§ 75.803 Fail safe ground check circuits on high-voltage resistance grounded systems.

[STATUTORY PROVISIONS]

On and after September 30, 1970, high-voltage, resistance grounded systems shall include a fail safe ground check circuit to monitor continuously the grounding circuit to assure continuity and the fail safe ground check circuit shall cause the circuit breaker to open when either the ground or pilot check wire is broken, or other no less effective device approved by the Secretary or his authorized representative to assure such continuity, except that an extension of time, not in excess of 12 months, may be permitted by the Secretary on a mine-by-mine basis if he determines that such equipment is not available.

§ 75.803–1 Maximum voltage ground check circuits.

The maximum voltage used for ground check circuits under § 75.803 shall not exceed 96 volts.

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§ 75.803–2 Ground check systems not employing pilot check wires; approval by the Secretary.

Ground check systems not employing pilot check wires will be approved only if it is determined that the system includes a fail safe design causing the circuit breaker to open when ground continuity is broken.

§ 75.804 Underground high-voltage cables.

(a) Underground high-voltage cables used in resistance grounded systems shall be equipped with metallic shields around each power conductor with one or more ground conductors having a total cross sectional area of not less than one-half the power conductor, and with an insulated external conductor not smaller than No. 8 (A.W.G.) or an insulated internal ground check conductor not smaller than No. 10 (A.W.G.) for the ground continuity check circuit.

(b) All such cables shall be adequate for the intended current and voltage. Splices made in such cables shall provide continuity of all components.