

TRANSCRIPT OF PROCEEDINGS

IN THE MATTER OF:)
)
PUBLIC HEARING ON PROXIMITY)
DETECTION SYSTEMS FOR CONTINUOUS)
MINING MACHINES IN UNDERGROUND)
COAL MINES)

Pages: 1 through 138
Place: Charleston, West Virginia
Date: October 20, 2011

ANTHONY & ASSOCIATES, INC.

770.590.7570

ANTHONY & ASSOCIATES, INC.

770.590.7570

AB65-HEAR-2

IN THE MINE SAFETY AND HEALTH ADMINISTRATION

IN THE MATTER OF:)
)
 PUBLIC HEARING ON PROXIMITY)
 DETECTION SYSTEMS FOR CONTINUOUS)
 MINING MACHINES IN UNDERGROUND)
 COAL MINES)

Charleston, West Virginia

Thursday
October 20, 2011

APPEARANCES

MSHA Panel:

GREGORY WAGNER, DAVE CHIRDON, MATT WARD

Speakers:

CHRIS HAMILTON, Senior Vice President, West
 Virginia Coal Association
 BRIAN THOMPSON, Local Representative, Joy Mining
 Equipment
 DENNIS O'DELL, Administrator of Occupational
 Health & Safety, United Mine Workers

P R O C E E D I N G S

(9:02 a.m.)

1
2
3 MODERATOR WAGNER: Good morning. My name is
4 Gregory Wagner. I'm the Deputy Assistant Secretary for
5 Policy for the Mine Safety & Health Administration. I'm
6 going to be the moderator for this public hearing on
7 MSHA's Proposed Rule on Proximity Detection Systems for
8 Continuous Mining Machines in Underground Coal Mines.

9 On behalf of Assistant Secretary of Labor for
10 Mine Safety & Health, Joseph A. Main, I want to welcome
11 all of you here today.

12 I'd like to introduce the members of the MSHA
13 panel. To my right is Dave Chirdon from the Approval and
14 Certification Center, MSHA's Tech Support, and Matt Ward
15 from the Office of the Solicitor.

16 In response to requests from the public, MSHA
17 is holding public hearings on its Proposed Rule for
18 Proximity Detection Systems for Continuous Mining
19 Machines in Underground Coal Mines.

20 This is the second public hearing on this
21 proposal. The next hearings will be held in Washington,
22 Pennsylvania, on October 25th, and in Evansville, Indiana
23 on October 27th.

24 The purpose of this hearing is to receive
25 information from the public that will help MSHA evaluate

1 the requirements of the proposal and produce a final rule
2 that will improve safety conditions at mines.

3 As most of you know, the hearings will be
4 conducted in an informal manner. Formal Rules of
5 Evidence will not apply. The hearing panel may ask
6 questions of speakers and speakers may ask questions of
7 the panel.

8 Speakers and other attendees may present
9 information to the court reporter, sitting over here --
10 want to wave -- for inclusion in the rule making record.
11 MSHA will accept written comments and other appropriate
12 information for the record from any interested party,
13 including those not presenting oral statements.

14 We ask that everyone in attendance sign in on
15 the attendance sheet that's on the table just before you
16 enter the room.

17 MSHA is proposing to require the use of
18 proximity detection systems on continuous mining machines
19 in underground coalmines according to a phased-in
20 schedule. This rule would help protect miners from the
21 pinning, crushing and striking hazards that result from
22 working too close to continuous mining machines in
23 underground coal mines.

24 The proposal would also establish performance
25 and maintenance requirements for proximity detection

1 systems and require training for miners conducting
2 installation and maintenance of these systems. The
3 proposed rule is an important part of the Department of
4 Labor's "Plan, Prevent and Protect" strategy.

5 MSHA requests comments from the mining
6 community on all aspects of the proposed rule and is
7 particularly interested in comments that address
8 alternatives to keep provisions in the proposal.
9 Commenters are requested to be specific in their comments
10 and submit detailed rationale and supporting
11 documentation for suggested alternatives.

12 At this point, I'd like to reiterate some of
13 the requests for comment and information that were
14 included in the preamble to the proposed rule. And let
15 me say, if you haven't seen the proposed rule, there are
16 a limited number of copies on the desk where you signed
17 in.

18 So some things that were asked for in the
19 preamble would include the following.

20 Number 1. MSHA proposes to phase in the use of
21 proximity detection systems over an 18-month period.
22 Continuous mining machines manufactured after the date of
23 publication of a final rule would be required to be
24 equipped with proximity detection system three months
25 after the date of publication of a final rule.

1 Continuous mining machines manufactured on or before the
2 date of publication of the final rule would be required
3 to be equipped with proximity detection system 18 months
4 after the date of publication of a final rule.

5 The Agency requests comments on the proposed
6 compliance dates considering the availability of systems,
7 the time necessary to process approvals for proximity
8 detection systems, and projected time needed to install
9 the systems.

10 Number 2. MSHA proposes to require the use of
11 proximity detection systems that cause machines to stop
12 no closer than 3 feet from the miner. The continuous
13 mining machine operator would be allowed to be closer
14 than 3 feet only when the machine is cutting coal or
15 rock. However, the proximity detection system would be
16 required to prevent contact with the machine operator.

17 MSHA considered proposing other specific
18 stopping distances and considered a performance-oriented
19 requirement that would not have included a specific
20 distance. MSHA requests comments on this proposed
21 provision, including whether a greater distance or a
22 performance-based approach would be effective
23 alternatives to the proposed 3-foot stopping distance
24 requirement.

25 Number 3. Some proximity detection systems on

1 continuous mining machines are installed to stop machine
2 tram movement and the conveyor swing function when the
3 system is activated while permitting other machine
4 movement, such as rotation of the cutter head and
5 movement of the gathering arms.

6 MSHA requests comments on whether all movement
7 should be stopped or under what, if any, circumstances
8 would it be acceptable for continuous mining machines to
9 continue mining -- excuse me -- to continue moving.

10 Number 4. The proposed rule does not cover
11 full-face continuous mining machines. A full-face
12 continuous mining machine includes integral roof bolting
13 equipment and develops the full width of the mine entry
14 in a single cut, generally without having to change its
15 location.

16 The Agency is interested in whether full-face
17 continuous mining machines should be equipped with a
18 proximity detection system, and, if so, why.

19 Number 5. Each of the three proximity
20 detection systems approved for underground coalmines in
21 the United States require use of a miner-wearable
22 component. These systems cannot detect a miner who is
23 not wearing the component.

24 MSHA solicits comments on which miners working
25 around continuous mining machines should be required to

1 have a miner-wearable component.

2 Number 6. Most proximity detection systems
3 alert miners who get within a certain distance of a
4 machine before causing machine movement to stop. This
5 provides an added margin of safety that's consistent with
6 most standard safety practices. The Agency recognizes
7 that the use of a proximity detection system that causes
8 frequent machine stops can result in frustration to
9 miners, miners ignoring warnings, and can possibly lead
10 to unsafe work practices.

11 MSHA believes that an appropriate warning
12 signal is necessary to optimize safety of miners when a
13 proximity detection system is used. MSHA requests
14 comments on this provision, including whether a greater
15 distance or performance-based approach would be effective
16 alternatives to the proposed five-foot warning distance
17 requirement.

18 Number 7. MSHA's estimates of the benefits and
19 costs of the proposal are given in detail in the
20 Preliminary Regulatory Economic Analysis and are
21 summarized in the preamble. MSHA requests comments on
22 the proposed estimated benefits and costs.

