

TRANSCRIPT OF PROCEEDINGS

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

Pages: 1 through 79

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Date: October 25, 2011

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AB65-HEAR-3

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)

Washington, Pennsylvania

Tuesday
October 25, 2011

APPEARANCES

MSHA Panel:

ROSLYN FONTAINE, DAVE CHIRDON, WILLIAM BAUGHMAN,
MATTHEW WARD

Speakers:

R. HENRY MOORE, Pennsylvania Coal Association
JAMES LAMONT, United Mine Workers Association
RON BOWERSOX, United Mine Workers Association
JOHN M. GALLICK, Alpha National Resources
TERRY J. THEYS, Alpha National Resources
TODD MOORE, Consol Energy Coal Operations

P R O C E E D I N G S

(9:10 a.m.)

1
2
3 MODERATOR FONTAINE: Good morning. We're going
4 to get started.

5 Good morning. My name is Roslyn Fontaine, and
6 I am the acting Director for the Office of Standards,
7 Regulations, and Variances for the Mine Safety and Health
8 Administration.

9 I will be the moderator for this public hearing
10 on MSHA's Proposed Rule On Proximity Detection Systems
11 for Continuous Mining Machines in Underground Coal Mines.
12 On behalf of the Assistant Secretary of Labor for Mine
13 Safety and Health, Joseph A. Main, I want to welcome all
14 of you here today.

15 I would like to introduce the members of the
16 MSHA Panel. To my right, is Dave Chirdon with MSHA's
17 Approval and Certification Center; to my immediate left,
18 is Bill Baughman with the Office of Standards; and to my
19 far left is Matt Ward with the Department of Labor and
20 Office of the Solicitor.

21 In response to requests from the public, MSHA
22 is holding public hearings on its Proposed Rule for
23 Proximity Detection Systems for Continuous Mining
24 Machines in Underground Coal Mines. This is the third
25 public hearing on this proposal. The fourth hearing will

1 be held in Evansville, Indiana on Thursday, October 27th.

2 The purpose of this hearing is to receive
3 information from the public that will help MSHA evaluate
4 the requirements in the proposal and produce a final rule
5 that will improve safety conditions at underground coal
6 mines.

7 As most of you know, the hearings will be
8 conducted in an informal manner. Formal Rules of
9 Evidence will not apply. The Hearing Panel may ask
10 questions of speakers, and speakers may ask questions of
11 the Panel.

12 Speakers and other attendees may present
13 information to the court reporter for inclusion in the
14 rulemaking record. MSHA will accept written comments for
15 the record and other appropriate information for the
16 record from any interested party, including those not
17 presenting oral statements.

18 We ask everyone in attendance to sign in on the
19 attendance sheet at the table to the right.

20 MSHA's proposal is to require use of proximity
21 detection systems on continuous mining machines in
22 underground coal mines, according to a phased-in
23 schedule. This rule would help protect miners from
24 pinning, crushing, and striking hazards that result from
25 working too close with continuous mining machines in

1 underground coal mines. The proposal would also establish
2 performance and maintenance requirements for proximity
3 detection systems and require training for miners
4 conducting installation and maintenance of these systems.

5 The proposed rule is an important part in the
6 Department of Labor's "Plan, Prevent, and Protect"
7 strategy for protecting workers. MSHA requests comments
8 from the mining community on all aspects of the proposed
9 rule and is particularly interested in comments that
10 address alternatives to key provisions in the proposal.
11 Commenters are requested to be specific in their comments
12 and submit detailed rationale and supporting
13 documentation for suggested alternatives.

14 At this point, I would like to reiterate some
15 of the requests for comment and information that were
16 included in the Preamble to the proposed rule.

17 As stated in the proposal, MSHA proposes to
18 phase in the use of proximity detection systems over an
19 18-month period. Continuous mining machines manufactured
20 after the date of publication of a final rule would be
21 required to be equipped with a proximity detection system
22 three months after the date of publication of a final
23 rule. Continuous mining machines manufactured on or
24 before the date of publication of a final rule would be
25 required to be equipped with a proximity detection system

1 18 months after the date of publication of a final rule.

