BEFORE THE
UNITED STATES OF AMERICA
DEPARTMENT OF LABOR
MINE SAFETY AND HEALTH ADMINISTRATION

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# PUBLIC HEARING
# ON
# HIGH VOLTAGE CONTINUOUS MINING MACHINES
# PROPOSED RULE

SHERATON SUITES
BALLROOM A
2601 RICHMOND ROAD
LEXINGTON, KENTUCKY

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9:00 A.M.

MARVIN W. NICHOLS, JR.
PRESIDING OFFICIAL

Reporter: Douglas R. Wilson

APPEARANCES:

MR. MARVIN W. NICHOLS, JR.
PRESIDING OFFICIAL

PANEL MEMBERS:
MR. RONALD FORD, ECONOMIST
STANDARDS OFFICE
ARLINGTON, VIRGINIA

MR. SALWA EL-BASSIONI,
HEALTH AND SAFETY SPECIALIST
HEADQUARTERS OFFICE
ARLINGTON, VIRGINIA

MR. BOB BORING,
A&CC TECHNICAL SUPPORT CENTER

MR. RON STAHLHUT,
COAL DISTRICT 3
VINCENNES, INDIANA

MS. PAM KING,
REGULATORY SPECIALIST
STANDARDS OFFICE
ARLINGTON, VIRGINIA

PUBLIC PARTICIPANTS
Mr. Otis D. Mullins,
DMCC/PMCC Coal Company
606-435-7020

Mr. Jimmy Combs,
DMCC/PMCC Coal Company
606-435-7020

Mr. Darrell Halcomb,
MSHA District 10
270-821-4180

Mr. David Beerbower,
Peabody Energy
314-342-7731

APPEARANCES (CONTINUED):

PUBLIC PARTICIPANTS:
Mr. John Vallar,
Peabody-Highland
270-389-5420

Mr. John Dodd,
Jay/MTV
618-246-5043

Mr. Mark Tully,
AmerCable
724-728-2223

Mr. Jim Honaker,
Peabody Energy
304-340-1783

Mr. David Jones,
UMWA
270-232-5119

Mr. Bob Cox,
UMWA
270-274-7184

Mr. Tim Baker,
UMWA
703-208-7120

Mr. Steve Earle,
UMWA
270-825-2333

Mr. James O'Neal,
UMWA
270-965-5452

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I N D E X

P R O C E E D I N G S

MODERATOR NICHOLS: Let's get started. Can you hear me in the back?

UNIDENTIFIED: Yeah.

MODERATOR NICHOLS: Is the microphone okay?

(Indicated in the affirmative.)

MODERATOR NICHOLS: Good morning, everybody. My name is Marvin Nichols, and I am the Director of the Office of Standards for MSHA. On behalf of Dave Lauriski, the Assistant Secretary of Labor for Mine Safety and Health, I would like to welcome you to this public hearing.

I think what we are going to do today is, the Federal Register Notice says we will have two hearings. The first hearing will be on High Voltage Continuous Miners, and then at one o'clock we would open the record for a hearing on Portable Diesel Generators.

What worked well for us in Alabama and what we will try to do here, we will see how it goes, is that once we have all of the comments on High Voltage Continuous Miners from everybody in the audience, if it is -- if it is, you know, ten or eleven o'clock, we will just go ahead and open the record on Portable Diesel Generators, and then if someone shows up and wants to

give comments on High Voltage Continuous Miners then we can switch a tape and go back to that record.

And the MSHA Panel will be here in the afternoon, after one o'clock, because that is what the Federal Register Notice says.

We will be around here until we have determined that there is no one else to give comments.

This is the third of four hearings, and the last hearing will be held on November the 30th in Morgantown, West Virginia.

The purpose of these hearings is to obtain input from the public on a Proposed Rule that was published in the Federal Register on July the 16th, 2004. A modified hearing location and date notice, as well as the extension of the post-hearing comment period, was published in the Federal Register on August the 12th, 2004.

We have copies of these documents in the back at the registration table if you need extra copies.

The Proposed Rule we are addressing today would include construction and design requirements for approval of high-voltage continuous mining machines under MSHA's Part 18, and mandatory safety standards for high-voltage miners in underground coal mines under Subpart I of Part 75.

The Proposed Rule would also amend Subpart K of Part 75 to allow the use of such machines in permissible areas of underground coal mines.

Let me take a minute to introduce my other MSHA colleagues up here.

To my left is Bob Boring. Bob is with the A&CC Technical Support Center.

At the end of the table is Ron Stahlhut. Ron is with the Coal District 8 Staff over at Vincennes, Indiana.

To my right is Salwa El-Bassioni. Salwa is a health and safety specialist in our Headquarters Office in Arlington, Virginia.

And at the end of the table is Ron Ford. Ron is an economist with the Standards Office.

And at our registration table in the back is Pam King. Pam is a regulatory specialist with the Standards Office in Arlington, Virginia.

This hearing is being held in accordance with Section 101 of the Federal Mine Safety and Health Act of 1977, and as is the practice of MSHA, formal rules of evidence will not apply. Therefore, cross-examination of the hearing panel will not be allowed, but the panel may explain and clarify provisions of the Proposed Rule.

As moderator of this public hearing, I reserve

the right to limit the amount of time each speaker is given as well as the questions of the hearing panel. Those of you who have notified us in advance of your intent to speak will be allowed to make your presentations first. I will call the speakers in the order that the requests were made.

