

November 30, 2004
Morgantown, West Virginia

Comments
of the
United Mine Workers of America, International Union
Deputy Administrator of Occupational Health and Safety
Timothy J. Baker

for the
Mine Safety and Health Administration's
High-Voltage Continuous Mining Machines; Proposed Rule

Good morning, my name is Tim Baker, I am the Deputy Administrator of Occupational Health and Safety for the United Mine Workers of America, International Union. I am pleased to be here in Morgantown, West Virginia to offer the Union's comments on the High-Voltage Continuous Mining Machines; Proposed Rule.

First, I would like to thank the Agency for acting on the Union's request and changing the location of today's hearing from the Pittsburgh Airport. I believe the response to the hearing today by miners from the area is an important reminder to all of us that given a reasonable opportunity, including hearing location, they will make every effort to participate in the process. It is also extremely important to note that the input of all these miners today should afford the Agency sufficient information and real mining experience to offer a final rule that not only advances the technological aspects of the mining industry, but one that truly enhances the level of safety at the minesite.

It is my intension to expand on the comments I made in Lexington, Kentucky on November 18, 2004. I will also be submitting a copy of these comments at the conclusion of the hearing.

In an effort to place my comments on the record in the clearest manner, I will be dividing my testimony into two specific areas – the technical aspects of the high-voltage rule as currently written and published in the Federal Register and the practical application of the provisions of the rule and how those provisions affect miners' health and safety. Obviously, there will be times during my testimony when these two areas overlap, if that causes confusion please stop me and I will attempt to clarify the position.

Let me begin with the specific language of the Proposed Rule. It is important to understand the Union's position with regard to the use of high-voltage mining machines – we are not here to request the prohibition of such equipment in the industry. The Union and its members, as you can summarize from my previous testimony, accepts this technology as an

inevitable and necessary evolution of the industry. However, as with all new or advancing technology there must be an inclusion of necessary safeguards applied to insure miners lives and health are not placed at risk.

Limiting Voltage

As I just stated, the Union recognizes the useful application of high-voltage mining machines. Along with that, we must also recognize the application of high-voltage equipment should not be unrestricted. The Union takes exception with the Agency's decision to omit a reasonable limit on the maximum voltage operators would be permitted to supply to this type of equipment. The determination by the authors of the Proposed Rule to allow operators to utilize 4,160 volts on continuous miners under this standard, without fully knowing the hazards that are being introduced, is unacceptable. The Union can find no reasonable explanation for this decision and the Agency offers no credible data to indicate the practice is safe.

On page 42,814 of the July 16, 2004 Federal Register the Agency states, "The proposed rule does not limit the continuous mining machine voltage, originally specified by the manufacturer to 2,400 volts, because existing regulations in Part 18 allow for approval of equipment up to 4,160 volts." The Union is aware of the existence of twenty-three (23) "high-voltage continuous mining machines in the country. The maximum voltage on any of these machines is currently limited to no greater than 2,400 volts. The Union has also been made aware that there is no intention, by any manufacturer, to build a continuous mining machine that would require greater than 2,400 volts. The Union understands that the current prohibition which does not permit the use of high-voltage inby the last open cross-cut or within 150 feet of pillar workings has been superceded by the approval of numerous 101(c) Petitions for Modifications regarding the use of high-voltage mining equipment. However, the "relaxed" standard these petitions have created should not be permitted to be exceeded under the Proposed Rule. The fact that Part 18 allows for approval of equipment up to 4,160 volts does not mean that such a practice would be safe in this instance. There is no other piece of mobile equipment in the underground mining industry approved with such voltages. It is impossible to predict the hazards that would inherently be created by the introduction of equipment with such high voltage.

Subsequent statements on the same page of the Federal Register note, "The proposed rule, like the high-voltage longwall rule, has technical provisions to test and evaluate equipment containing on-board switching of high-voltage components up to 4,160 volts. Therefore, we believe that limiting the maximum voltage of continuous mining machines to 2,400 volts would unnecessarily restrict the design, and have written the propose rule to allow the approval of equipment with operating voltages up to 4,160 volts." First let me start by saying that referencing high-voltage longwalls in this Proposed Rule, in a deliberate attempt to have the reader believe that the equipment is similar and would therefore be operated in a similar manner, is disingenuous. The fact is that the vast differences between longwalls and continuous mining machines necessitates a rule that places greater restrictions on the application of high-voltage on continuous mining machines. The size and mobility of the high-voltage mining machine creates

a variety of hazards that must be mitigated by requiring necessary safeguards, including limiting maximum voltages. It is important to remember that damage to a high-voltage mining machine or the cable supplying power to it can come from numerous sources; including roof falls, rib falls and from other mobile equipment on the mining section. To permit operators the unrestricted right to increase equipment voltage beyond 2,400 volts without knowing the problems that may be created is unsafe. The UMWA request the Agency revisit this issue and prohibit the use of voltages above 2,400 volts on any piece of continuous mining equipment.