2 The Agency requests comments on the proposed
3 compliance dates, considering the availability of
4 systems, the time necessary to process approvals for
5 proximity detection systems, and projected time needed to
6 install systems. MSHA proposes to require the use of
7 proximity detection systems that cause a machine to stop
8 no closer than 3 feet from a miner. The continuous
9 mining machine operator would be allowed to be closer
10 than 3 feet only when the machine is cutting coal or
11 rock. However, the proximity detection system would be
12 required to prevent contact with the machine operator.
13 MSHA considered proposing other specific stopping
14 distances and a performance-oriented requirement that
15 would not have included a specific distance.

16 MSHA requests comments on this proposed
17 provision, including whether a greater distance or a
18 performance-based approach would be effective
19 alternatives to the proposed 3-foot stopping distance
20 requirement. Some proximity detection systems on
21 continuous mining machines are installed to stop machine
22 tram movement and the conveyor swing function when the
23 system is activated, while permitting other machine
24 movement, such as rotation of the cutter head and
25 movement of the gathering arms.

1 MSHA requests comments on whether all movement
2 should be stopped or under what, if any, circumstances
3 would be acceptable for continuous mining machines to
4 continue moving.

5 The proposed rule does not cover full-face
6 continuous mining machines. A full-face continuous
7 mining machine includes integral roof bolting equipment
8 and develops the full width of the mine entry in a single
9 cut, generally, without having to change its location.

10 The Agency is interested in whether full-face
11 continuous mining machines should be equipped with a
12 proximity detection system; and, if so, why? Each of the
13 three proximity detection systems approved for
14 underground coal mines in the United States requires use
15 of a miner-wearable component. These systems cannot
16 detect a miner who is not wearing the component. MSHA
17 solicits comments on which miners working around
18 continuous mining machines should be required to have a
19 miner-wearable component.

20 Most proximity detection systems alert miners
21 who get within a certain distance of a machine before
22 causing machine movement to stop. This provides an added
23 margin of safety and is consistent with most standard
24 safety practices. The Agency recognizes that the use of
25 a proximity detection system that causes frequent machine

1 stops can result in frustration to miners, miners
2 ignoring warnings, and can possibly lead to unsafe work
3 practices. MSHA believes that an appropriate warning
4 signal is necessary to optimize safety of miners when a
5 proximity detection system is used. MSHA requests
6 comments on this provision, including whether a greater
7 distance or a performance-based approach would be
8 effective alternatives to the proposed 5-foot distance
9 requirement for the warning signal.

10 MSHA's estimates of the benefits and costs of
11 the proposal are given in detail in the Preliminary
12 Regulatory Economic Analysis and summarized in the
13 Preamble. MSHA requests comments on the proposed
14 estimated benefits and costs.

15 As you address the proposed provisions, either
16 in your testimony today or in your written comments,
17 please be as specific as possible. We cannot
18 sufficiently evaluate general comments.

19 As I said earlier, please include any suggested
20 alternatives, including those of a performance-based
21 nature, your rationale, the benefits to miners, any
22 technological and economic feasibility considerations,
23 and data to support your comments. The more specific
24 your information is, the better it will be for MSHA to
25 evaluate and produce a final rule that will be responsive

1 to the needs and concerns of the mining public.

2 You may submit comments following this public
3 hearing by any method identified in the proposed rule,
4 and must be received or postmarked by November 14th,
5 2011.

6 MSHA will make available a verbatim transcript
7 of this public hearing approximately two weeks after the
8 completion of the hearing. You may view the transcripts
9 of all the public hearings and comments on MSHA's website
10 at www.msha.gov and on www.regulations.gov.

11 We will now begin today's hearing. If you have
12 a copy of your presentation, please provide it to the
13 court reporter.

14 Please begin by clearly stating your name and
15 organization, and the spelling your name for the court
16 reporter to make certain we can obtain an accurate
17 record.

18 Our first speaker today is -- okay. Our first
19 speaker today is Chris Hamilton. And I don't see him
20 here, so I'm going to move to the next speaker, who is
21 Hank Moore.

22 MR. HENRY MOORE: Thank you. I am Hank Moore.
23 Actually, R. Henry Moore. I am here on behalf of the
24 Pennsylvania Coal Association. George Ellis, the
25 president of the Coal Association, was not able to be

1 here today.

2 We appreciate this opportunity to testify on
3 behalf of our members regarding the Proposed Proximity
4 Detection Rule.