Following these presentations, others who request an opportunity to speak will be allowed to do so. We invite all interested parties to present their views at this hearing, and if you are sitting in the audience now and wish to speak, please sign in at the registration table.

We will remain in session today until everyone who desires to speak has had an opportunity to do so. Also, if you are not speaking today we would like for you to sign the attendance sheets so we have an accurate record of who attended today's hearing.

We will accept written comments and information at this hearing from any interested party, including those who are not speaking. When I call on you to speak, please come to the speaker's table and begin your presentation by identifying yourself and your affiliation for the record.

If you have a prepared statement or any supporting documents that you would like to submit for

the record, please leave a copy with me today. You can give written comments on this hearing to us today or you can send them to MSHA's Office of Standards electronically, by facsimile, by regular mail or hand delivery, using the address information in the Federal Register Notice.

The post-hearing comment period on this Proposed Rule will end on December the 10th, 2004, and submissions must be received by that date.

A verbatim transcript of this hearing will be made a part of the record, and it will be posted on MSHA's website. If you would like a copy sooner, you can make your own arrangements with the court reporter, and the company information for the court reporter is available at the registration table.

Before the speakers begin their testimony, I would like to give you some background on the Proposed Rule we are addressing here today.

The mining industry has been moving toward the use of high-voltage continuous mining machines to increase productivity. This efficiency can be accomplished with a minimal increase in machine size.

When paired with more efficient roof bolting and section haulage equipment, a high-voltage continuous mining machine can increase production over a low- or

medium-voltage continuous mining machine.

These machines use less electrical current and permit the use of smaller cables. Smaller cables are easier to handle and can reduce injuries to miners.

MSHA's existing regulation, 30 C.F.R. 75.1002, applies to the use of electrical equipment and conductors. This regulation does not allow the use of high-voltage conductors or cables, except for high-voltage longwalls, in or inby the last open crosscut or within a hundred and fifty feet of pillar workings.

Consequently, mine operators submitted thirty-eight petitions for modification that MSHA has granted for the use of high-voltage continuous ming machines.

Since the Proposed Rule was published, mine operators have submitted additional petitions, some of which MSHA has granted.

In developing this Proposed Rule we reviewed the granted petitions for modification. The Proposed Rule includes most of the provisions from granted petitions for modification as well as some new safety provisions which enhance safety protection from fire, explosion, and shock hazards.

The proposed rul would improve the design requirements for high-voltage continuous mining machines consistent with existing requirements, accomodate new

design technology that is practical, and lessen burdens on the mining community associated with a petition for modification process, while preserving safety and health protection for miners.

To date we have received five written comments on this Proposed Rule. You can view these comments on our website. And our purpose here today is to further receive information on the Proposed Rule.

Our first presenter will be Mark Fuller with AmerCable, Inc. Mark?

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MR. FULLER: Thank you. I wanted to -- just wanted to -- my name is Mark Fuller. I am with the AmerCable. We manufacture underground mining cables. I just wanted to take this time today, this opportunity, to discuss the -- some of the features that the windsrow five KV high density advanced EC cable and the different elements that are in the cable, so that everybody can understand, you know, what exactly is inside the cable and what the benefits are and some of the safety and use of handling, and also to describe some of the materials that are hooked in that design.

Okay. In the first thing down there, if you look at the cable you see the outer jacket, which has a two -- two layer jacket with a reinforcing covering

inbetween. The outer jacket is coded orange and the inner jacket is a contrasting color, non-black. This all came out of the specifications through meetings when the very first twenty-three hundred volt liners went online, and I have worked very closely with some of the folks at Peabody to develop this specification.

The cable has a very tough outer jacket. It is considered to be extra heavy duty by the Insulated Cable Engineers Association, Specification S-75-381, which I have here. And this is a group of cable manufacturers that meet and write the minimum requirements for cables. And in our particular case, these are -- surpass by a wide margin, so we have a very tough jacket. And the specification, of course, is that it shows the two different colors.

For reference I read Document IN-1219-AD34. I noticed that there was an omission of another jacket that is extremely tough. It is a new material, fairly new, to alert the look at it. It is thermoplastic polyurethane, or TPU.

This jacket is -- can be colored also, but it can only be produced in a single layer, so we can't put the rubbing inbetween the layers. We put the reinforcing rubbing underneath. But its superior physical properties make this single pass tougher than

the two-layer rubber jackets. And the jacket has a five thousand pound per square inch tensile strength, the TPU jacket; whereas, most rubber jackets on the market, and not just ours, would run between twenty-six hundred Psi to three thousand Psi tensile strength.

On tear resistance, tear strength, standard rubber jackets on the market will run anywhere from forty-five pounds per inch to fifty pounds per inch.

This TPU jacket I am referring to, and asking that it be placed into this document as an acceptable alternate is -- has over a hundred pounds per inch tear, so it is over double in tear resistance, and it is -- it is almost double on the tensile strength.

So the aspect of the in and out and, like I said, it is colorable and it is extremely abrasion resistant. It is five times more resistant to abrasion than any standard rubber jacket in the field available to the mining industry. So that is another good reason to include the TPU material in some color. We would want it to be colored, I think, other than black to signify that the cable especially would go for the high-voltage miner.

