

Chapter E 141

SUPPLY SYSTEMS; RULES FOR EMPLOYERS

E 141.01 General requirements

E 141.02 Protective methods

E 141.01 General requirements. (1) **INTERPRETATION AND ENFORCEMENT OF RULES.** (a) *Distribution.* The employer shall furnish to each regular employee operating or working on electrical supply equipment, supply or communication lines, or hazardous electrical tests a copy of these safety rules for operation (or such of these rules as apply to his work), either separately or incorporated in more comprehensive rule books, and shall take means to secure the employee's compliance with the same.

Note: Many companies number their books of rules and require a receipt from each employee for his copy.

(b) *Interpretation.* If a difference of opinion arises with regard to the meaning or application of these rules or as to the means necessary to carry them out, the decision of the employer or his authorized agent shall be final, unless an appeal is taken to the administrative authority.

(c) *Modification.* Cases may arise where the strict enforcement of some particular rule will seriously impede the progress of the work in hand; in such cases the employee in charge of the work to be done may, with the consent of the chief operator concerned, make such temporary modification of the rule as will expedite the work without materially increasing the hazard.

(2) **ORGANIZATION DIAGRAM.** An organization diagram or written statement clearly showing the division of responsibility between officials and employees, down to and including the grade of foreman, should be supplied with the book of rules, or the diagram should be posted conspicuously in offices and stations of the employer and in other places where the number of employees and the nature of the work warrant.

(3) **FIRST-AID RULES AND PHYSICIANS' ADDRESSES.** The rule book should contain or be accompanied by the following:

(a) A list of names and addresses of those physicians and members of the organization who are to be called upon in emergencies.

(b) A copy of rules for first aid, an approved method of resuscitation and fire extinguishment. These should also be kept in conspicuous locations in every station and testing room, in line wagons, and in other places where the number of employees and the nature of the work warrant.

(4) **INSTRUCTING EMPLOYEES.** Employees regularly working on or about equipment or lines shall be thoroughly instructed in methods of first aid, resuscitation by an approved method, and where advisable in fire extinguishment.

(5) **QUALIFICATION OF EMPLOYEES.** The employer shall use every reasonable means and precaution to assure himself that each employee is mentally and physically qualified to perform his work in accordance with these rules.

(6) **CHIEF OPERATOR.** (a) *Authority.* A properly qualified chief operator, system operator, load dispatcher, general superintendent, or otherwise designated employee shall be in charge of the operation of electrical equipment and lines and directly responsible for their safe operation. His duties shall be those prescribed in section E 142.02 (1).

(b) *Deputy.* In large organizations the duties of the chief operator may be delegated for any particular section of the system to a deputy chief operator (or otherwise designated employee) who shall report as required to the chief.

(c) *Large organizations or extended systems.* When it is impracticable to have the entire system placed in charge of one chief operator, the duties of the chief operator may be performed by a local superintendent, local manager, or other employee who may also perform other duties.

(d) *Small organizations.* The duties of the chief operator in small organizations may be performed for a portion of the system by a local superintendent, electrician, engineer, or some other employee who may also perform other duties.

Note: In these rules the various employees listed by above titles including the deputy chief operator, will be designated (for simplicity) by the title of chief operator, where referred to in this capacity.

(7) **RESPONSIBILITY.** If more than one person is engaged in work on or about the same electrical equipment or lines at any one location, one of the persons shall be designated as the foreman locally in charge of the work; or, all of the workmen shall be instructed as to the work they are to perform, and the employee instructing the workmen shall be considered in charge of the work.

History: Cr. Register, November, 1961, No. 71, eff. 12-1-61.

E 141.02 Protective methods. (1) **ATTENDANCE.** Unless a qualified employee is kept on duty where generators or rotary converters are operating such equipment shall be made inaccessible to unauthorized persons.

(2) **REQUIREMENT FOR TWO WORKMEN.** In wet weather or at night, no employee shall work alone on or dangerously near live conductors or parts of overhead or underground lines of more than 750 volts.

(a) Exception: Trouble or emergency work is excepted.

(3) **UNQUALIFIED WORKMEN AND VISITORS.** Unqualified employees or visitors shall be prohibited from approaching any live parts, unless accompanied by a qualified employee, who should warn the unqualified employee or visitor of the danger attendant upon such approach.

(4) **DIAGRAMS FOR CHIEF OPERATOR.** Diagrams or equivalent devices, showing plainly the arrangement and location of the electrical equipment and lines, should be maintained on file or in sight of the chief operator.

Note: These diagrams may be of the entire system, or of each specific portion of the system, or they may show typical arrangements.

(5) **INSTRUCTIONS TO EMPLOYEES.** All employees shall be instructed as to the character of all equipment or lines on or dangerously near to which work must be done by them. Instructions shall describe the equipment and lines to be worked on, identifying them either by position, letter, color, number, or name.

(6) **PROTECTIVE DEVICES.** (a) A supply of suitable protective, first-aid, and fire extinguishing devices and equipment, sufficient to enable employees to meet the requirements of these rules, shall be provided in conspicuous and suitable places in electrical stations, testing departments, and line construction and repair wagons. The following is a list of suitable devices and equipment, the kinds and numbers of which will depend on the requirements of each case:

1. First-aid outfits.
2. Insulating wearing apparel, such as insulating gloves, sleeves, and boots. Insulating shields, covers, mats, stools, and platforms. Insulating appliances, such as rods and tongs, for any necessary handling or testing of live equipment or lines.
3. Protective goggles of suitable materials and construction.
4. Tools of such special design and insulation as to eliminate so far as practicable the danger of forming short-circuits across conducting parts at different potentials or bringing the user into contact with such parts.
5. "Men at work" or equivalent tags, log books, operation diagrams, or equivalent devices, and portable danger signs.
6. Fire-extinguishing devices, for safe use on live parts or plainly marked that they must not be so used.
7. Grounding devices for making protective grounds.
8. Fixed or portable lighting equipment.

(7) **INSPECTION OF PROTECTIVE DEVICES.** Such devices and equipment shall be inspected and tested to insure that they are kept in good order, and in dependable condition and shall not be used unless so inspected, and in the case of insulating devices, tested as frequently as their use necessitates. Safety belts, whether furnished by employer or employee, should be inspected from time to time to assure that they are in safe working condition.

(8) **WARNING SIGNS.** Permanent warning signs forbidding entrance to unauthorized persons shall be displayed in conspicuous places at all unattended and unlocked entrances to electrical supply stations, substations, and testing rooms containing exposed current-carrying parts or moving parts.

(9) **DANGER SIGNS.** Suitable danger signs shall be placed in supply stations, substations, switching towers, and testing rooms about equipment having exposed current-carrying parts of more than 750 volts.

(10) **IDENTIFICATION.** Circuits should be tagged, marked or lettered unless identification be obtained by location.

History: Cr. Register, November, 1961, No. 71, eff. 12-1-61.