23 As you address the proposed provisions either
24 in your testimony today or in written comments, please be
25 as specific as possible. We cannot sufficiently evaluate

1 general comments. As I said earlier, please include
2 suggested alternatives, including those of a performance-
3 based nature, your rationale, the benefits to miners, any
4 technological and economic feasibility considerations,
5 and any data that support your comments. The more
6 specific your information is, the better it will be for
7 MSHA to evaluate and produce a final rule that's
8 responsive to the needs and concerns of the mining
9 public.

10 You may submit comments following this public
11 hearing. Comments may be submitted by any method
12 identified in the proposed rule and must be received or
13 postmarked by November 14th, 2011. MSHA will make
14 available a verbatim transcript of this public hearing
15 approximately two weeks after the completion of the
16 hearing.

17 You may view the transcripts of all the public
18 hearings and comments on MSHA's website at www.msha.gov
19 and on www.regulations.gov.

20 We will now begin hearing testimony. If you
21 have a copy of your presentation, please provide it to
22 the court reporter. I'm going to ask each person who
23 speaks to please begin by clearly stating your name and
24 your organization, and spell your name for court reporter
25 to make certain that we obtain an accurate record.

1 Our first speaker today is Chris Hamilton.

2 MR. HAMILTON: Good morning.

3 MODERATOR WAGNER: Good morning.

4 MR. HAMILTON: I hope your travel here was
5 uneventful.

6 MODERATOR WAGNER: It was quite eventful, thank
7 you.

8 MR. HAMILTON: My name is Chris Hamilton,
9 Senior Vice-President, West Virginia Coal Association.

10 Our association is comprised of coal producing
11 companies that collectively account for over 95 percent
12 of the state's coal production. The State of West
13 Virginia is the nation's leading underground coal
14 producing state, consistently averaging over 150 million
15 tons of annual coal production over the past decade.

16 Arguably, our industry here in West Virginia,
17 our members, are more directly impacted by this rule than
18 most others. As an industry, we wholeheartedly support
19 the development of proximity detection technology and its
20 eventual widespread deployment and use in underground
21 mining applications.

22 As evidence of this position, our association
23 has been part of a pilot project with the West Virginia
24 Mine Safety Technology Task Force and other industry
25 partners since 2008, in an effort to evaluate and advance

1 this technology forward. Other partners in this
2 important endeavor include the State of West Virginia
3 through the Mine Safety Technology Task Force, the Office
4 of Miners' Health Safety and Training, representatives of
5 labor, the United Mine Workers, manufacturers of
6 proximity devices, individual coal companies, NIOSH, and
7 even MSHA.

8 As I indicated, this project began in late 2008
9 and continues today. The idea, then and now, was to have
10 several control mines that would agree to install
11 proximity detectors on continuous miners in order to
12 monitor and evaluate the available technologies in a
13 number of underground applications. It was originally
14 anticipated that the control mines would vary in seam
15 heights and have different layouts and design.

16 My purpose of mentioning this today is so that
17 you are at least aware of the work that has been done
18 here in West Virginia by the Mine Safety Technology Task
19 Force, which you should find useful in your current role
20 with this rule making, and to encourage MSHA to
21 coordinate its work in rule development with the State of
22 West Virginia to avoid the issues we experienced with
23 underground safety shelters where the State had different
24 criteria and standards, or MSHA for that matter, for
25 approving underground -- and for the design of

1 underground shelters.

2 Accordingly, I will submit for your review a
3 copy of the work plan and protocol developed by the task
4 force to provide guidance and oversight to the pilot
5 project. This document was recently circulated by the
6 Office of Miners' Health Safety and Training and was
7 accompanied by a memorandum, which, in part, stated that
8 all proximity detection equipment must be tested and
9 approved by the Director of the Office of Miners' Health
10 Safety and Training.

11 In essence, we hope to avoid a situation where
12 the State and MSHA are on two separate paths and
13 ultimately end up with two separate rules and
14 requirements for the operation and installation of
15 proximity detection devices. We simply urge the two
16 agencies to work closely together to share information
17 and resources towards that end.

18 We are aware that a relatively small sample of
19 mine operators have purchased and implemented proximity
20 detectors on a limited and small-scale basis. We
21 understand that issues of availability and reliability
22 were prevalent in each instance. Hence, a major concern
23 shared by our industry today is over how this technology
24 has evolved over the past couple of years and whether it
25 is ready for widespread or industry-wide implementation.

1 It would appear that the timeline proposed in
2 the Agency rule is not sufficient to accommodate
3 manufacturing production and delivering capabilities,
4 operational demands, and existent equipment refit or
5 replacement schedules. Questions also flow concerning
6 the availability of technical resources within the
7 industry to complete installation demands. Frankly,
8 there are several mining firms with large inventories of
9 continuous mining machines, which would require
10 substantially more time than the timeline proposed by
11 MSHA. I believe you will be hearing from those companies
12 throughout this public comment period, and we'll be more
13 specific to that point in our written comments.

14 One of the major problems in safety issues that
15 this rule purports to address is miners being struck by
16 moving equipment or moving parts thereof. As with most
17 safety concerns, there are a number of ways to
18 effectively address this underlying concern. Training
19 and education, effective supervision, the use of
20 technologies, operational controls and safeguards,
21 individual alertness, enhanced communications and
22 coordination among team members are all important tools
23 in the world of accident prevention and often employed
24 concurrently and used in concert with one another. A
25 discussion of the rule and rationale for the rule within

1 MSHA's proposal addresses some of these issues.

2 Another important tool under professional
3 safety management and accident control involves
4 engineering process or administering the process, so the
5 frequency or exposure that one has to accident-producing
6 situations is decreased or eliminated. Towards that end,
7 and as it relates to the hazards or underlying safety
8 concern, which this proposed rule purports to address,
9 MSHA has the authority and power to immediately reduce
10 the exposure or frequency that miners have to moving
11 underground equipment by encouraging and expediting the
12 approval of extended cut mining systems. But for some
13 inexplicable reason, MSHA continues to be reluctant to
14 approve extended cut mining plans here in West Virginia.
15 In fact, there have only been a relatively small number
16 of extended cut plans or plans allowing dust rubbers to
17 be used that have been approved over the past several
18 years.

19 Extended cut remote controlled mining is one of
20 the many technological advances used in mining today that
21 has allowed West Virginia's underground mining industry
22 to achieve and improve mine safety performance and gains
23 in overall mine efficiency. As we know, this method of
24 mining is designed to optimize individual miner safety by
25 providing the continuous miner machine operators an

1 operating position a safe distance from the face, away
2 from respirable dust and gas as coal is extracted, and to
3 minimize the number of times the machine must be moved,
4 relocated, and repositioned for mining.

5 Mine safety is further enhanced by this method
6 of mining by cutting down the number of times that
7 continuous mining machines and all other section
8 equipment are moved around in tightly confined
9 underground areas limiting miner exposure to accident-
10 producing situations by as much as 78 percent. The use
11 of deep cut mining and machine-mounted dust rubbers have
12 improved the level of health and safety of coal miners by
13 reducing explosive and respirable dust by reducing
14 unnecessary equipment moves and eliminating a multitude
15 of accident-producing situations every single day. When
16 this equipment is approved by MSHA for use, as it was
17 developed and designed, it is a win-win situation for the
18 miner and for the industry.