Okay. When we look at our standard FHD, now looking inside the cable, of course you have tin-coated little copper conductors. And then over that, when you

get into the five KV cables, there is an extruded strand shield. And the extruded semi-conductive rubber is placed around the strand in a circle, and what this does is eliminates high stress points where the bunches of the strand might protrude a little bit. So we have equal stress all the way around the circumference of the insulation and we have a good, even balance there.

And the TPU insulation that we are using today on the five KV cable for a twenty-three hundred volt miner is the same TPU insulation that we used on seventeen hundred volt cables and thirteen-point-seven here on sixteen KV cables. And this insulation is very pure and very clean and has a excellent mechanical strength.

ICEA S-75-381 requires twelve hundred pounds per square inch tensile strength for your insulation. Our TPU insulation that we are using now has seventeen hundred pounds per square inch tensile strength, so you can see there is a lot of not only electrical properties, there are excellent mechanical properties.

But going back to the electrical properties, we see that this TPU insulation that we are using, and it is industry standard, no practice to hide or bend, runs around five hundred to five hundred and fifty volts per mil dielectric strength. And if we were to hook up the

cable and test it and run it up until it blew, it would hold five hundred and fifty volts per thousand cubic inch.

Now you have got point-one-one-zero inches, or a hundred and ten mils over each power conductor. Okay? And so that cable, if you multiply that out, it is going to be up around -- let's see. Five -- be about fifty thousand volts. Okay? So before it would timely break down, and that is the kind of electrical strength that is placed into that cable.

And this has been calculated out. This is over a safety factor of twenty-five. When you compare that voltage at five hundred and fifty volts per mil, it is where the cable is actually sitting in service at twenty-three hundred volts. So there is a huge safety factor built into that.

All of our five KV SHD cables, every reel, is tested at thirteen thousand volts AC before shipping from the factory. Okay? So that shows you, you know, every day routine tests, it is good material and it will function quite amply in the field, and has been for years.

Now in continuing to look at the cable, moving away from the insulation now to the shielding, when the first twenty-two hundred volt miner was being spec'd out

and the cable spec was being written, out customer came to me and said, “What can we do to make this the safest cable you can possibly make?”

Now when you look at the ICEA S-75-381, you see that it allows either a non-conducting tape over the insulation or a conducting tape over the insulation. And these tapes are helically applied and there is about a ten, twelve percent overlap. There is no chance of it coming undone or separated.

And the tape, the semi-conductive tape has a very thick layer -- a fairly thick layer, what I would consider for tape, of semi-conductive rubber impregnated into the fabric. It goes all the way through the fabric, so the outside of the tape and the inside of the tape are both very conductive.

And so I told our customer that if she wanted a hundred percent coverage we should use the semi-conductive tape.

And the -- one of the good things about the semi-conductive tape is that if the cable does get bit, pinched, punched, punctured, damaged mechanically, whatever force hits the jacket hard enough to go all the way through will -- when it ruptures that tape it will take both threads of the tape down into the volting with it, so you will have, you know, the instantaneous trip,

whatever the settings are made on the device of the ground fault.

And then we finish off over that tape with the nylon/copper braid, or some textile/copper braid shielding. And that gives us sixty percent coverage.

The -- and they decided at that point in time the semi-conductive tape was the route to take. And it has been very effective in these applications. To my knowledge there hasn't been any problem in approximately eight years, somewhere in that vicinity, seven or eight years, maybe more.

So that pretty much describes the cable. We have, of course, the braid shield which I have gone through. And then in addition to that are the grounding conductors.

The grounding conductors there, too, are substantial in size. Those grounding conductors represent the -- almost eighty percent of the -- seventy-nine percent of the area of a phase conductor, so through the fault you can see there is almost as much -- almost as much circular mil area, in other words copper cross-section in the two grounding detectors as there is in one-phase conductor. So they will carry and and all volt current should there be any.

Okay. So anywhere the cable -- the cable

assembly is, of course, put together in a helix so it is very flexible and have a certain bend radius to follow when handling the cable. And tensile strength properties involved in handling the cable. But these are all built in, you know, to the best possible product for this application.

In conclusion, the cable design, rubber materials, special shielding and manufacturing processes make the cable capable of withstanding the extremely rigorous environment of mining. This, coupled with the extremely sensitive ground faultprotection described throughout the document numbered RIN 1219-AB 34 indicate that mine operators should be allowed to handle the twenty-three hundred volt cable without the use of special high voltage gloves or other special equipment.

In other words, this should be allowed to be determined between the Union and the operator, you know, instead of mandating that every bit of cable has to be handled with these gloves. They are, you know, extremely stiff and hard to use and hard to grip the cable.

There may be some other -- I would like to see some other allowable methods, at least incorporated into this document, and it will make it better, really, to hold the cable and handle it and to -- for everybody to

understand all of the measures that have been built into this cable.

MODERATOR NICHOLS: Thanks, Mark. Do you have anything new to leave with us for the Birmingham Hearing, anything in addition?

MR. FULLER: No. What I would want to do, I want to re -- I want to e-mail the comments, and then I may make an addendum. You know, make some addendum, maybe discuss some of the sort of same questions. I don't know if anybody has addressed that in any of the comments, but we might have some ideas there that I can incorporate into some of the most recent --

MODERATOR NICHOLS: Okay. Give it to us by December the 10th.

