back of the board. Switchboards shall have the entrance to the rear guarded against entrance of unauthorized persons, unless in a building that is kept locked.

(c) Switchboards shall be well lighted for switch operations in the front and for repair and maintenance in the rear.

Rooms housing switchboards shall be free of debris and refuse.

Pull switches and circuit breakers, or other power controls shall be mounted on slate or other suitable insulating material.

116. Power circuits (a) High-potential power cables (600 volts or more) carried from the surface through shafts, boreholes, and underground passageways shall be adequate for the services intended, installed in a permanent manner, and guarded from mechanical injury.

Power wires carrying less than 600 volts, whether bare or insulated, except ground wires and trailing cables shall be supported on or by well-installed insulators and shall

not touch combustible materials, roof, or ribs.

(b) Power wires shall be insulated properly when passing through doors and stoppings, and where they cross other power circuits.

Electric cables and wires, other than signal wires and trolley wires used for haulage, installed in haulage slopes shall be buried not less than 12 inches below combustible material or installed in fireproof protective conduit.

- (c) Where track is used as a power conductor:
- 1. Both rails of main-line tracks shall be well bonded at every joint and cross-bonded at least every 200 feet; however, if the track circuit is paralleled with a feeder cable, both rails of the track shall be well bonded at every joint and cross bonds shall be installed at least every 1,000 feet in both the track and feeder circuit.
- 2. At least one rail on secondary haulage roads shall be well bonded at every joint, and cross bonds shall be installed at least every 200 feet.
  - 3. Switches on entries shall be well bonded.
- (d) Power shall be disconnected before repair work is to be done on energized electric circuits or energized parts of electric equipment. Employees required to make repairs on energized bare trolley lines shall wear protective clothing, such as insulated shoes and lineman's gloves, or the power shall be disconnected.