Secondly, the assertion that limiting voltage would, "unnecessarily restrict design" is contrary to accepted safety practices and a departure by the Agency on its directive to proactively protect the health and safety of the Nation's miners. The Agency must limit the use of untested systems or equipment until they are proven to be safe. Prohibiting the use of voltages higher than those already approved, without first insuring it can be done safely, is a diminution of safety. MSHA does not possess the authority to permit untested and potentially life threatening conditions to be introduced into the mine.

Finally regarding this matter, the torque energy generated by these 2,400 volt continuous mining machines is incredible. At least one fatal accident can be directly attributed to the force generated between the drum of the mining machine and mining face. In that incident, a bit struck the face with such force that it shattered. The fragments of the bit were dispersed around the face area and one piece struck the miner operator in the neck, causing a fatal injury. The Union believes by not restricting the voltage to the current maximum of 2,400 volts approved in the petitions, the Agency is unnecessarily and illegally creating a potentially lethal condition. The Union would seek to have the Agency prohibit the use of continuous mining machines with voltages beyond 2,400 as is the current requirement.

Splices

The Union is disturbed by the Agency's decision not to limit the number of splices permitted on the high-voltage trailing cable. Likewise, we are not supportive of the decision to permit the use of tape-type splices on these cables. In order to effectively address these issues I would like to discuss them separately.

By not limiting the number of splices on the high-voltage trailing cable the Union believes MSHA has failed to adequately address a known problem area. The determination to permit operators the latitude of unlimited cable repairs would institutionalize an unsafe practice. The probability of shock hazards or explosion of a cable increases significantly with each splice, permanent or otherwise. Cable splices no matter what their design should be viewed as a temporary fix. Once a cable has been repaired numerous times there needs to be a realistic determination as to the safety protection afforded the miner who must work around these high-voltage cables. Inadequate splices or splices that have become worn or damaged over time present a real hazard to miners. Allowing unlimited splicing of the cable increases the hazard to miners. This is not the direction the Agency should be heading. When considering this section

of the Proposed Rule the Agency had a duty to look at all aspects of the possible hazards that could be created. This not only includes the number of splices on a single cable, but the proximity of those splices in relation to the equipment being energized as well as the proximity of splices to each other. The Union does not believe relying on the sensitive nature of the grounding system would be sufficient protection for miners. The UMWA seeks to have the Agency revisit this section of the rulemaking and place reasonable limits on splicing of high-voltage trailing cables.

The Union does not support MSHA's decision to permit the use of tape-type splices on high-voltage trailing cables. This practice has been accepted on other, low- and medium volt, cables and is a problem in the mining industry. Given the rigors these cables must endure it should be apparent taping is not a suitable means of protecting miners from potential shock hazards. Anyone who has even a limited amount of experience in the mining industry can attest to the problems they have seen with tape-type splices. The Agency's inadequate attempt to lessen the potential problems these types of splices create, by requiring the use self-vulcanizing tape is insufficient. This tape will inevitable roll on the cable jacket or become tattered with use, rendering it useless as a protection. These types of splices will lead to questions by cable handlers and equipment operators as to the extent of the damage in that area. Far too often the damaged area is in need of a complete splice, but taping is seen a more cost effective and less time consuming. The Union requests reconsideration by the Agency and seeks to have all damaged areas on a high-voltage cable spliced.

Training

The Union has always understood the importance of training and education programs for members of the mining community. The components of a successful training program were originally rooted in the requirements of 30 CFR Part 48. New miner training, annual refresher and task training when done properly combine to offer miners the necessary tools to safely perform the duties to which they are assigned. These requirements however do not, in the opinion of the Union, satisfy the entire scope of training miners need in today's industry. Just as the Union acknowledges the need to introduce new technologies, the Agency and industry must recognize the need to better train miners on the health and safety protections these technologies require.