MR. FULLER: Okay.

MODERATOR NICHOLS: That is the closing date.

Any questions for -- Salwa?

MR. EL-BASSIONI: Do you have a sample of your cable with you? And, if you don't, is there -- can you get us a sample?

MR. FULLER: Yes, I can certainly get you a sample.

MR. EL-BASSIONI: The other question I have is, you mentioned that the cable should be handled by other means other than the gloves. Do you have anything

specific in mind?

MR. FULLER: Well, as I look at the gloves, you know, how hard that the leather and the thick rubber is to handle, you know, I think that an insulated hooker stick or something like that would be -- would be good, you know, to grab it, because a lot of times these are in weather, muddy conditions. That is a thought.

There are some -- I understand there are some other types of gloves out there available that have some dielectric strength, but I am not interested in that at all because I have been underground enough to know that some problems can originate just getting ahold of a cable and -- and you have enough hanging up on the cutter drum and stuff like that, and it is -- it is hard to do with those leather covered high voltage gloves, because I have been and watched this cable underground.

MODERATOR NICHOLS: Okay. Anyone else?

MR. BORING: This is Bob Boring. Mr. Fuller, I have, I think, two questions.

One has to do with the sample that Salwa talked about.

MR. FULLER: Uh-huh.

MR. BORING: Could you provide us with a sample of both types of cable, both the colored jacket cable and the TPU cable that you mentioned?

MR. FULLER: Okay. Yes, I certainly can.

MR. BORING: Thank you.

The other question I have concerns the semi-conductive tape material. Do you have any engineering data to show or to give us some information on how conductive that tape might be?

MR. FULLER: Yes.

MR. BORING: Like how much current it can carry, things of that nature?

MR. FULLER: Yes, I can get information on that from our cable supplier.

MR. BORING: Okay. Thank you.

MODERATOR NICHOLS: Okay. Is that it?

(No further questions by the Panel indicated.)

MODERATOR NICHOLS: Thank you, Mark.

MR. FULLER: You are welcome.

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MODERATOR NICHOLS: Our next presenter will be David Jones, United Mine Workers of America.

MR. BAKER: How about if I just go -- if I go first?

MODERATOR NICHOLS: No, you have got to go the way you signed in.

UNIDENTIFIED: Pam, this guy has got to leave in fifteen minutes.

MS. KING: Maybe he could.

MODERATOR NICHOLS: Okay. Tim Baker, United Mine Workers.

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MR. BAKER: My name is Tim Baker. I am Deputy Administrator for Occupational Health and Safety for the United Mine Workers.

I am pleased to be here to give a general overview of the Union's position regarding high-voltage continuous miners. What I would like to do is just really divide this into two very brief discussions.

First on the Rule standpoint: What we see is a potential problem within the current writing of the Rule, and also go with some practical aspects of what we are dealing with, with the high-voltage cable.

I think the first and really most alarming thing that I see within the Rule itself is pretty much an open-end on the amount of voltage that it is going to be allowed to be used in these cables. And as we sit now, we have miners that run on twenty-three and twenty-four hundred volts, and the mine workers clearly understand that high-voltage miners are going to be used. High-voltage miners in some places are necessary to deal with the current coal tonnage process.

However, the Rule would allow for the use of forty-one hundred and sixty volts without any Petition for Modification.

I think from a practical standpoint that is a dangerous precedence. I think that when the high-voltage miners were initially brought in and petitions were filed to use those, even companies that I have had discussions with realized that they didn't understand all the potential hazards or dangers that that may create.

And so when they fashioned their Petitions for Modification they included extra safeguards and we sat down with a lot of those companies to get some of those safeguards included on the twenty-three and twenty-four hundred volt miners.

I think that by not limiting this Rule to that amount and opening up to forty-one-sixty may create other potential hazards that we don't even know may exist out there.

The Union would strongly recommend that in this Rule that the voltage be limited to twenty-four hundred volts, which I believe is the maximum currently out there, current for any miner.

It is out understand clearly too that there is no intention at this point by any mine manufacturer to

create a machine that needs higher voltage. I think if you have looked at these machines and seen them run torques on these high-voltage miners it is, first of all, surprising the amount of torque that these things can generate, but it also creates quite a danger. And I think we have had that experience previously at one of the mining operations where the cutter drum hit some rock and it actually broke the bits off and resulted in a fatality.

There is a lot of torque on these. But we would certainly request that you revisit at least that part of the Rule at this point and limit voltage. We see no need to have more than twenty-four hundred volts.

Longwalls is another story. I think we have got -- we understand how the Longwall Rule works, and we need to limit that.

Also, we have a question on not limiting the amount of splices. And I will be honest with you, some people need a clear something in order to appreciate it. I am confused on what you are saying by not limiting the amount of splices, and in reading the Rule I was a little bit confused, to be honest with you.

Are we talking cave splices? Are you going to permit any of those, just taping over an abrasion? Is that acceptable? Or are we talking that you have got to

have an MSHA approved splice kit boot, the whole bit whenever you knick that cable or for -- something to keep in our lead? I would think that that is the way it is going to work. But if some of you could give me that answer I would appreciate it.

The other thing from the Rule standpoint that we are looking at is the training aspect. The intervention of high-voltage miners also changes the dynamics for the individual working at the mine, and we believe that when that machinery is introduced there should be a training aspect connected to that, that allows that individual to have immediate and current information on what they are going to be dealing with with that new machine.

