

**From:** Ellis [ellis@pacoalalliance.com]  
**Sent:** Monday, February 09, 2015 10:22 AM  
**To:** Gaida, Allison  
**Cc:** Stefanko, John; Sbaffoni, Joseph  
**Subject:** Trailing Cables



**TO:** Allison Gaida  
**cc:** John Stefanko  
Joe Sbaffoni  
**FROM:** George Ellis  
**RE:** Trailing Cables

On behalf of PCA's representatives to the Pennsylvania Board of Coal Mine Safety (Board), attached is a revised regulatory proposal that addresses the use of shielded cables or sensitive ground fault detection devices (SGFDD) in underground bituminous coal mines. PCA's representatives respectfully request that this proposal be distributed to other Board members for consideration at the March meeting.

If adopted as submitted, the proposal commits PA coal operators to retrofit underground section power equipment, currently in place and proven to be safe, with additional enhancements within a phased timeframe. The enhancements required in the proposal exceed any existing state or federal mandate.

In summary, the proposal would require PA coal operators to utilize either a SGFDD or shielded cables, as determined by the operator, on equipment in a working section that is used in by the last open crosscut. This would include pumps and other mining equipment (i.e. continuous miners, roof bolters, auxiliary fans, shuttle cars) used in such underground mine locations.

If a SGFDD is used, it is to be set at 300 milli-amperes or less. If used on equipment with a variable speed drive, the setting may be adjusted upwards if nuisance tripping occurs. That setting, however, would be limited to one half of the neutral ground resistor's rating.

The proposal also provides for backup ground fault protection on the main circuit breaker subject to certain requirements.

As an alternative to SGFDDs, the operator may elect to use shielded cables.

Within five years from the effective date of this regulation, all section load centers powering equipment that operate inby the last open crosscut or equipment that operates inby the last open crosscut must meet either the SGFDD or shielded cable requirement.

You should not misinterpret this last provision to mean that operators will not immediately begin to take the requisite compliance actions. It is more a recognition that retrofitting every load center cannot be logistically completed simultaneously.

The equipment must be withdrawn from the mine to perform the retrofits. A phased-in schedule provides the time for operators to engage in the necessary actions to comply with a final regulation during planned rebuilds or scheduled maintenance.

In addition, the number of load centers that will have to be retrofitted is large. Based on an internal PCA survey of our underground operators (who account for about 90 percent of PA's 2013 total coal production), the average number of load centers that would need to be retrofitted averages 21 per operator. The average amount of time to remove, rebuild and put these load centers back in service is about three months per unit.

Balancing these logistics with the need to maintain enough load centers underground to sustain operations and, combined with the fact that continued reliance on load centers currently in place is not creating any safety exigency, this phased-in schedule is a critical component of the rule.

Finally, please keep in mind that what the PA coal industry is proposing is not required by the federal government or any other state. This factor also militates in favor of taking a prudent and deliberate step forward to maximize both safety and efficiencies.

PCA's Board members are prepared to discuss the proposal in more detail at the next Board meeting.

George Ellis  
President  
Pennsylvania Coal Alliance  
212 N. Third St., Suite 102  
Harrisburg, PA 17101

Phone: 717-233-7900 ext. 22  
Fax: 717-231-7610  
Email: [ellis@pacoalalliance.com](mailto:ellis@pacoalalliance.com)  
Web: [www.pacoalalliance.com](http://www.pacoalalliance.com)