supported on the pole or structure are deenergized and grounded in accordance with all of the provisions of this section which apply to the repair of energized surface high-voltage lines; or (2) the provisions of §§ 75.705–2 through 75.705–10 have been complied with, with respect to all lines, which are supported on the pole or structure.

(d) Work may be performed on energized surface high-voltage lines only in accordance with the provisions of §§ 75.705–2 through 75.705–10, inclusive.

§ 75.705–2 Repairs to energized surface high-voltage lines.

An energized high-voltage surface line may be repaired only when

(a) The operator has determined that:

(1) Such repairs cannot be scheduled during a period when the power circuit could be properly deenergized and grounded;

(2) Such repairs will be performed on power circuits with a phase-to-phase nominal voltage no greater than 15,000 volts;

(3) Such repairs on circuits with a phase-to-phase nominal voltage of 5,000 volts or more will be performed only with the use of live line tools;

(4) Weather conditions will not interfere with such repairs or expose those persons assigned to such work to an imminent danger; and

(b) The operator has designated a person qualified under the provisions of § 75.154 as the person responsible for carrying out such repairs and such person, in order to ensure protection for himself and other qualified persons assigned to perform such repairs from the hazards of such repair, has prepared and filed with the operator:

(1) A general description of the nature and location of the damage or defect to be repaired;

(2) The general plan to be followed in making such repairs;

(3) A statement that a briefing of all qualified persons assigned to make such repairs was conducted informing them of the general plan, their individual assignments, and the dangers inherent in such assignments;

(4) A list of the proper protective equipment and clothing that will be provided; and

(5) Such other information as the person designated by the operator feels necessary to describe properly the means or methods to be employed in such repairs.

§ 75.705–3 Work on energized high-voltage surface lines; reporting.

Any operator designating and assigning qualified persons to perform repairs on energized high-voltage surface lines under the provisions of § 75.705–2 shall maintain a record of such repairs. Such record shall contain a notation of the time, date, location, and general nature of the repairs made, together with a copy of the information filed with the operator by the qualified person designated as responsible for performing such repairs.

§ 75.705–4 Simultaneous repairs.

When two or more persons are working on an energized high-voltage surface line simultaneously, and any one of them is within reach of another, such persons shall not be allowed to work on different phases or on equipment with different potentials.

§ 75.705–5 Installation of protective equipment.

Before repair work on energized high-voltage surface lines is begun, protective equipment shall be used to cover all bare conductors, ground wires, guys, telephone lines, and other attachments in proximity to the area of planned repairs. Such protective equipment shall be installed from a safe position below the conductors or other apparatus being covered. Each rubber protective device employed in the making of repairs shall have a dielectric strength of 20,000 volts, or more.

§ 75.705–6 Protective clothing; use and inspection.

All persons performing work on energized high-voltage surface lines shall wear protective rubber gloves, sleeves, and climber guards if climbers are worn. Protective rubber gloves shall not be worn wrong side out or without protective leather gloves. Protective devices worn by a person assigned to perform repairs on high-voltage surface lines shall be worn continuously from the time he leaves the ground until he

returns to the ground, and, if such devices are employed for extended periods, such person shall visually inspect the equipment assigned him for defects before each use and, in no case, less than twice each day.

§ 75.705–7 Protective equipment; inspection.

Each person shall visually inspect protective equipment and clothing provided him in connection with work on high-voltage surface lines before using such equipment and clothing, and any equipment or clothing containing any defect or damage shall be discarded and replaced with proper protective equipment or clothing prior to the performance of any electrical work on such lines.

§ 75.705–8 Protective equipment; testing and storage.

(a) All rubber protective equipment used on work on energized high-voltage surface lines shall be electrically tested by the operator in accordance with ASTM standards, Part 28, published February 1968, and such testing shall be conducted in accordance with the following schedule:

(1) Rubber gloves, once each month;

(2) Rubber sleeves, once every 3 months;

(3) Rubber blankets, once every 6 months;

(4) Insulator hoods and line hose, once a year; and

(5) Other electric protective equipment, once a year.

(b) Rubber gloves shall not be stored wrong side out. Blankets shall be rolled when not in use, and line hose and insulator hoods shall be stored in their natural position and shape.

§ 75.705–9 Operating disconnecting or cutout switches.

Disconnecting or cutout switches on energized high-voltage surface lines shall be operated only with insulated sticks, fuse tongs, or pullers which are adequately insulated and maintained to protect the operator from the voltage to which he is exposed. When such switches are operated from the ground, the person operating such devices shall wear protective rubber gloves.

§ 75.705–10 Tying into energized high-voltage surface circuits.

If the work of forming an additional circuit by tying into an energized high-voltage surface line is performed from the ground, any person performing such work must wear and employ all of the protective equipment and clothing required under the provisions of §§ 75.705–5 and 75.705–6. In addition, the insulated stick used by such person must have been designed for such purpose and must be adequately insulated and be maintained to protect such person from the voltage to which he is exposed.

§ 75.705–11 Use of grounded messenger wires; ungrounded systems.

Solely for purposes of grounding ungrounded high-voltage power systems, grounded messenger wires used to suspend the cables of such systems may be used as a grounding medium.

§ 75.706 Deenergized underground power circuits; idle days—idle shifts.

[STATUTORY PROVISIONS]

When not in use, power circuits underground shall be deenergized on idle days and idle shifts, except that rectifiers and transformers may remain energized.

Subpart I—Underground High-Voltage Distribution

§ 75.800 High-voltage circuits; circuit breakers.

[STATUTORY PROVISIONS]

High-voltage circuits entering the underground area of any coal mine shall be protected by suitable circuit breakers of adequate interrupting capacity which are properly tested and maintained as prescribed by the Secretary. Such breakers shall be equipped with devices to provide protection against under-voltage grounded phase, short circuit, and overcurrent.

§ 75.800–1 Circuit breakers; location.

Circuit breakers protecting high-voltage circuits entering an underground area of any coal mine shall be located on the surface and in no case