5 PCA is an association that represents the
6 majority of underground and surface coal mine operators
7 in Pennsylvania. It represents large longwall mines, as
8 well as single section continuous miner mines. It
9 represents mines that work in the Pittsburgh seam, and it
10 represents low seam mines.

11 At the outset, I would like to say that we
12 appreciate the fact that the rule is being developed to
13 notice and comment rulemaking. We've heard that an
14 earlier proposal to utilize the emergency temporary
15 standard-making power was being considered. Given some
16 issues as to the timing of the implementation, as well as
17 other issues, we think this is appropriate to use,
18 notice, and comment rulemaking. It will necessarily
19 strengthen the rule by the participation and input of the
20 stakeholders in the process.

21 We view the use of the emergency temporary
22 standard as inappropriate in many cases. It leads to
23 hastily promulgated rules and causes problems in
24 implementation. PCA strongly believes that where a
25 standard-making power is vested in an executive agency,

1 due process and the Administrative Procedure Act demand
2 that notice and comment rulemaking be utilized to create
3 valid new rules in the regulations. We believe that
4 notice and comment rulemaking is appropriate here because
5 the rule needs to be fleshed out.

6 At this point, there are ambiguities and gaps
7 in the rule. For example, it does not indicate where the
8 sensors might be on the machine; how many sensors there
9 should be; where the 3 feet is to be measured; and
10 similar types issues.

11 I think a judge looking at the rule as it is
12 currently written would consider it ambiguous. And, as
13 we know, under the Doctrine of Judicial Deference, that
14 means operators lose the interpretation battle, if there
15 is one. We do not think that any rule should have to be
16 interpreted in post-promulgation questions and answers or
17 other policy. The rule itself should say what is meant;
18 clear and understandable and unambiguous rules of
19 advanced mining safety. Operators want to comply, and in
20 order to do that, the rule has to be clear and
21 unambiguous.

22 We believe it is appropriate at this time to
23 focus this rule on continuous mining. The majority of
24 injuries and deaths have occurred to operators who
25 normally control the continuous mining machines' movement

1 with a handheld remote control. It is also my
2 understanding that the majority of those operators or
3 injuries are to the person used in a remote control box.

4 The majority of events have arisen as a
5 consequence of miners being pinned by the machine they
6 are operating against a rib while the machine is trammed
7 or moved from one location to another. Now, we have to
8 concede that significant progress had been made over the
9 last two decades concerning the prevention of red zone
10 injuries.

11 While there are different injury and fatality
12 statistics that have appeared in literature about red
13 zone injuries, it appears there has been a significant
14 decline. This evidence highlights the strides the
15 operators have made on this issue and the power of
16 training, education and elimination of red zone hazards.
17 It also serves to illustrate the benefits of state and
18 federal agencies working cooperatively with operators to
19 attack this problem. Working together, we were able to
20 successfully reduce red zone injuries and fatalities.

21 The consciousness of red zone injuries is
22 ubiquitous. If you go into any mine office in this
23 country, you will see somewhere on the wall a red zone
24 poster. Whether it's MSHA's poster or another type
25 poster, it will be there. Much of the progress has been

1 made because of the use of administrative controls. We
2 believe proximity detectors will add a significant layer
3 of additional protection. But I would note that, on
4 occasion, MSHA personnel have said that administrative
5 controls are sufficient.

6 Given the advancements and the potential for
7 educational and training solution of red zone hazards,
8 some will reasonably voice concerns about the necessity
9 of the implementation of the proposed proximity systems.
10 We support the rule. We believe that the proximity
11 detection systems can serve an important function in
12 accomplishing the goal of eliminating red zone injuries
13 and death. We also note that the introductions of such
14 system will perhaps eliminate disputes about whether a
15 miner is in the red zone.

16 There have been several cases involving alleged
17 violations of the red zone, and they are often evolved
18 into a he said/she said-type, which provide low sense of
19 fairness to the miner who is accused of being in the red
20 zone.

21 While we support the use of proximity detection
22 systems, we have reservations about the rule, as
23 proposed. The first issue PCA would like to highlight is
24 the 18-month implementation period. We believe that the
25 18-month schedule is based upon assumptions that have not

1 been fully considered. It is overly ambitious, in our
2 view.

