1.0 PURPOSE

The purpose of this Policy is to provide guidance to Electrical Safety Division investigators when evaluating the current carrying capacity of cables used on permissible mining equipment as required by Title 30 Code of Federal Regulations (30 CFR), Part 18, Section 18.36(a)(1).

2.0 SCOPE

This policy encompasses equipment submitted to MSHA for evaluation under 30 CFR Part 18.

3.0 REFERENCES

This document references 30 CFR 18.36(a)(1).

4.0 DEFINITIONS

There are no terms in this document, which need to be defined.

5.0 POLICY

5.1. 30 CFR, Part 18, Section 18.36(a)(1) requires cables between machine components to have adequate current carrying capacity for the loads involved.

5.2. Cables supplying motor loads should be rated for 125 percent of the motor full load current. The cable rating should be at the highest anticipated ambient temperature.

5.3. Cables supplying multiple motors or other loads should be rated at least 125 percent of the largest load plus 100 percent of all other loads. The cable rating should be at the highest anticipated ambient temperature.

5.4. Control cables shall be rated for at least the ampacity of the overcurrent device protecting the cable. The cable rating should be at the highest anticipated ambient temperature.

5.5. For varying and intermittent duty motors and loads, the applicant may justify the use of a cable with a smaller rating than that specified in sections 5.2 or 5.3.