

DRAFT REGULATION (revised)
~~SHIELDED CABLES AND SENSITIVE GROUND FAULT~~

Section 208.____

All three phase electrically operated equipment operated on a working section in by the last open crosscut shall receive power either from a circuit equipped with sensitive ground fault protection ~~or a shielded trailing cable, at the option of the operator,~~ as specified herein:

1. Sensitive Ground Fault

- a. A sensitive ground fault protective device ~~on circuits not utilizing a variable speed drive~~ shall be connected so that the associated circuit will be instantaneously interrupted upon the occurrence of a ground fault which shall not exceed 300 milli-amperes nominally.

- b. A sensitive ground fault protective device on such circuits on equipment utilizing variable speed drives shall be connected so that the associated circuit will be instantaneously interrupted upon the occurrence of a ground fault which shall not exceed 300 milli-amperes nominally; provided that if nuisance tripping occurs on such circuits, such devices shall be permitted to be adjusted to the minimum setting necessary to prevent nuisance tripping under the following conditions:
 - i. In no case shall the device(s) be adjusted greater **than the lower value of 500 milli-amperes** or one half of the neutral ground resistor's current rating.
 - ii. The operator establishes a means of communication, approved in advance by the Department, that will provide a history of nuisance tripping and subsequent electrical adjustments to section mechanics, relevant supervisors, and the Department. Such communication shall include, at minimum, the date of the adjustment, the name of the person who made the adjustment, and the new adjusted setting.

- c. The secondary main circuit breaker protecting any sensitive ground fault circuit subject to this regulation shall also provide “backup” sensitive ground fault protection. Relay settings may include a short time delay (250mS) and/or a higher current setting to provide coordination. ~~A higher current setting cannot exceed ½ the neutral ground resistor rating.~~ **In no case shall the device(s) be adjusted greater than the lower value of 500 milli-amperes or one half of the neutral ground resistor’s current rating.**

~~2. Shielded Cables~~

- ~~a. Alternatively, instead of sensitive ground fault protection, portable cables for equipment described in the preceding section shall include grounded metallic shields around each power conductor or a grounded metallic shield over the assembly.~~

2. Implementation Schedule

- b. ~~This~~ **These** ~~requirement~~ **regulations** ~~is~~ **are** effective **immediately upon enactment for all new and rebuilt equipment** and at all new mine openings and ~~sensitive ground fault protection or cable shielding~~ shall be installed **within** ~~and maintained 60 36~~ months after the effective date of this regulation, or within a later date pursuant to a variance granted by the Department upon good cause shown, for all section load centers that power equipment that operates inby the last open crosscut. ~~or equipment that operates inby the last open crosscut.~~