19 The majority of extended remote controlled
20 mining machines in operation today have been in place for
21 years and operate at high levels of safety and overall
22 efficiency. Without exception, report after report
23 published by mining and mine safety professionals, NIOSH
24 and the former Bureau of Mines attest to the safety
25 advantages and overall accomplishment of this method.

1 Even a cursory review of this published mine safety
2 research leaves little doubt over the safeness and
3 superiority of this method of mining. We'll submit a
4 list of these reports we've referenced in support of
5 extended cut remote control mining with our testimony.

6 However, when new operations commence, or when
7 existing mine operations attempt to expand current
8 capacity, the approval of these machines is arbitrarily
9 and inexplicably withheld by the Mine Safety & Health
10 Administration. In fact, there have only been a
11 relatively small number of extended cut plans, or plans
12 allowing dust rubbers to be used, that have been approved
13 over the past several years. We believe this is simply
14 unacceptable.

15 MSHA's reluctance to approve this method of
16 mining places hundreds of miners in harms way at an
17 alarming rate on a daily basis in West Virginia's
18 underground coalmines. Obviously, the deeper the face
19 penetration, the fewer times that continuous mining
20 machines and other supportive equipment is moved and
21 confined in underground spaces and less disruption to the
22 mining cycle in the miner's daily routine.

23 It is also true that when the continuous mining
24 machine is forced to move and relocate underground, every
25 other piece of mining equipment that follows the

1 continuous miner in the mining sequence must also move
2 and be relocated or repositioned. This would typically
3 involve two or three shuttle cars, one or two roof bolter
4 machines, and a scoop car. This point is so compelling,
5 it frames the unchallenged conclusion that requests to
6 use this form or method of mining should be approved
7 without delay. In fact, unless there are demonstrated
8 geological issues that may affect roof stability or
9 exceptionally high methane liberation, these requests
10 should carry, in our view, a rebuttable presumption that
11 their approval be expedited by regulators charged with
12 safety, particularly when we want to eliminate accident-
13 producing situations from moving underground equipment.

14 Based on a survey conducted by our association
15 earlier this year, there are approximately 345 continuous
16 miners that can use extended cut remote controlled mining
17 systems in operation today. There are 230 mine plans
18 purporting to use extended cut remote controlled mining
19 systems. At one point this year, there were 90 plans
20 awaiting approval for extended cut mining. Some have
21 been waiting for over a year.

22 Also earlier this year, NIOSH released a
23 comparable study of respirable dust control measures and
24 their effects on extended cut mining methods versus
25 traditional 18- or 20-foot cuts. The study focused on

1 six control mines throughout central Appalachia during an
2 18-month period from the fall of 2009 to late 2010. We
3 will also attach a copy of this study for your review and
4 consideration. The report concludes that with regard to
5 respirable dust, which we so often hear is the reason
6 that MSHA withholds or has a moratorium on approving
7 extended cut mining plans, that there was no statistical
8 differences between dust control and compliance averages
9 between extended cut mining and traditional or non-
10 extended cut mining methods.

11 Two independent analyses of this method of
12 mining were also recently conducted, which we'll include
13 with our written comments. Both reports reveal similar
14 findings, particularly as it relates to the number of
15 unnecessary equipment moves; mining machines are being
16 compelled to maneuver in West Virginia underground coal
17 mines subjecting miners to a high risk of hazards. It
18 was found that under the same conditions, taking an 18-
19 foot cut instead of a 38-foot extended cut, increases the
20 tram distance and, thus, exposure to machine-related
21 injury by 78 percent.

22 I would also point out that the study cited
23 within MSHA's proposed rules by MSHA's Technical Support
24 Approval and Certification Center, also updated and
25 revised earlier this year, fatal accidents involving

1 remote controlled continuous mining machines also
2 provides shocking findings. A study of these accidents
3 resulted in the following summary conclusions as to how
4 and where the accidents occurred. "Tramming the machine
5 to a new location was the most dangerous work function;
6 26 out of 33 fatalities and, thus the majority of the
7 fatalities occurred while tramming or performing
8 maintenance, and only 2 during the actual mining
9 process." The accidents in this study were limited to
10 those involving continuous mining machines. However,
11 when the continuous miner is forced to move or relocate,
12 so is every other piece of equipment used in the mining
13 cycle.

14 Ironically, as it relates to the current rule
15 making, MSHA clearly acknowledges the hazards attendant
16 to place changing and repositioning continuous mining
17 machines underground in its proposed rule before us today
18 and remarkably states in its justification for not
19 requiring proximity detectors on full-face continuous
20 mining machines; that full-face continuous mining
21 machines involve less frequent place changing and
22 repositioning resulting in fewer pinning, crushing or
23 striking hazards to miners.

24 It is perplexing and absolutely belies logic
25 that MSHA would exempt mining machines from this safety

1 feature based on its limited movement, while at the same
2 time force other machines to be moved from place-to-place
3 or relocated in an underground mine 78 percent more
4 frequently. The central states of the Appalachian
5 region, principally West Virginia, Kentucky and Virginia,
6 have been under attack by this administration and federal
7 agencies with responsibility for mining. Their goal
8 seemingly appears -- is to limit coal production from
9 this region. They appear destined to do so, to see coal
10 production from this region severely restricted, and all
11 associated mine permitting and operation costs elevated.

12 In West Virginia, for all intent and purposes,
13 a moratorium is in place on the approval of new mines or
14 expansion of existing mines that seek to use extended cut
15 remote control continuous miners with scrubbers equipped
16 on those machines. The use of deep cut mining and
17 machine-mounted scrubbers have improved the level of
18 health and safety of coal miners by reducing explosive
19 and respirable dust and by reducing unnecessary equipment
20 moves eliminating a multitude of accident-producing
21 situations every single day.

22 Clearly and simply stated, extended cut mining
23 offers superior safety advantages over traditional
24 methods, and MSHA's reluctance to expedite approvals of
25 these systems is indefensible, subjecting hundreds of

1 working miners to unnecessary hazards on a repeated basis
2 every day. As part of this rule making and goal of
3 eliminating hazards, we respectfully request MSHA to use
4 all available tools in its tool box to encourage
5 immediate approval of extended cut mining plans in order
6 to reduce miner exposure around moving machines
7 underground.

8 Towards this end I simply ask, is our goal to
9 reduce accidents of this nature, or is our goal something
10 other?

11 Thank you. I appreciate your indulgence and
12 attention.

13 MODERATOR WAGNER: Thank you very much.

14 I'm going to turn first to Mr. Chirdon, do you
15 have any questions?

16 MR. CHIRDON: I do not have any questions.

17 MODERATOR WAGNER: Mr. Ward?

18 MR. WARD: No.

19 MODERATOR WAGNER: I want to take a quick look
20 through my notes.

21 You don't have any specific recommendations on
22 a timeline for implementation at this point.

23 Am I correct in understanding you to say that?

24 MR. HAMILTON: That's correct.

25 MODERATOR WAGNER: Okay. But we will expect to

1 hear from folks later.

2 MR. HAMILTON: Yes.

3 MODERATOR WAGNER: Thank you.

4 You also noted that the Agency addressed some
5 of the issues of training, supervision, education, work
6 practices intended to reduce risk.