We don't believe that dumping more into the annual refresher trainings and ask for anything. I think we have made that -- already made prime time again. I mean, we have got to be honest about what is physically required in annual refresher. And the fact of the matter is, with the vast amount of talk considered there, we can't get to more in eight hours, and everybody in this room realizes that.

If you are going to introduce this equipment in a mine, there has to be special training for those individuals. And I think that, at least from one

operation I have recently been at, they don't limit that training to those individuals who are going to be on those sections. New miners that come to that operation are trained when they arrive and told about the hazards of the high-voltage and, you know, where those machines are located.

So I don't see it as a difficult process for the mine operator. A lot of them are coming out with it. And we think that that should be a requirement in the Rule, and not be left to any work pressures, but it went to new knowledge as far as, you know, the practical aspect of high-voltage miners.

I have dealt with a lot of the folks at the mines who have worked with this equipment. First of all, I wouldn't so far as to say that we don't need gloves or -- high-voltage gloves to handle this cable. I don't think the Union is in a position to say that that is in fact a good idea. We haven't arrived at that.

I would say that other means of moving the cable, as was suggested earlier, insulated hooks would be acceptable. And I know that the people that I have talked to who work around this equipment would like to see those used.

From the operation that I was recently at,

though, the suggestion of an insulated hook was brought up, but it was also -- they were also instructed that even if they used the insulated hook they would have to wear the gloves for the sake of time; which is, from a practical aspect, none-manageable, I think.

If you have an insulated hook the gloves don't make much sense. However, if you are going to -- and this was suggested previously, if you are going to lift that cable off over the power head, that you are going to back that machine out and you have to do that, I don't think a hook is the answer. I think you are going to have to have gloves. So I think there is a combination here that you can use. And we would certainly endorse the idea of using hooks to move that cable.

The other thing that I think, there is some confusing district-to-district within the testing of these gloves. And I will give you a for instance. I have talked to several operators. One operator who had a citation written whenever he had a miner helper who picked up the cable with his gloves on, picked up the cable and moved it out of the way. He then took off the gloves, okay, to clean his glasses, and put the gloves back on. The citation was issued because he did not retest the gloves before he put them back on.

And all we are talking about is a glove test. And I think everybody -- you usually blow in them when you roll them up and make sure that those gloves hold air.

I think from a practical standpoint that individual who was in possession of those gloves the whole time certainly didn't need to retest those gloves simply because he took them off to clean his glasses. I mean, we have got to get a rule that is more practical about how we do this, and we have got to be a little bit more in face across the board district-to-district within the industry. And I think that is a fair statement. I think that is, from a practical standpoint, that is the way it should be.

The other thing that I looked at and I have seen is the way the cable itself is treated, and I think that there are certain precautions that we have got to take when we get into high-voltage, and I would agree with that. But sometimes I think we may create more hazards for ourselves than we eliminate.

At the operation I was at yesterday, slack cable was in a crosscut outby. It is barricaded. You can't get into it, and I understand that it has part of their partition.

However, as you walk up to the face and you get

next to the last crosscut, there is just as much or more cable laying there. I am a little bit confused as to how we treat it when it is outby where nobody is at and how we treat it inby where the equipment is being run.

The cable is from the barricade then hung across the crosscuts and along the rib line. And I think to a circumstance when you look at this just from a outside point of view, you think well that is a good idea to hang that cable and get it out of the way.

Well I witnessed, and have witnessed on a couple of occasions, that I think we have created a greater hazard here by hanging that cable where we hang it. And if I can briefly explain.

I have talked to several of the -- several mill car operators and a couple of ram car operators who travel by this cable on a routine basis. This cable hanging on the rib line hangs just about, and in many instances right at canopy height. Okay?

The concern I think that I have and the hazard I think that is created by this is if that individual slides through that rig and that canopy hits that cable -- and I am not certain if any of you have seen a twenty-four hundred, twenty-three hundred cable blow out, but you get a heck of a flash and a heck of a fall.

If that occurs right there next to -- as I

said, we are going to have a major fall with him. And so I am not sure we haven't created a greater hazard by hanging that cable along that rib line.

Certainly, I think that as you look realistically after you initially -- you say, well, you don't want to lay it on the ground, but. . . From a practical aspect, if that cable is going to get hit by the buggy, I would sooner have it hit it by a tire than the canopy where you would even get the soot in there.

I think that is -- that is a concern that these miners expressed to me and something that we certainly need to look at.

As far as the practical application of the high-voltage miner, I think that they are here. I think they are necessary in some instances, and the Union has at this point no problem dealing with those -- I guess other safety issues that are out there. But I think as we go through the Rule you have got to look at the practical aspect of this, also.

I see a lot of that missing, and I -- you know, you need to -- several operations I have been in I have noticed that that practical aspect is missing.

Hanging the cables or barricading outby areas so you can't get next to the cable wall -- I have -- and I guess I should give you a clear for instance. I have

twenty-three hundred volt cable in a crosscut, barricaded off so I can't get near it. Right beside that crosscut is a sled with fourteen thousand five hundred volt cable. I can sit down and eat my lunch.

So I am not sure what we are doing here, and I an not saying that we don't need to take special precautions, but what I am saying is are we -- are we creating a hazard here that we don't need to. Putting barricading, I think we have created a problem.