The introduction of a high-voltage mining machine into any operation will affect all miners working there. Obviously, the miners working in the section where the equipment is operated will be the most directly impacted. However, because of the nature of the industry today, it is likely that every member of the workforce will be exposed to this equipment. Understanding that reality must force each of us to understand the need to offer all the miners at the operation comprehensive safety training for this equipment.

This site specific training should be used to compliment and expand on the other training noted in Part 48. The decision by the Agency to include this training in the annual refresher is

inadequate. The Union has consistently argued that the requirements of that training is already taxed beyond any reasonable chance of accomplishing the already noted training mandates. Therefore, it becomes extremely important that specific high-voltage training be given to all miners where such equipment is utilized on a routine basis outside the Part 48 requirements. The Union would request the Agency revisit their determination not to require special training on this matter. Further, the Union will be available to the Agency to offer constructive solution for such training.

The UMWA does understand and encourages a higher level of training for individuals who job will include testing and repairing high-voltage systems and cables.

Onboard Power Circuits

On page 42,816, column two (2) bottom of the page it states, "Proposed paragraph (e)(1) would require an on-board grounded-phase indicator light to alert the machine operator if a grounded-phase condition were to occur on any ungrounded three phase circuit." However, on page 42,820 section (3)(c) of the July 16, 2004 Federal Register notice the Agency states, "Proposed paragraph (c) of § 75.824 would require a mine operator to implement certain procedures if a grounded-phase indicator light was provided on a high-voltage continuous mining machine, and it indicated a grounded-phase condition."

The Union is unable to determine the Agency's intent with respect to on-board grounded-phase indicator lights based on the writing of the preamble. The statements on the referenced pages clearly contradict one another. The Union believes such an indicator light is a necessary safety feature and should be required on all high-voltage equipment. We would ask the Agency to clarify their position before the Union offers further comments on the matter.

Grounding Stick

The Union is in agreement with the Agency regarding the use of a grounding stick to discharge high-voltage capacitors and circuits. This practice will allow the safe discharge of stored energy, ensuring that miners will not be exposed to high-voltage conductors or parts. The Union would also like to know if the high-voltage trailing cable can and will store energy after being disconnected from the power source. The UMWA would request that the Agency make a determination as to the potential for such an occurrence. Should that potential exist, the Union requests MSHA take the necessary regulatory steps to insure this stored energy is safely discharged also.

Tramming of High-Voltage Mining Machines In and Out of the Mine, and From Section to Section

The UMWA sees the inclusion of the use of high-voltage diesel-powered generators in the High-Voltage Continuous Mining Machine; Proposed Rule as a matter that is not germane to

the issue at hand. The Union strenuously objects to the Agency's attempt to include in this Proposed Rule mining equipment other than that specifically noted as the purpose of the Proposed Rule. Considering the impact the introduction of a high-voltage diesel-powered generator would have on the underground workings of the mine this issue must be dealt with in a separate rulemaking process. It is inappropriate and by the Union's assessment beyond the authority of the Agency to proceed further with this rule based on the inclusion of the generator language. Therefore the UMWA demands the Agency strike all reference to these generators from the High-Voltage Continuous Mining Machine; Proposed Rule.

Further, in accordance with Section 101(a)(3) of the Federal Mine Safety and Health Act of 1977, Public Law 91-173, as amended by Public Law 95-164 (Mine Act) the UMWA objects to the inclusion of the use of high-voltage diesel-powered generators in the High-Voltage Continuous Mining Machine; Proposed Rule. The use of such equipment is not germane to the specified purpose of the Proposed Rule and is in fact an issue that would require separate rulemaking. Therefore, in accordance with Section 101(a)(3) the Union requests public hearings on this objection. The Union understands the Secretary has sixty (60) days from the close of the official comment period to schedule the required hearings on this matter. We will monitor the Federal Register for notice of the hearing notice, but would request official notification from the Secretary's office to the Union's International Headquarters in Fairfax, Virginia.

I would like to point out at this time that the Union will be presenting comments later on this afternoon on the Low- and Medium Voltage Diesel Powered Generators; Proposed Rule and while comments on that subject are not appropriate in this hearing, many of the comments that will be made at that time would also apply to the use of high-voltage diesel-powered generator. It is the Union's belief that should the Agency have felt the need to promulgate a rule for high-voltage generators that would have been the appropriate place. Its inclusion in this Proposed Rule simply confuses two (2) separate and distinct matters, restricting the rights of miners to full and fair participation on such divergent issues. The Union objects to their inclusion in this Proposed Rule.