7 And do you have anything to say about the
8 adequacy or inadequacy of those approaches?

9 MR. HAMILTON: I think those approaches appear
10 to be sufficient.

11 MODERATOR WAGNER: I beg your pardon?

12 MR. HAMILTON: I say, I believe those
13 approaches appear to be sufficient.

14 MODERATOR WAGNER: Okay. So despite the
15 fatalities and the serious injuries that were noted in
16 the preamble, you feel they are sufficient to prevent all
17 the fatalities and the significant injuries that were
18 noted.

19 MR. HAMILTON: My recollection is that MSHA
20 delineates a number of activities currently underway
21 within the industry.

22 MODERATOR WAGNER: Uh-huh.

23 MR. HAMILTON: And while I believe, you know,
24 individual training and human resource development
25 programs consistently evolve based on needs. And I note

1 that they are evolving every single day by our hundreds
2 of Mine Safety engineering and training professionals
3 within the business; but I believe, as I said, the
4 reference to those safety accident-prevention techniques
5 appear to be adequate as they are provided for within
6 MSHA's rule.

7 MODERATOR WAGNER: So within the context of the
8 rule, they're adequate if supplemented by the engineering
9 controls that we're discussing.

10 MR. HAMILTON: Your reference in the rule, as I
11 understand, and based on my reading of the rule,
12 addresses a number of the training education activities
13 that are currently underway within the industry.

14 MODERATOR WAGNER: Right. I think that what
15 the rule says, to my reading, is that there are a number
16 of training, warning, education, supervision and
17 information dissemination efforts; and these have been
18 inadequate to stop the fatalities. That's why the Agency
19 is looking beyond training in order to use available
20 engineering controls and is proposing to do that in order
21 to prevent the continuing fatalities from this
22 suppression hazard?

23 MR. HAMILTON: Let me make it perfectly clear.
24 We support the development of proximity detection
25 technology and advancement within the industry. So we

1 think it will aid in the prevention of these types of
2 accidents.

3 MODERATOR WAGNER: Great, thank you very much.

4 MR. HAMILTON: Now, let me finish.

5 MODERATOR WAGNER: Uh-huh.

6 MR. HAMILTON: We think there's a whole array
7 of tools within this toolbox. You know, the statement
8 that you just made where you questioned the adequacy of
9 these techniques, because we still have accidents, it's
10 almost like, you know, the immediate response that when a
11 piece of rock falls in the mine, the roof control plan is
12 inadequate. I'm not sure all those measures are
13 inadequate. Can they be improved upon? Yes. But MSHA
14 has to realize that it has the control and ability today
15 to eliminate the majority of these accident-producing
16 situations. Eliminate the exposure. Again, it's
17 inexplicable to us; it's incomprehensible, how MSHA can
18 continue this path forward with this apparent moratorium
19 in place on approving extended cut mining plans.

20 MODERATOR WAGNER: Let me be clear --

21 MR. HAMILTON: You cut that expose --

22 MODERATOR WAGNER: -- because you've said this
23 a number of times. There is no moratorium on the
24 approval of extended-cut plans.

25 MR. HAMILTON: There is not a written official

1 moratorium, I will grant you that. But for those of us
2 in the field, and for those of us that work in this
3 industry in this state on a routine basis, there is
4 tremendous reluctance and resistance on behalf of MSHA.
5 And they're holding these plans that are approved over
6 the head of operators and using those on a threatening
7 basis, on a daily basis.

8 Miners, like mine operators and managers, are
9 raising these concerns repeatedly and MSHA has a deaf
10 ear. And, yet, we're going to subject miners on a daily
11 basis to all this unnecessary movement of equipment. You
12 know, the more stable a work place, a work area is going
13 to be a tremendous enhancement for mine safety.
14 Disruption of that twice as often creates a lot of
15 extraordinary confusion as it relates to movement of all
16 this equipment, coordination and communications.

17 MODERATOR WAGNER: Thank you very much.

18 MR. HAMILTON: Thank you.

19 MODERATOR WAGNER: The second person who signed
20 up to speak today is Brian Thompson.

21 MR. THOMPSON: I have some slides to show this
22 morning, if that's okay.

23 MODERATOR WAGNER: That's fine. I hope that
24 you have a copy of them to share with the court reporter.

25 MR. THOMPSON: I do not have a hard copy with

1 me. The detailed information I'll be showing here today
2 is going to be submitted in a written report as well.

3 MODERATOR WAGNER: Thank you.

4 MR. CHIRDON: We would normally ask for a copy
5 of the presentation as well, if you can provide that to
6 us, maybe subsequent to the hearing.

7 MR. THOMPSON: Yeah, that would be fine.

8 MODERATOR WAGNER: Thank you.

9 And, Mr. Thompson, if you could identify
10 yourself, spell your name, and say who you represent. We
11 can also give you an e-mail address to e-mail the
12 presentation.

13 MR. THOMPSON: Good morning.

14 My name is Brian Thompson. We have a little
15 bit of an echo. I'm the local rep for continuous miners
16 and Joy Mining machinery.

17 We wanted to come in this morning and address a
18 few of the items that were listed in the proposed rule.

19 I've got some detailed examples that I'd like
20 to go through as well, just give you some perspective on
21 where we've been from an historical point of view and
22 actually where we're going from -- a future vision with
23 proximity detection on our continuous miners.

24 So as we go through, if you have any questions,
25 I would just encourage you to ask those as we go through.

1 If we could do that, and that way we'll keep topics
2 linked together as we go.

3 Proximity detection has been an item on Joy's
4 vision or plan for some time. We've been working with
5 several folks within the industry to make that happen.
6 We've been working with MSHA and Nautilus for four to
7 five years ago on the first system, the first set of
8 trials.

9 I know there was mention in the literature that
10 was sent out. We've done a lot of work to develop
11 proximity detection and to make it viable underground.
12 Later on in 2009, we did partner with another supplier to
13 develop a better product for the continuous miners, in
14 particular. The goal of those products has always been
15 to train operators in the most effective place to be
16 underground in the safest areas where they can be, but
17 really function in a training scenario more so than a
18 safety system.

19 The system reliability has been critical.
20 That's one thing that stands out as we go through all of
21 these tests, all of these implementation processes, and
22 an unreliable system does not promote safety. It seems
23 to promote frustration throughout the operating work
24 force, as well as the adoption of new technology. So
25 anything we can do to make these newer technologies

1 accepted underground, adaptable and less intrusive, all
2 those things go hand-in-hand to make a successful system.

3 We do note that there are limitations to the
4 technology as it exists today. These are electromagnetic
5 systems. They can be influenced by certain things. So
6 they're not perfect. The industry continues to work on
7 things to evolve the product and make it better. But,
8 fundamentally, they're not a hundred percent failsafe;
9 they're not a hundred percent perfect in the environment
10 that we're in. So we work through that to come up with
11 the best product that we can and have the best system on
12 the market.

13 A little bit of background. We do have over 30
14 systems running in the U.S. mine industry today. Those
15 are spread out across a variety of operators. The
16 largest install base is with Alliance, and then there are
17 subsequent machines that have been shipped over the last
18 year to 18 months at a variety of operators. Those
19 systems are up and running and running well. They've
20 been adopted well. They've been brought into those
21 environments with little trouble or disruptions to the
22 overall process.

23 So while the end goal is being achieved as far
24 as keeping operators in a safe area, in an appropriate
25 distance away from the machine, it's also blending into

1 an operator work force and being adopted in such a manner
2 that it's been very successful. Having a bit of
3 foresight or looking out in the future, we actually
4 started planning for proximity in the latter part of
5 2009. In November of 2009, we started making provisions
6 on machines that they would be capable for field fitment.
7 This coming November, in a few weeks, we'll flip the
8 switch and actually make that same provision available on
9 our rebuilt miners. Prior to that, those were done at
10 customer request; those were not done as an automatic
11 function.