As far as the application of the gloves, I needed to go back here. I will disagree with anybody who says we don't need gloves. I don't think the need is in a position to say that you just grab for that cable and go with it.

On the other hand, I think you need to be a little bit more understanding about how this cable runs through the mine. And if you permit me, I will do this for a reason and then I will be off.

You can -- if you can picture the cable hanging -- being hung the whole way from the barricade to the face and then drop on the bottom, and for six crosscuts my shuttle car where my ram car is driving right alongside it, and it is laying on the bottom, I think that is less the hazard, laying on the bottom. I think that even with that better shuttle we need to get that

cable off that rib, for the safety of those individuals running those cars. It is a matter of timing before we get into muddy situations and somebody slides into it.

At this point I am going to reserve a whole bunch of comments we have for Morgantown, simply because they -- and what I will try to do at Morgantown, is I will try to do a prepared statement. That way I can read it and turn it in so we can be really clear on all that. But from the Union's standpoint, we see what is out there. We just want to get the best safety controls on these that we can.

One of the things I think we need to start with is to limit that voltage to what it is right now. There is no need to go beyond that at this point.

Thank you.

MODERATOR NICHOLS: Okay. Thank you, Tim.

Wait, Tim. We have got a question.

MR. BAKER: Oh, I am sorry.

MR. EL-BASSIONI: Can you clarify your comment about the use of the gloves? In the Proposed Rule we are saying if you use tongs, hooks, or mits or whatever, you still need the gloves. Is this what you are saying, or are you saying if we used any of these we don't need the gloves?

MR. BAKER: Well, I think from a practical

standpoint, and in talking to the individuals who work around this equipment, what you are saying is if I had a -- if I had an insulated hook, a lineman's hook, for instance, that they would use on high voltage, and it is two feet long and it is insulated, you know, obviously the people that are up there would be saying it doesn't make practical sense to have gloves and the hook.

The best thing about the hook is I grab a hook and I drag the cable over. It is insulated; therefore, I am protected. Okay?

If I am going to have to wear the gloves anyhow, then the hook doesn't make much sense. And they would prefer to use the hook, obviously.

If you are on the trailing cable and that machine is operating cutting coal, more often than not a hook would be sufficient. I mean, you are going to drag it all the way above you, or you are going to drag it out of the way of the cap to the miner. You don't necessarily have to pick it up and throw it.

You know, my folks are telling me as evidence, with the hook they are very comfortable with that. And I think we are, too, provided that hook is insulated sufficiently to protect them. There is no need for both the gloves and the hook.

MR. EL-BASSIONI: One more thing. You mentioned

something about the splice kit, eventually requiring any self-stick, I think. I believe that we are requiring MSHA boot kit, and I don't know whether you have seen that provision.

MR. BAKER: I did, but I was confused by this. There is also a lot of comment in there about taping areas. You know, we are not -- we are very opposed to taping cable.

I -- the bottom line, let's do this: Once I have a knick on a cable and somebody tapes that, or I tape it, and you go in the next shift, you don't know what is there. And in some instances that may be suitable just to tape over it, and others it may not. And we get a little bit apprehensive whenever, you know, we see a cable with just taping over an area.

Especially when you get into an area that is, you know, a foot and a half, two feet long, I get a little skeptical about what is under there.

My question is, when the cable is knicked, are we requiring a splice kit in every instance, a approved splice kit where they have the, you know, the glue, the boot, the whole bit, or are we going to allow taping on these, and use other things on it?

MR. STAHLHUT: May I ask?

MODERATOR NICHOLS: Yes, go ahead.

MR. STAHLHUT: Ron Stahlhut. You did order and you used the same approved splice kit, and then the instructions are to be included in that approved splice kit for use with a splice for a cable, power jacket cable repair. And that should be included in the instructions in that splice kit.

MR. BAKER: Okay. Ron, then let me ask you this real quickly. If -- at what point -- at what point do I have to splice that cable, or is this when it goes through the outer jacket, the inner jacket, when I get the shielding, or --

MR. STAHLHUT: Daily inspect shield or conductors.

MR. BAKER: And at that point then I need a splice kit?

MR. STAHLHUT: Yes.

MR. BAKER: A full splice kit.

MR. STAHLHUT: Uh-huh, yes.

MR. BAKER: Then that answers my questioh.

MODERATOR: Okay. Who do you want to come up next?

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MR. JONES: David Jones. I am the President of Local Union 9800 United Mine Workers.

And my position is, I would like to ask that

MSHA take into consideration the use of as low a voltage as possible to run this equipment in the mines. And whenever we are handling cable, I think they ought to use their gloves or some type of a safety tong or whatever.

That is all I have.

MODERATOR NICHOLS: Okay. Thanks, David. Any questions?

(No questions by the Panel indicated.)

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MODERATOR NICHOLS: Go ahead.

MR. COX: I am Bob Cox, President of Local Union 3000, down in Western Kentucky.

Having spent the past thirty-and-a-half years of my life underground every day, I would like to give a little practical view. I don't have any certificates about cables and all that; although, you all know in Western Kentucky there is a difference between cable's outside use and one that is in use underground, so for two or three weeks.

Things change, as you know, with use, deterioration and stuff. So it concerns me at any time that we are talking about upping voltage and at the same time talking about might not need the proper insulation for the hands or whatever.