Records of Tests

Section 75.832(g) requires a, "qualified person who conducted the examination and tests record any unsafe condition found and any corrective action taken." Further it states, "[p]roposed paragraph (g) would require that a certifications and records be kept for at least one (1) year..."

It would be the Union's experience that such "certified persons" will normally be the section or roving mechanic as the case may be, generally a non-management employee of the operator. Given the language are you not requiring that these records be counter signed by management personnel. It would appear to the Union, and we have made this argument on several different occasions, that someone from management should shoulder the responsibility

for insuring the records are properly documented and stored. In this writing of the Proposed Rule that does not appear to be the case. The UMWA would request the Agency revisit this section of the Rule and insure an agent of the operator is the ultimate responsible person.

Issues of a Practical Nature

Personal Protective Equipment

In my previous testimony, I spoke briefly about the practical aspect of working on and around this type of equipment. I would like to expand on that a little at this point.

First, there is the question of wearing protective equipment when handling this cable. The Union agrees that there must be some type of personal protective equipment afforded to miners by the operator and that equipment should be used when handling the high-voltage mining machine cable. There are of course different types of equipment available for such use. There are as described in the Proposed Rule properly tested and rated insulated gloves. This is probably the most common personal protective equipment used by miners when moving the cable. However, as the Proposed Rule notes there are also mitts, hooks, tongs, slings aprons and other protective equipment used to handle high-voltage cables. The Union would recognize that each of these has practical uses and limitations. However, if each of the PPE's are rated to be used for a specific application with regard to handling high-voltage cable the miner should be able to select that equipment that best suits the need and that ultimately they will wear.

It should become evident that equipment, no matter how well manufactured, will not be utilized or utilized properly if it is cumbersome. For instance, the Union would agree that the use of properly tested and insulated tong or hooks would be a great benefit to miners moving the cable. In fact the Union would suggest that, a miner using this equipment would be at least as safe as when using gloves, simply based on his proximity to the cable itself. However, requiring that miner wear gloves while using the hook or tongs does not appear to make practical sense. The Union believes there is a need here to require operators to supply a variety of PPE's and afford the miner the opportunity to determine what safety equipment is best suit their need.

Trailing Cable Installations

The Union is concerned that certain requirements of Section 75.827 introduce hazards into the mining environment that otherwise would not exist. There is no doubt that safeguards must be required at the mining operations that utilize this high-voltage equipment, however, the Proposed Rule appears to include demands that impede safety.

The Union understands and agrees with a determination that extra high-voltage cable should be stored in a location where it will be protected from damage by mobile equipment or other sources. However, the Proposed Rule encourages operators to move this cable to a location where barricading or other such protective measures are not required. Unfortunately,

the other location in the mining section such protection is not required is in or inby the last open crosscut. While this may be a “legal” solution for the operator, it is neither a practical or safe solution for the miners in the section. The worst place to have the extra cable, especially high-voltage cable placed, is at this location. The potential to have this cable damaged and thereby pose a health and safety threat to miners is precisely what this Proposed Rule does. The Agency must reexamine this situation and create to a viable alternative.

To further complicate this dangerous situation the Proposed Rule requires the cable to be hung in entries where equipment is being operated. From a outsiders view that may well seem to be the best location, the Union understands many if not all the current PDO’s require this. However, from a practical standpoint this creates a dangerous situation that is unnecessary. Hanging the cable along the rib-line and in crosscuts will in many instances place it at the level of the sections mobile equipment canopy. The real possibility of striking this cable with the machines canopy does exist. Should that occur the risk to the miner from electrical shock or exploding cable is very real. Because of the nature of the mining sections routine operations the Union believes allowing the cable to be placed along the rib on the bottom would be safer for miners. This in our estimation greatly reduces the risk of a serious injury.

The Union, however, does not want to indicate by these statements that the cable should never be hung. In fact, it is our determination that at all locations where mobile equipment will encounter the high-voltage cable it must be hung. There is never, in the Union’s estimation a safe method of tramming equipment over such cables.

The Union does support the requirement by the Agency that suspended cables must be guarded by nonmetallic flame resistant material at all locations were it is suspended from the mine roof. We also agree the cable must be suspended from approved insullators.