STATUTORY INSTRUMENTS

1989 No. 635

The Electricity at Work Regulations 1989

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) As may be necessary to prevent danger, all systems shall be maintained so as to prevent, so far as is reasonably practicable, such danger.
- (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. No electrical equipment shall 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 as necessary 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 as 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 ensuring compliance with 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.

Integrity of referenced conductors

9. If a circuit conductor is connected to earth or to any other reference point, nothing which might reasonably be expected to give rise to danger by breaking the electrical continuity or introducing high impedance shall be placed in that conductor unless suitable precautions are taken to prevent that danger.

Connections

10. Where necessary to prevent danger, every joint and connection in a system shall be mechanically and electrically suitable for use.

Means for protecting from excess of current

11. 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.

Means for cutting off the supply and for isolation

- **12.**—(1) Subject to paragraph (3), where necessary to prevent danger, suitable means (including, where appropriate, methods of identifying circuits) shall be available for—
 - (a) cutting off the supply of electrical energy to any electrical equipment; and
 - (b) the isolation of any electrical equipment.
- (2) In paragraph (1), "isolation" means the disconnection and separation of the electrical equipment from every source of electrical energy in such a way that this disconnection and separation is secure.
- (3) Paragraph (1) shall not apply to electrical equipment which is itself a source of electrical energy but, in such a case as is necessary, precautions shall be taken to prevent, so far as is reasonably practicable, danger.

Precautions for work on equipment made dead

13. Adequate precautions shall be taken to prevent electrical equipment, which has been made dead in order to prevent danger while work is carried out on or near that equipment, from becoming electrically charged during that work if danger may thereby arise.

Work on or near live conductors

- **14.** No person shall be engaged in any work activity on or so near any live conductor (other than one suitably covered with insulating material so as to prevent danger) that danger may arise unless—
 - (a) it is unreasonable in all the circumstances for it to be dead; and
 - (b) it is reasonable in all the circumstances for him to be at work on or near it while it is live;

(c) suitable precautions (including where necessary the provision of suitable protective equipment) are taken to prevent injury.

Working space, access and lighting

15. For the purposes of enabling injury to be prevented, adequate working space, adequate means of access, and adequate lighting shall be provided at all electrical equipment on which or near which work is being done in circumstances which may give rise to danger.

Persons to be competent to prevent danger and injury

16. No person shall be engaged in any work activity where technical knowledge or experience is necessary to prevent danger or, where appropriate, injury, unless he possesses such knowledge or experience, or is under such degree of supervision as may be appropriate having regard to the nature of the work.