions shall be taken, either by earthing or by other suitable means, to prevent danger arising when any conductor (other than a circuit conductor) which may reasonably foreseeably become charged as a result of either the use of a system, or a fault in a system, becomes so charged; and, for the purposes of this regulation, a conductor shall be regarded as earthed when it is connected to the general mass of earth by conductors of sufficient strength and current-carrying capability to discharge electrical energy to earth without danger.

Integrity of referenced conductors

9. If a circuit conductor is connected to earth or to any other reference point, anything which might reasonably be expected to give rise to danger by breaking the electrical continuity or introducing high impedance shall not be placed in that conductor unless suitable precautions are taken to prevent that danger.