3 PCA believes that most of the significant
4 problems implementing the rule can be addressed with
5 additional time. However, if more time is not provided,
6 we are concerned that some mines will be unable to
7 complete the installations and times, and others will be
8 forced to rely on inexperienced third parties and
9 opportunists that will perform inadequate installations
10 that can compromise the safety benefits of the new
11 systems.

12 MSHA estimates there are approximately 1,150
13 place changing continuous mining machines in the nation
14 that will need to be fitted with proximity detection
15 systems. Averaging slightly more than two mining
16 machines a day, this does not sound overly daunting, but
17 the reality is otherwise. Eighteen months is not enough
18 time. It is still unclear whether the developers of the
19 approved systems will be involved in the installation or
20 working to license the technology to others. In either
21 case, PCA believes that serious delays will inevitably
22 result while this is worked out.

23 In support of the 18-month period, MSHA cited
24 comments it received in response to its request for
25 information indicating that a proximity detection system

1 can be installed and calibrated on a remote control
2 continuous mining machine in one midnight shift. We
3 believe this is a gross underestimate of the time
4 required. We are even more concerned about the efficacy
5 of underground installation and calibration. Consistent
6 with the testimony of the Joy representatives, PCA
7 members think it would be best to install and calibrate
8 the new equipment in a shop or during rebuild to ensure
9 the installation is performed properly and to minimize
10 mining disruptions.

11 Many of PCA's members rely on continuous miners
12 to mine 36-inch seams. Repairs on such continuous miners
13 can be challenging, and the installation of new
14 technology in the mine's environment will be more of a
15 challenge than is envisioned by MSHA.

16 MSHA stated in its Preamble that the proper
17 functioning of a proximity detection system is directly
18 related to the quality of the installation. That's, I
19 think, something no one can argue with. We believe that
20 this can only be accomplished by equipping the continuous
21 miners with proximity detection systems during initial
22 construction or during a rebuild.

23 It is our understanding that Joy has testified
24 about their capacity for installing the systems. We
25 understand it will take a number of years for Joy to

1 provide properly installed proximity systems during
2 replacement or rebuilds through their certified
3 facilities for all machines. We believe that Joy's
4 testimony is the realistic testimony.

5 It is assumed, of course, that some PCA members
6 will use local shops, which have a pre-existing
7 relationship for performing installation. Where the
8 installation occurs when a rebuild is undertaken, the
9 shop may be occupied for more than a week on a single
10 continuous mining machine. If a miner is going to be
11 pulled from a mine and transported to a shop, it makes no
12 sense to simply install the detection system.

13 We were talking this morning before I came here
14 that it may be a six-week period for you to remove the
15 miner from the mine, transport it to whatever shop it is
16 going to be, and then return it to the mine. And, of
17 course, that doesn't even address the issue that if you
18 have a replacement miner, what the approved ventilation
19 and dust control planning will be. Moreover, these shops
20 tend to be small, local businesses without necessarily
21 the ability to easily expand operations to be in excess
22 demand. As such, these shops are going to be operating
23 at capacity to perform the required installations.

24 The proposed rule may also lead to mine
25 operators accelerating their own schedule of rebuilds and

1 other significant maintenance, adding to the scheduling
2 difficulty. These installations in a shop will obviously
3 result in mining machines being out of service for
4 significantly longer than if they were performed
5 underground, as it appears MSHA contemplates. It will
6 also strain the capacity of vendors to keep up with
7 demand.

8 To the extent that misconceptions guided MSHA's
9 selection of the time frame, it should be reconsidered.
10 To the extent that these sorts of misconceptions form the
11 basis of the economic analysis, they should also be
12 reworked. We believe it grossly underestimates the
13 actual costs. We believe that the analysis
14 underestimates the cost of the installations, as well as
15 the cost of lost production.

16 In addition, while MSHA has sought to temper
17 concerns about interference, the Proximity Detection
18 Systems will only be one of several devices operating
19 underground at risk for interference.

20 As I indicated, our miners operate a number of
21 low-seam mines. There is limited, if any, experience to
22 date with proximity detection in low-seam mines.
23 Understand the way the experimentation and trial had been
24 done in mines; it isn't easy to maneuver in. We are not
25 sure that interference will not occur when the detection

1 device is present with a loop of cables kneeling in close
2 proximity. In addition, we have concerns about the
3 availability of the specialized parts and equipment
4 needed to install the proximity systems.