Things do change as mining continues, and I tell them strictly from the practical side of it, actually doing it every day. And I know that there is the technology and I know the recommended production. And I wouldn't want to dig into any of that because, you know, I want to enhance coal mining.

But more than that, I want to protect the miners that have to do the things, because they already claim they have got a shortage of them; so, I mean, you know, it would be a shame to have a big shortage.

So, I don't know. I worked in mines where we had some of the first nine-hundred mining volt miners. It was considered a higher voltage, you know, that most of them is four-forty. And then they come up with the nine-ninety, and some more around in the eighties, I think. But that is when we got them at the Maltese Mines.

And there was things better that even VanCusper didn't know at that time. And they have been designing many fashion of miners and cables for years and years, so, you know, you have to be concerned about anything that you get for an underground, what you are going to cause.

That is the one thing you have to think every day about. Flip this switch, what is it going to do?

If there is a cave-influence cooking, you know? Ones that has got any mining experience can understand that.

So we don't think concerned with our miners, and I would say that the more voltage you put on it the more concern you would want to have, in my opinion. And certainly all the protection in the world is not enough if somebody gets hurt. So you certainly want to use all the protection that is available to you, handling cable and you are pulling leads.

And, like I said, I am just strictly speaking from concerns of the miners people that actually has to do these jobs after we get done talking about it.

I thank you.

MODERATOR NICHOLS: Thank you.

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MR. O'NEIL: Hello. My name is James O'Neil. I representative the United Mine Workers of America.

I have twenty-four years underground mine experience at Pyro Mining Company and later at Load Star Ends, and I worked about eighteen of those years in a non-union mine, so even though I am here to represent the UMWA, I am speaking for all miners.

And I am going to try to be talking to you from the perspective of a miner, because that is pretty well all I have done my whole life, but it goes wider.

I think that, you know, we have to worry about production, of course. And I know you are in the expert panel and you have to find a happy medium. It is a thing that you have got to look at, and I don't want to be redundant, is we -- we have to first consider the miner with the safety.

And we have all -- we have heard a lot about the bells and whistles on this high-voltage cable, but from my personal stance, you know, I think any time that you put high voltage in the last double crosscut of a working section that you are asking for trouble.

Because, you know, if you are just -- we have heard, or we have -- everybody has tried to paint the scenario, if all the bells and whistles of this high voltage are in place and they work, yeah, it sounds like a good thing.

But in reality, if you go down there and watch miners day in and day out, you know cables are going to be cut. They are going to be accidentally ran over. And so this is going to happen. I can tell you from a personal experience. It is going to happen because, you know, it is just human error. When you have got equipment running and those type quarters, spaces, and the low areas, it is going to happen.

And then we have talked about the shielding and

the extra precautions and the extra standards that we have put on this cable, and that is all good and fine. But I would ask the Board to go back and look. You know, our federal inspectors, state inspectors, do a great job. And, you know, they are the miners' watchdog.

But every time they go in a mine -- well, I am not going to say every time. Let me correct myself. But most times they find a violation, and they take care of that or they cite that.

You know, even in low-voltage cables, you know, they are not maintained like it would be if it was a perfect world. They are not maintained. You can -- you can look at your records of citations and -- and even fatalities regarding electrocution.

You can look at that, and I am telling you, you know, if we can't keep the low-voltage cables maintained to a perfect standard, which all you have got to do is look at your violations, we are not going to be able to keep this one maintained perfectly either.

So I think you have got to -- you look at things from the perspective of the miner, you know, without blinders on, because it is not going to be a perfect world down there.

And if you look at the records of citations in

the past with low voltage, and then you can come to the realization that this one isn't going to be maintained perfectly either. And that is what is going to endanger the miner.

You know, I don't care if you hang it, like Tim said earlier, it may be even with the canopy. I don't care of you try to store it. The only way you are going to protect it is to not let them have a slack pile at the face and, you know, that is going to be hard to run the thing.

You know, even if you hung it to the miner all the way, which is virtually impossible, and then run coal, you know, there is still the possibility that it is going to be hit. And I think -- I wish the Board would take that into consideration, you know.

And I wish that you would call on some of your federal inspectors and really speak with them at length and use their experiences with this.

You know, with -- somebody said awhile ago, you know, if that cable was knicked and we tape, just tape the outer jacket, you know, if you will talk to your federal inspectors, I have travelled with them in the mine after with the Union, and we have cut up numerous splices on there at an inspection and they have not been spliced correctly. I mean it happens numerously.

So from a miner's perspective, I think we are asking for trouble when we put high-voltage inby the last double crosscut, and we really can't even take care of low voltage to a standard that we would all like to have it.

And questions for me?

MODERATOR NICHOLS: Thank you, James. Questions?

MR. BORING: I have one.

MODERATOR NICHOLS: You got one?

MR. BORING: Sir, you mentioned -- this is Bob Boring. You mentioned about the --

MODERATOR NICHOLS: Pull that over. Can the court reporter hear that okay?

REPORTER: Yes.

MODERATOR NICHOLS: Okay.

MR. BORING: You mentioned about splicing of the low volt, of the cables. Are you speaking of the low new voltage cables, or are you particularly discussing the high voltage type cables?

MR. O'NEAL: No, no. I have been -- it was low voltage, is all that I am familiar with.