12 Since 2009, we've been working with this style
13 system in making preparation for its implementation prior
14 to any rule writing or any issuance of a rule. Full
15 system release -- my apologies for the slide, they're
16 being cut off slightly -- but the full system release is
17 underway now. We'll start shipping machines after the
18 first of the year with full "prox" loaded on them. So
19 the three key areas that I want to focus on this morning
20 and bring attention to. Again, we will detail these a
21 bit more in our written comments that will come before
22 the November deadline, so all this information will be
23 included in that.

24 The three key success factors that we've seen
25 through this implementation process has really been about

1 proper installation and system protection. It's been
2 about proper training, having that in place, and having
3 it set up and running. And also understanding the
4 limitations of the technology and not trying to push it
5 past what it's capable of doing or putting requirements
6 on it that it can't, or we can't, meet. Those are
7 probably the three biggest areas that we see and those
8 are the areas I'll talk about this morning, specifically,
9 in the rule and some of the comments that are in there,
10 the first of which is proper installation.

11 The installations that have been made to date
12 have been done in a workshop environment. Any
13 manufacturer out there today, us included, have the
14 capability of taking a system underground. We could lay
15 it over top of a machine and that product would function.
16 It would work satisfactorily. But, again, that does not
17 deem success with this product. Success with this
18 product ends up being, you know, how long can that system
19 survive? How long can it make it through a working
20 environment?

21 These systems need to be protected. They need
22 to be robust and solid to where they can withstand the
23 every day working environment. Even noted in the
24 comments on page 44, you know, proper function is
25 directly related to the quality and installation. We

1 believe that wholeheartedly, and we've seen that in a
2 number of instances. I think we'll hear that from other
3 written comments and verbal comments as well. So, we see
4 that as a very key staple to this process; that these
5 systems be installed in a work environment, a workshop
6 environment; that they be installed in a manner that can
7 be well protected and that they will survive.

8 Addressing the individual rule itself, we've
9 given an 18-month timeline right now; that's what's been
10 set out. If this product would be required to be
11 installed underground, there are several things that
12 would have to take place, many shifts of cutting and
13 welding to properly protect. We feel that's not the best
14 environment to be doing large amounts of cutting and
15 welding and multiple shifts-style working.

16 As an example, the 1150 number that was set out
17 in the written comment or in the written rule that was
18 proposed, if you apply that over 18 months, that means
19 you need to be installing about 64 machines per month
20 over that 18-month period. To do that, is quite taxing
21 and quite hard. Just in general, if you're going to take
22 those same 64 machines and stick them into a shop
23 environment, there's not enough capacity in the U.S.
24 market to handle that workload. Our current workloads
25 for rebuilding machines, right now, we usually average

1 about 11 or 12 machines in a given month. So you take
2 that in comparison with the 64 machines that would be
3 required, and you see that's quite a daunting task that's
4 being asked of the industry. If you spread that out and
5 look at it in a different form and look at it in the way
6 of coal production -- I've taken the MSHA data from 2010
7 and looked at it by region and basically taken three of
8 those particular regions, probably the worst case
9 examples of those environments. When I say worst case, I
10 mean, lowest tons per miner in any given area, Northern
11 App, Central App and Southern App; you'll see represented
12 up here the 41,000 tons, 29,000 tons and 30,000 tons are
13 average tons per month per mine. And, again, this is
14 coming from the MSHA data. All I've simply done there is
15 taken the number of tons for those regions divided by the
16 number of mines.

17 So the general assumption is there's one miner
18 working at those locations. Those come out to believable
19 numbers from everything that we've dealt with over the
20 years, very believable numbers. These are clean tons, so
21 there would be some variation there in that number. But
22 you can see the relative numbers at the bottom. An
23 average month between rebuilt is 36, 50, 49, and those
24 are in stark comparison to the 18 months that's being
25 proposed.

1 So, again, starting with the general premise
2 that this product needs to be installed in a workshop.
3 To effectively do that, you're looking at timelines more
4 along the lines of 48, 50 months to capture some of the
5 lower producing regions within the United States.

6 Training was the second aspect that was
7 mentioned in the intro, and we see that as a very key
8 part of success with this product. Minimum, absolute
9 minimum, training of three days that we provide today,
10 and that's usually extended into about two weeks. By the
11 time you do training, and if you include hands-on
12 initiation underground, our service reps are there for
13 usually ten days on and off to make sure the machine is
14 up and running, making sure it's stable, making sure
15 everything is working properly. Again, the system itself
16 goes in, gets turned on; but the training, the
17 maintenance, the follow-up activity that needs to take
18 place with this equipment, or this type of system, is
19 very critical.

20 To give you an example of that, again, taking
21 the same 1150 number that was mentioned in the written
22 rule, we divide that over the 18 months; you end up with
23 those 64 installations per month that are required. If
24 you multiply that by the three man-days of training that
25 exist, you roughly have 192 days of training. My note at

1 the bottom of this slide, which didn't pop up, was we
2 typically, as an organization, train about 30 man-days in
3 a given month. So, you know, if you take that number and
4 multiply it across the industry, there would have to be
5 quite a few training organizations developed and
6 established to hit this 18-month target.

7 The next one I want to talk about is some of
8 the technical details. In particular, the 3-foot rule
9 that was mentioned in the rule. The comment, it says
10 when cutting machines must stop before contacting an
11 operator.

12 First of all, the technology is not failsafe.
13 And I've said that a couple times already, but there's no
14 way to predict exactly where the machine is going to
15 stop. We can do shutdown functions at 3 feet; that's not
16 an issue. But all we can control is the turning off of
17 activity. What we can't control are floor conditions:
18 slopes that the machine may be sitting on; whether
19 bottoms are wet; whether they're sloppy; whether they're
20 rock; those type of things we can't control. And for
21 that reason, it would be extremely hard to dictate an
22 exact number. So unless you can narrow down what your
23 friction is going to be on that floor every single time,
24 it's going to be nearly impossible to dictate a number in
25 that portion of the rule. Again, just noting the

1 technology; we see it as a training aid; we see it as
2 something that's very valuable and gets us toward an end
3 goal, but it doesn't satisfy the purity of a safety
4 system or a hundred percent failsafe type system.

5 The last point I'll make on this topic is
6 zones. We talk about defining the zones as 3 feet out
7 for stopping distances. The rule also mentions that in
8 the cutting environment, we want that to be -- it drops
9 down; there's no specific number given for cutting coal.
10 What we do say in that rule is that machines cannot
11 contact an operator. There is an environment when
12 cutting where we change our zones currently, and there
13 are two aspects.

14 The tramming, as mentioned before, has been the
15 most hazardous environment. In those areas, we fully
16 protect the machine; we fully engulf the machine in the
17 zone and prevent operators from coming into those areas.
18 When we are in cut mode, we do drop that zone in back in
19 behind the bumper to give the operator a safe place or a
20 safer position to be. What we don't see as viable is
21 keeping that zone at its full strength or full size, and
22 actually moving the continuous miner operator backwards
23 into the path of haulage.

