## § 1910.269

to perform his duties safely at his level of training.

- (36) System operator/owner. The person or organization that operates or controls the electrical conductors involved.
- (37) Telecommunications center. An installation of communication equipment under the exclusive control of an organization providing telecommunications service, that is located outdoors or in a vault, chamber, or a building space used primarily for such installations.

Note: Telecommunication centers are facilities established, equipped and arranged in accordance with engineered plans for the purpose of providing telecommunications service. They may be located on premises owned or leased by the organization providing telecommunication service, or on the premises owned or leased by others. This definition includes switch rooms (whether electromechanical, electronic, or computer controlled), terminal rooms, power rooms, repeater rooms, transmitter and receiver rooms, switchboard operating rooms, cable vaults, and miscellaneous communications equipment rooms. Simulation rooms of telecommunication centers for training or developmental purposes are also included.

- (38) Telecommunications derricks. Rotating or nonrotating derrick structures permanently mounted on vehicles for the purpose of lifting, lowering, or positioning hardware and materials used in telecommunications work.
- (39) Telecommunication line truck. A truck used to transport men, tools, and material, and to serve as a traveling workshop for telecommunication installation and maintenance work. It is sometimes equipped with a boom and auxiliary equipment for setting poles, digging holes, and elevating material or men.
- (40) Telecommunication service. The furnishing of a capability to signal or communicate at a distance by means such as telephone, telegraph, police and firealarm, community antenna television, or similar system, using wire, conventional cable, coaxial cable, wave guides, microwave transmission, or other similar means.
- (41) *Unvented vault.* An enclosed vault in which the only openings are access openings.
- (42) Vault. An enclosure above or below ground which personnel may

enter, and which is used for the purpose of installing, operating, and/or maintaining equipment and/or cable which need not be of submersible design.

- (43) Vented vault. An enclosure as described in paragraph(s) (42) of this section, with provision for air changes using exhaust flue stack(s) and low level air intake(s), operating on differentials of pressure and temperature providing for air flow.
- (44) Voltage of an effectively grounded circuit. The voltage between any conductor and ground unless otherwise indicated
- (45) Voltage of a circuit not effectively grounded. The voltage between any two conductors. If one circuit is directly connected to and supplied from another circuit of higher voltage (as in the case of an autotransformer), both are considered as of the higher voltage, unless the circuit of lower voltage is effectively grounded, in which case its voltage is not determined by the circuit of higher voltage. Direct connection implies electric connection as distinguished from connection merely through electromagnetic or electrostatic induction.

[40 FR 13441, Mar. 26, 1975, as amended at 43 FR 49751, Oct. 24, 1978; 47 FR 14706, Apr. 6, 1982; 52 FR 36387, Sept. 28, 1987; 54 FR 24334, June 7, 1989; 61 FR 9242, Mar. 7, 1996; 63 FR 33467, June 18, 1998; 67 FR 67965, Nov. 7, 2002; 69 FR 31882, June 8, 2004; 70 FR 1141, Jan. 5, 2005]

## § 1910.269 Electric power generation, transmission, and distribution.

Note: OSHA is staying the enforcement of the following paragraphs of §1910.269 until November 1, 1994: (b)(1)(ii), (d) except for (d)(2)(ii) and (d)(2)(iii), (e)(2), (e)(3), (j)(2)(iii), (1)(6)(iii), (m), (n)(3), (n)(4)(ii), (n)(8), (o) except for (o)(2)(i), (r)(1)(vi), (u)(1), (u)(4), (u)(5). OSHA is also staying the enforcement of paragraphs (n)(6) and (n)(7) of §1910.269 until November 1, 1994, but only insofar as they apply to lines and equipment operated at 600 volts or less. Further, OSHA is staying the enforcement of paragraph (v)(11)(xii) of §1910.269 until Februrary 1, 1996.

(a) General—(1) Application. (i) This section covers the operation and maintenance of electric power generation, control, transformation, transmission, and distribution lines and equipment. These provisions apply to:

(A) Power generation, transmission, and distribution installations, including related equipment for the purpose of communication or metering, which are accessible only to qualified employees:

Note: The types of installations covered by this paragraph include the generation, transmission, and distribution installations of electric utilities, as well as equivalent installations of industrial establishments. Supplementary electric generating equipment that is used to supply a workplace for emergency, standby, or similar purposes only is covered under subpart S of this part. (See paragraph (a)(1)(ii)(B) of this section.)

- (B) Other installations at an electric power generating station, as follows:
- (1) Fuel and ash handling and processing installations, such as coal conveyors,
- (2) Water and steam installations, such as penstocks, pipelines, and tanks, providing a source of energy for electric generators, and
  - (3) Chlorine and hydrogen systems;
- (C) Test sites where electrical testing involving temporary measurements associated with electric power generation, transmission, and distribution is performed in laboratories, in the field, in substations, and on lines, as opposed to metering, relaying, and routine line work;
- (D) Work on or directly associated with the installations covered in paragraphs (a)(1)(i)(A) through (a)(1)(i)(C) of this section; and
- (E) Line-clearance tree-trimming operations, as follows:
- (1) Entire §1910.269 of this part, except paragraph (r)(1) of this section, applies to line-clearance tree-trimming operations performed by qualified employees (those who are knowledgeable in the construction and operation of electric power generation, transmission, or distribution equipment involved, along with the associated hazards).
- (2) Paragraphs (a)(2), (b), (c), (g), (k), (p), and (r) of this section apply to line-clearance tree-trimming operations performed by line-clearance tree trimmers who are not qualified employees.
- (ii) Notwithstanding paragraph (a)(1)(i) of this section, §1910.269 of this part does not apply:

- (A) To construction work, as defined in §1910.12 of this part; or
- (B) To electrical installations, electrical safety-related work practices, or electrical maintenance considerations covered by subpart S of this part.

NOTE 1: Work practices conforming to §§ 1910.332 through 1910.335 of this part are considered as complying with the electrical safety-related work practice requirements of this section identified in Table 1 of appendix A-2 to this section, provided the work is being performed on a generation or distribution installation meeting §§ 1910.303 through 1910.308 of this part. This table also identifies provisions in this section that apply to work by qualified persons directly on or associated with installations of electric power generation, transmission, and distribution lines or equipment, regardless of compliance with §§ 1910.332 through 1910.335 of this part.

NOTE 2: Work practices performed by qualified persons and conforming to §1910.269 of this part are considered as complying with §§1910.333(c) and 1910.335 of this part.

- (iii) This section applies in addition to all other applicable standards contained in this part 1910. Specific references in this section to other sections of part 1910 are provided for emphasis only.
- (2) Training. (i) Employees shall be trained in and familiar with the safety-related work practices, safety procedures, and other safety requirements in this section that pertain to their respective job assignments. Employees shall also be trained in and familiar with any other safety practices, including applicable emergency procedures (such as pole top and manhole rescue), that are not specifically addressed by this section but that are related to their work and are necessary for their safety.
- (ii) Qualified employees shall also be trained and competent in:
- (A) The skills and techniques necessary to distinguish exposed live parts from other parts of electric equipment,
- (B) The skills and techniques necessary to determine the nominal voltage of exposed live parts,
- (C) The minimum approach distances specified in this section corresponding to the voltages to which the qualified employee will be exposed, and
- (D) The proper use of the special precautionary techniques, personal protective equipment, insulating and