MR. BORING: Okay, sir. Thank you.

MR. O'NEAL: They are not -- and quoted the -- I don't know. Did I say twenty -- I have been working

twenty-four years. Eighteen of those was non-union. Six were union for Pyro and Load Star .

Thank you.

MODERATOR NICHOLS: Thank you. Steve Earle?

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MR. EARLE: Mr. Nichols, my name is Steve Earle. I am representing United Mine Workers this morning.

I have got a couple of questions I would like to ask the Panel that maybe you all can answer.

I am a thirty-three-year coal miner, and I have done quite a bit of mechanic work underground, moving electric rope in the years that I have worked for Peabody Coal.

As you all are aware, we had problems down at the Highland Operations with the high-voltage continuous miner, and I think it was a twenty-three hundred volt miner. We have had a fatality, and high torque on that miner as a result of that. The miner was sharing bits and one of the slower set bits hit the miner and caused a fatality. And those miners down there now, the miner operators, are wearing Camelot Dinkies.

If we in -- you increase the voltage of these miners, you go to the maximum of forty-one-sixty volts, how much does that torque increase in that miner? How much more torque do you have? That is the question I am

asking.

MODERATOR NICHOLS: Anybody want to fully address that? That -- I remember that fatality. Was that fatality attributed to a high-voltage mining machine or just a mining machine? I am getting nods from the audience here.

MR. EARLE: When they -- it is my understanding -- I wasn't down there when the investigation was ongoing. It is my understanding that the torque on that miner, when it got in, got in and started cutting, when it hit rock it, you know, it was going so fast the head, one of those bits just separated. And I think one of the things was the high torque in there.

Can you all elaborate on that, or --

MODERATOR NICHOLS: No, I don't think so.

MR. EARLE: I guess the question I am -- the question I am asking --

MODERATOR NICHOLS: Well, but --

MR. EARLE: -- is if we increase the voltage on these miners, how much more torque do we have? I am not aware of it. I don't know. That is why I am asking you.

MODERATOR NICHOLS: I don't think we know that either. Does anybody know that?

MR. EARLE: Well, I think that certainly should

be a major concern.

MR. STAHLHUT: I don't, but I -- one of the factors in the fatality is going to solve that. One of the fatality -- one of the factors there where this bit -- bit lacing or the bit spacing, it will add at new horse power.

MR. EARLE: Right.

MR. STAHLHUT: And I don't remember the exact details of the fatality report, but there is no doubt the more horsepower, I would say that there is a correlation to tid pressure on bits. Depends on the bit at the time, so there is a whole design system there. It is a hard question to just definitely answer, would it be more. Depends on the increase in horsepower.

MR. EARLE: Well, if you increase the horsepower then you are going to have more torque, right?

MODERATOR NICHOLS: That would be -- I think that -- I think I can understand that one.

So is your comment that we shouldn't increase?

MR. EARLE: Right.

MODERATOR NICHOLS: Or what is your recom --

MR. EARLE: I think we need to be very careful increasing voltage. Now we have done -- we have got miners down there wearing Camelot Dinkies now to protect

them, and we need to do everything we possibly can to protect our miners. And I think that is a major concern, increasing voltage.

MODERATOR NICHOLS: Okay. I think we understand your position.

MR. EARLE: You all are the experts on this. That is why I wanted to ask the question. I didn't know.

MODERATOR NICHOLS: Well, what we are here to do is to just take comments, allow those comments. So I think we understand your comment.

MR. EARLE: Yeah. Well, that is a concern that we have, increasing voltage and increasing the torque. Are we going to have more and more bits disintegrating and, as a result, they come out and injure the miner.

MODERATOR NICHOLS: I think we understand your comment.

MR. EARLE: Okay. That is all I have.

MODERATOR NICHOLS: Okay.

MR. EARLE: Thank you, Marvin.

MODERATOR NICHOLS: Any questions of Steve?

(No questions by the Panel indicated.)

MODERATOR NICHOLS: Okay. Thanks, Steve.

MR. EARLE: Thank you.

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MODERATOR NICHOLS: That is all the people we have signed up to give comments on the high-voltage continuous miner. Are there others in the audience that would like to make comments on high-voltage continuous miner?

(No further comments indicated.)

MODERATOR NICHOLS: Okay. Let's take a break until ten-thirty, and we will switch over to Portable Diesel Generators.

See you at ten-thirty.

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(THE TIME BEING APPROXIMATELY 10:00 A.M., THE HEARING WAS TEMPORARILY ADJOURNED.)

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(THE TIME BEING 12:00 NOON, AND THE PANEL MEMBERS PRESENT AS INDICATED HERETOFORE, THE HEARING WAS RECONVENED.)

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MODERATOR NICHOLS: This is Marvin Nichols. We are back on the record for the high-voltage continuous miner rule. It is about Noon.

If there is no other person to show up wanting to give us comments, then we are going to close the record on the high-voltage continuous miner.

We will break for lunch from Noon until one,

and at one o'clock we will go back on the record for the portable diesel generator rule.

(AT THIS POINT THE HEARING RECORD ON THE HIGH-VOLTAGE CONTINUOUS MINING MACHINES WAS CLOSED.)

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(WHEREUPON, A LUNCH BREAK WAS TAKEN UNTIL 1:00 P.M.)

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