24 You do have various forms of haulage. I
25 understand shuttle cars are the most prevalent. But when

1 you have that environment, the last thing we do is push
2 that operator into a more hazardous area than what he
3 could be if he was actually standing just behind the
4 machine. We don't like the idea of operators standing
5 beside the back bumper, obviously. We keep zones in that
6 area. That seems to be a very hazardous area that's been
7 identified with various red zone diagrams produced by
8 MSHA and also local mining groups. But we do see the
9 need to have separate zones for cutting and tramming.

10 In tramming, we do envision having a larger
11 zone, keeping that at quite a large area. Then, during
12 cutting, we believe the right idea is to shrink that zone
13 into the back bumper and give that operator a chance to
14 stay out of the haulage path.

15 MR. CHIRDON: If I could just ask you for
16 clarification.

17 These two pictures that you have at the bottom,
18 the one would be your protection zone while tramming, and
19 the other is what, cutting?

20 MR. THOMPSON: Yes, yes.

21 Next time, I'll put those names up at the top
22 so if they do get chopped off, you'll be able to see
23 those.

24 Yes, the image on the left-hand side is for
25 tramming. We do have the two zones as mentioned. We do

1 have the warning zone and the shut down zone on this
2 system. They are set roughly about the same numbers that
3 were prescribed in the rule.

4 MR. CHIRDON: Okay.

5 MR. THOMPSON: As an alternate, again, we've
6 talked about some of these things prior to. Again, the
7 shutdown process, we can turn functions off at any given
8 time. That's not a problem. But we feel it's going to
9 be impossible to dictate exactly where the final resting
10 position of the machine is going to be just because of
11 motion, because of ground conditions, because of inertia
12 that's built up around that machine. So we think that's
13 going to be very, very hard to overcome.

14 We also feel that the prohibiting of certain
15 functions is ideal. Tram and swing movement are the two
16 things that cause the most motion on the machine. Those
17 are the two features that we do shut down today and also
18 seem to be the least intrusive on the mining operations.
19 It provides the highest level of protection for an
20 operator matching up with the incidents that have been
21 recorded over time. So those two areas we see as very
22 critical. We want to make sure that those two features
23 are taken care of.

24 And the last thing, as we mentioned earlier,
25 definitely the zone configuration is keeping those in an

1 order that allows an operator to stay away from any type
2 of haulage, batch or continuous, either one, we see as
3 critical.

4 Finally, there's a comment about preventing
5 interference from other electrical systems. These are
6 electromagnetic systems. They can be influenced by some
7 things, either heavy metal or other electromagnetic
8 fields. There are possibilities for influence in this
9 environment, and that goes back to the original comment
10 about the systems not being failsafe, not being a hundred
11 percent reliable.

12 You know, you can probably hit those things 95
13 percent of the time, and I'm sure we can come up with
14 numbers to substantiate. But, fundamentally, we're not
15 going to be there a hundred percent of the time. I don't
16 think anybody with this current technology will be.

17 And those are the general comments I have. If
18 you guys have any questions at all, I'll be glad to
19 answer them.

20 MODERATOR WAGNER: Thank you very much.

21 I'll start with Mr. Chirdon.

22 MR. CHIRDON: I do have a couple of questions.
23 Regarding your rebuilt data that you provided --

24 MR. THOMPSON: Yes?

25 MR. CHIRDON: -- you mentioned the different

1 time frames. Depending on the production, how frequently
2 they're removed. When the machine is removed from
3 service, how long would it typically be out of service
4 for this rebuilt?

5 MR. THOMPSON: Usually, you're out for about
6 six months.

7 MR. CHIRDON: Six months.

8 MR. THOMPSON: Yeah. Just to make a
9 clarification point there, those rebuilds simply come out
10 as the machines are due anyway. So there's obviously
11 extensive work that takes place on these pieces of
12 equipment.

13 MR. CHIRDON: How many rebuilt facilities do
14 you have?

15 MR. THOMPSON: Right now, for continuous
16 miners, we've got one rebuilt facility operating in
17 Virginia. We have secondary rebuilt facilities that we
18 do overflow work in, so there are two additional
19 facilities we work in across the United States.

20 MR. CHIRDON: So everything has to go through
21 Duffield then, primarily?

22 MR. THOMPSON: Most of our rebuilds go through
23 Duffield. The exception to that would be our western
24 facilities. We do have operations in Wellington that run
25 rebuilds through that shop. It runs as an independent

1 shop on its own. We do some overflow business into
2 Bluefield, into Kentucky as well.

3 MR. CHIRDON: Okay. And then one additional
4 question.

5 You said it would be possible to prevent
6 contact in all cases. With your 30-plus systems you have
7 in operation, do you have data of failures available?

8 MR. THOMPSON: Failures in what way?

9 MR. CHIRDON: Failures of the proximity
10 detection system to do its intended function, which is to
11 stop before contacting the miner.

12 MR. THOMPSON: I'll state it this way. In
13 those instances, we've not had any reported contact of an
14 operator.

15 MR. CHIRDON: Okay.

16 MR. THOMPSON: As far as giving you a number
17 that says such a percentage of time, you know, it will
18 function properly, I can't give you a number for that.

19 MR. CHIRDON: Thank you.

20 MR. WARD: You mentioned that it's hard to
21 predict where the machine would stop based on ground
22 conditions.

23 Have you done any testing on that issue?

24 MR. THOMPSON: We've not done any testing
25 directly to it. The reason for that is there's so much

1 variability there. You know, you can do testing on a
2 marble floor and you're going to get different results
3 than what you would if you're on a mud floor. So there's
4 really not a single place or a single point you can test
5 and say: "Okay, that's going to be perfect; that's going
6 to be our number." It's always going to vary. So with
7 that level or breadth of variability, there's really not
8 much emphasis being placed on individual testing for
9 those.

10 MR. WARD: One follow-up. Within that range of
11 variability, are you expecting that generally this would
12 be like a de minimis movement, like in terms of a few
13 inches that it would move?

14 MR. THOMPSON: Typically, yes, I would think it
15 would be small. But, again, it's all dependent on what
16 the bottom conditions are.

17 MODERATOR WAGNER: My questions are along the
18 same lines.

19 Do you have an idea of what the range is, or a
20 margin of safety that would be needed if you had to be
21 highly confident that a 3-foot cut-off would be achieved?

22 MR. THOMPSON: That, I don't know. I don't
23 have a number that I can give you there. As I said
24 before, there's enough variability in each of the mine
25 conditions that I would be afraid to give you a number.

1 MODERATOR WAGNER: Because of that variability,
2 do you think that it would --

3 There's a question that we ask concerning views
4 of this specification of 3 feet versus a performance
5 standard that said cut it off before it would contact an
6 individual.

7 Do you have any ideas about which would be
8 preferable?

9 MR. THOMPSON: Just in general, I'd make one
10 statement about that.

11 As I said before, I don't think it's possible
12 to prevent contact in every situation. With that being
13 said, the ranges, you know, whether it's performance or a
14 hard number, I think it could go either way, but I'm very
15 uncomfortable with treating this system in general as a
16 hundred percent failsafe, as not ever having a problem,
17 not ever having an incident where you do touch someone.
18 The systems aren't that perfect. I don't believe the
19 current technology is in a position, or will be in a
20 position in the near future, to be presented in that
21 form.

22 MODERATOR WAGNER: Thank you very much.

23 When we started this hearing, those were the
24 only two individuals who had signed up to speak. I'd
25 like to ask now whether there's anybody in the room who

1 would like to speak.

2 Mr. O'Dell.

3 MR. O'DELL: Good morning.

4 MODERATOR WAGNER: Good morning.

5 MR. O'DELL: A great day to be alive. My name
6 is Dennis O'Dell -- D-E-N-N-I-S, O-D-E-L-L. I'm the
7 Administrator of Occupational Health and Safety for the
8 United Mine Workers of America.

9 I have a total combined time of 34 years in the
10 industry; close to 20 as an underground miner, and the
11 remaining time with the UMWA in the safety department.

12 I would like to thank MSHA for the opportunity
13 to speak today on a device that is way overdue and should
14 have been implemented years ago.

15 For years, miners have been killed by equipment
16 that has crushed, pinned, struck and ran over them. With
17 the implementation and use of proximity detection, this
18 violent and needless act of death can be avoided.

19 Many who will come to testify before you over
20 the time period of these hearings may argue that the
21 system is not ready yet; that it's not a hundred percent;
22 that it has bugs that need to be worked out; that they
23 need more time to perfect it. I will argue that mining
24 equipment that we use today is not a hundred percent. It
25 has a tendency to break down. It has bugs in it that

1 need to be worked out. It's not perfect; yet, we use it
2 every day to mine coal. Even more important to remember
3 are the miners who have died on the job because of the
4 lack of the use of a technology like proximity devices.
5 They weren't ready to die. They and their families would
6 love to have had more time.

7 If operators are really about protecting their
8 work force and providing a safer environment, then the
9 mining community needs to stop making excuses to put this
10 off. Systems have been approved, tested, had successful
11 results, and are already adopted and used by other
12 countries with much success in saving lives. Experience
13 with proximity detection systems on remote control
14 continuous mining machines already exist in five
15 coalmines in the United States, and are on machines and
16 mines in South Africa, Canada, and Australia, where they
17 have been reported to be very reliable.

18 Of the 70 fatalities resulting from pinning,
19 crushing and striking accidents from 1984 through 2010 in
20 underground coalmines, 30 were associated with the
21 continuous mining machine. That leaves 40 accidents from
22 other types of equipment, and we've had some since. The
23 use of proximity detection systems could have prevented
24 these accidents and fatalities. The union is
25 disappointed that MSHA failed to require proximity

1 devices on other mining equipment, and we would insist
2 that the rule be expanded to mandate the use of proximity
3 detection systems to shuttle cars, loading machines,
4 scoops, bolters, and other equipment that have been
5 associated with serious accidents or fatalities that have
6 occurred.

7 We are also disappointed that the proximity
8 devices were not mandated to be placed on surface
9 equipment and recommend that MSHA expand the use of these
10 devices to surface areas for surface equipment also.

11 In June of 2007, NIOSH put out a report,
12 RI-9672, where they gave a recommendation for evaluating
13 and implementing proximity warning systems on surface
14 mining equipment. The union believes that you must take
15 this into consideration. We also believe that you should
16 change your position on the type of miners you require
17 with the use of proximity devices. For example, persons
18 working around full-face continuous mining machines while
19 moving from one place to another can still be put at risk
20 when tramming the equipment.

21 During the time period when moving any
22 equipment from one place to another, the risk of an
23 accident increases. It doesn't matter if you're moving
24 an inch or the length of a football field, the individual
25 has a chance that he may be crushed, pinned, killed or

1 maimed. The rule should require the use of proximity
2 detection on all types of miners, as well as other mining
3 machines as I mentioned before. MSHA's own data supports
4 this. If you go back and review all the accidents that
5 have occurred over the years, on the question of the
6 transitional time period, because, as with any new
7 technology, we realize it takes time to get the required
8 amount of systems produced and delivered for use at the
9 mines, the UMWA supports the transitional time period as
10 suggested by MSHA. But if it takes longer, as pointed
11 out by the gentleman from Joy today, then MSHA may need
12 to revisit this time. We do ask, however, that you need
13 to speak to other manufacturers as well and take their
14 information in as consideration.

15 With saying that, I would suggest that if
16 manufacturers need to step up the process, this could be
17 a way to help stimulate the economy by them hiring more
18 people and personnel to meet the time and the demand to
19 help save miners' lives. The union has always been
20 strong advocates for training and retraining when new
21 technologies are introduced. We have learned that
22 initial training has to be given prior to the
23 implementation of the technology, actual and hands-on
24 training, once a miner is to operate or work around the
25 system, and frequent retraining has to occur so that

1 miners can retain and put to use what they have learned.
2 Training must also take place if any changes or
3 modifications are made to the system after the
4 implementation of the devices. Ideally, retraining
5 should occur on a daily basis, and our hope is that it
6 does. But once every quarter, or more often if a miner
7 requests it, may seem to be beneficial.

8 Training and retraining must also be separate
9 of the operator's annual retraining programs. The best
10 and safest work force is a well-trained work force. For
11 that reason, incorporating ongoing training into
12 operations can make employees aware of the importance of
13 respecting the equipment while providing employees with
14 helpful information about these devices and new
15 technology.

16 The union agrees with MSHA that the rules
17 should mandate that a detection system shall cause a
18 machine to stop no closer than 3 feet from a miner.
19 Based on feedback from our members, this would provide an
20 appropriate distance and a margin of safety between a
21 machine and a miner to prevent pinning, crushing or
22 striking him.

23 Again, NIOSH has provided research on this with
24 continuous mining machines and roof bolting machines
25 where a minimum 3-foot distance from the machines shows

1 operators can substantially reduce their risk of being
2 struck. The proposed 3-foot stopping requirement is also
3 consistent with proven and experienced proximity
4 detection systems in underground coal mines in other
5 mining countries, such as South Africa.

6 The union supports the 3-foot distance and it
7 shall be measured from the surface of the machine closest
8 to the miner-wearable component. The machine shall also
9 remain stopped and will not move while any miner is 3
10 feet or closer to the nearest surface of the machine.
11 All miners working in and around the equipment must be
12 required to have a mine-wearable component.

13 Training is necessary and must be provided by
14 the operator and the manufacturer for miners to learn
15 about this task. The union supports a mandate that both,
16 not just one, but both an audible and visual warning
17 signal should occur when a machine is 5 feet and closer
18 to a miner. Having both will assure the necessary
19 margins of safety to allow miners an opportunity to be
20 proactive and move away from the machine to avoid danger.
21 With machines being so loud and the use of hearing
22 protection as required today, an audible may not always
23 work. The same falls true with a visual warning,
24 depending on the location of miners around the equipment.
25 Having both will give an added protection. They should

1 also be set up on a separate circuit so that if one fails
2 or malfunctions, the other would continue to work.
3 Training also would be necessary and must be provided by
4 the operator for miners to learn this new task.

5 The union supports that a proximity detection
6 system should include visual system diagnostics to
7 indicate that the system is functioning properly. Each
8 proximity detection system should also be able to perform
9 self-diagnostics to identify software or hardware
10 problems. Miner operators must be trained on the use of
11 this function. A visual will allow miners to readily
12 determine if a proximity detection system is functioning
13 properly or not. The visual should be located so that
14 the miner operator would be able to observe it from all
15 locations that he or she is required to be placed during
16 the operations of that equipment. Again, training is
17 necessary and must be provided by the operator and
18 manufacturer for miners to learn this task.

19 If a system is not functioning properly, the
20 union supports the proposal to allow machine movement so
21 that it can be relocated from an unsafe location for
22 repair purposes only. The machine could be moved only if
23 an audible or visible warning signal has been designated
24 and used to distinguish it from other signals. The rule
25 needs to further mandate that this function can only be

1 performed under the direction of a qualified mechanic or
2 certified electrician. Again, this would be allowed only
3 to relocate the mining machine for safety reasons so that
4 repairs could be made.

5 Also when this occurs, the incident should be
6 recorded in a book showing the date, time, action taken
7 to repair, time put back into service, and then should be
8 signed off by the person who made the repairs, along with
9 a counter signature by the company's maintenance
10 supervisor. This record should be kept for a period of
11 one year and made available to all interested parties.

12 The union understands that there may have been
13 some questions and concerns that proximity detection
14 devices can interfere with other electrical systems.
15 Manufacturers of three approved proximity detection
16 systems have all stated that their systems do not have
17 significant interference issues. But if there truly are
18 interference issues, as pointed out by the gentleman
19 today from Joy, then they need to be identified,
20 resolved, and shared with the rest of the industry on the
21 problems that have been encountered. If necessary, NIOSH
22 could become involved to help identify and resolve these
23 concerns.

24 MSHA's proposal would require that a proximity
25 detection system be installed and maintained by a person

1 trained in installation and maintenance. The union
2 believes this is to be effective for machine operators,
3 mechanics, and electricians, and they need to be involved
4 in this process. Everyone must be properly trained to
5 understand the operation of the system; and those that
6 work on the system performing proper installation and
7 repair techniques should be additionally trained to do
8 this work.

9 All machine operators, mechanics and
10 electricians should receive training from manufacturer
11 representatives for operation, installation and
12 maintenance duties at the mine. These individuals will
13 need this training to assure that they understand the
14 proximity detection system functionally and any
15 maintenance issues and requirements that may occur. The
16 union supports a pre-operational check to be performed by
17 the individuals operating the machines at the beginning
18 of each shift, immediately prior to when the machine is
19 to be used.

20 A set of procedures is to be written by the
21 operator, the manufacturer, miners, and the miners' reps
22 to use as a checklist of items to be examined at the
23 start of each shift. This pre-optional check would need
24 to be submitted for approval to MSHA before using. A
25 visual check of the machine-mounted components of the

1 proximity detection system to verify that the components
2 are in tact would also ensure that proximity detection
3 systems are functioning properly before the machines are
4 operating. At a minimum, an appropriate check should
5 also include the visual inspection to identify if the
6 machine-mounted components are damaged so that action can
7 be taken to correct any defects. The proposed visual
8 check of the proximity detection system on the mining
9 machine must be made by the machine operator and a
10 certified electrician or qualified mechanic assigned to
11 the area of the section.

12 Training is necessary and must be provided.
13 The union supports that the miner-wearable component
14 shall be checked at the beginning of each shift for
15 damage, and to make sure that it has sufficient power to
16 work for the duration of the shift that it is to be used.
17 Training also has to be provided for this. The union
18 agrees that a trained, qualified maintenance person
19 should examine the basic functions of the proximity
20 detection system every seven days by checking zone sites,
21 system communication, and warning signals. The proximity
22 detection system must be examined at regular maintenance
23 intervals and each time there's been a modification to
24 the machine or the working environment.

25 The person evaluating a proximity detection

1 system should fully understand what the system is
2 intended to do and how electromagnetic field technology
3 operates. The examination would occur while the machine
4 is not in service. The qualified person would examine
5 the proximity detection system for the requirements in
6 the proposed paragraphs (b)(1) through (b)(5).

7 When this occurs, it should also be recorded in
8 a book showing the date, time, action taken to repair it,
9 time put back into service, and signed by the person who
10 made the checks, repairs, along with a counter signature
11 by the company's maintenance supervisor. This record
12 should also be kept for a period of one year and made
13 available to all interested parties. The union supports
14 that the defects and corrective actions in proposed
15 paragraphs (d)(1) and (d)(2) shall be reported and results
16 made available to all interested parties. These records
17 also should be maintained for one year. The check for
18 the miner-wearable component that would be required under
19 the proposed paragraph (c)(2) shall be certified,
20 recorded and results made available to all interested
21 parties. These records must be maintained for a year and
22 made available to all interested parties.

23 MSHA's proposal under paragraph (d)(3) would
24 require that the operator make and retain records at the
25 completion of the examination under proposed paragraph

1 (c) (3) of the section. The union supports that these
2 records must be retained for a year and the results be
3 made available to all interested parties.

4 The union also supports having the qualified
5 person conducting these examinations record, certify by
6 signature, and date that the examination was conducted
7 with a description of any defects and whatever corrective
8 action would have been taken. The union agrees that it
9 is necessary to assure that there is recorded evidence
10 that persons assigned to install and perform maintenance
11 on the proximity detection systems have to be trained.

12 The union insists mine operators would need to
13 make and retain records of training for proximity
14 detection system manufactures' employees who install or
15 perform maintenance on their systems for a period of a
16 year also. The union recognizes that in this age, many
17 records are kept by computer databases. The union will
18 support this for all recordkeeping requirements under
19 this proposal only if assistance is made available for
20 those that lack computer skills that would prohibit them
21 from viewing this information. The operator must either
22 assist those individuals to access these records, or make
23 and provide them with hard copies. These records should
24 be maintained for a period of a year and made available
25 to all parties.

1 I hope I've covered all the areas in question.
2 We'll also be providing written comments when the time
3 period is due.

4 Thank you for your attention to this important
5 proposed rule. When enacted, it will no doubt help save
6 miners' lives.

7 That concludes my comments for today.

8 MODERATOR WAGNER: Thank you very much.

9 Let me turn first to Mr. Chirdon.

10 MR. CHIRDON: I have no comment.

11 MODERATOR WAGNER: Just take a quick look here.

12 I don't know if you said specifically or if
13 I -- if you did, I didn't -- you did. You supported the
14 5-foot perimeter for the visual and audio signals, the 3-
15 foot for stopping.

16 Okay, thank you very much.

17 And I'll say again, we have records of no one
18 else having requested to speak.

19 Is there anyone in the audience who would like
20 to present remarks now? I will give anyone a chance.
21 And make sure that I'm not seeing them.

22 All right. If no one else wishes to make a
23 presentation, I want to say again that the Mine Safety &
24 Health Administration appreciates your participation at
25 this public hearing. Thanks to everyone who made a

1 presentation, as well as those who did not present, for
2 your attendance at this hearing and your interest in this
3 rule making.

4 I want to again emphasis that all comments must
5 be received or postmarked by November 14th, 2011. MSHA
6 will take your comments and your concerns into
7 consideration in developing the Agency's final rule.

8 I'd like to encourage all of you to continue to
9 participate in the rule making process throughout the
10 process.

11 And with that, this public hearing is
12 concluded. Thank you very much.

13 (Whereupon, at 10:25 a.m., the hearing in the
14 above-entitled matter was concluded.)

15

16

17

18

19

20

21

22

23

24

25

REPORTER'S CERTIFICATE

CASE TITLE: Public Hearing on Proximity Detection
Systems for Continuous Mining Machines In
Underground Coal Mines

HEARING DATE: October 20, 2011

LOCATION: Charleston, West Virginia

I hereby certify that the proceedings and
evidence are contained fully and accurately on the audio
and notes reported by me at the hearing in the above case
before the Department of Labor, Mine Safety & Health
Administration.

Date: October 20, 2011

ANTHONY & ASSOCIATES, INC.


ANGELA PRESTON
(Official Reporter)