5 In the Preamble to the proposed rule, MSHA
6 indicates that manufacturers have indicated they can
7 collectively produce about 350 units per month. MSHA
8 specifies that manufacturers can increase production to
9 400 to 600 per month, if necessary. It is unclear if
10 this is MSHA's own forecast or it is based on MSHA's
11 consultation.

12 At present, there are only three approved, or
13 almost approved, proprietary proximity systems; and each
14 has its own unique installation parts, software and
15 hardware. Any supply shortfalls will inevitably lead to
16 significant shortages and ultimately with delays in
17 installation. The shortages and delays would be
18 exacerbated further if one of the proximity systems
19 proves more popular for reasons of either availability,
20 viability, or support. Despite these variables, there is
21 no indication that MSHA has made a significant inquiry
22 into the capacity of the manufacturers to perform the
23 number of units indicated, let alone the number MSHA has
24 specified.

25 We also believe that the 18-month period fails

1 to fairly consider the time necessary for MSHA in the
2 state-approved approvals. Operators will be required to
3 get approvals for all such field modifications,
4 obviously. PCA members are concerned that MSHA's
5 Triadelphia office will be overwhelmed and unable to
6 respond in a timely manner to the massive influx to the
7 request for evaluation and approval that's soon to be
8 inundating that office.

9 But even more importantly, in Pennsylvania, we
10 have separate approvals by the state for electrical
11 equipment. The state has limited resources. Like every
12 other state, we have a budget shortfall. That may make
13 this process in the state more protracted and more
14 difficult. Allowance for these and additional approvals
15 are necessary by MSHA.

16 Based on our concern, we ask you to reconsider
17 the 18-month implementation period. We propose, or
18 suggest, a 36-month period to better ease the transition.

19 We are concerned about a number of other points
20 in the rule. We are concerned about the recordkeeping
21 requirement for training as to the installation of the
22 system. Most of the training, as we understand it, would
23 be done by third parties, such as equipment
24 manufacturers. We think it's somewhat impractical for
25 mine operators to keep track of that training.

1 We are further concerned about the records that
2 will be required of the daily checks and maintenance. At
3 this point, we've heard a 75.362 pre-operational
4 parameter check is not recorded in the book. The rule
5 for proximity detection requires the recording in the
6 book and countersigning by various upper management
7 people. We think that exceeds the bounds of necessity
8 and logic.

9 We also think that it should be made clear in
10 the rule that out-by construction continuous miners
11 should be equipped only after all full-face miners are
12 equipped. We also believe that the future rules, which
13 address full-face miners, should only apply when tramming
14 from place-to-place.

15 We are also concerned with the removal from
16 service provision in 75.1732(b)(4). As proposed, the
17 rule requires a continuous miner with malfunctioning
18 proximity detection to be immediately removed from
19 service. PCA believes that such a result is
20 unnecessarily severe and provides little benefit to
21 miners, given the progress that has been made overall in
22 reducing injuries. The deployment of this novel
23 technology underground will be subject to error and
24 problems. Perhaps, five years afterward, we will be
25 through that period, but there's obviously going to be an

1 initial learning curve.

2 In addition to software issues, there are also
3 likely to be problems with the hardware, as the harsh
4 operating conditions impact the systems' proper function.

5 If the final rule remains as proposed, it will
6 significantly impact mine operations. Operators are
7 dependant upon the use of continuous mining machines to
8 allow production to occur. If a continuous mining
9 machine is removed from production, the entire section
10 will very likely have to be shut down. Only if the use
11 of administrative controls were going be discontinued,
12 would it make sense to remove the miner from service.
13 There is no indication in the rule that administrative
14 controls will no longer be in place.

15 We believe the rule should be revised to
16 prevent the operators to use the mining machine until the
17 following maintenance shift. In the event of a system
18 malfunction, miners will be alerted by the use of a
19 distinct audio and visual cue. As such, they will be
20 aware that the red zone proximity is not operating
21 normally.

22 Moreover, one of the benefits of the system
23 will be to further train miners to avoid red zone areas.
24 In fact, I know that some of the equipment manufacturers
25 have seen it more as a training device than otherwise.

1 The continuous miner shuts down when the miners are
2 within 3 feet. It can properly be assumed that operators
3 will work to ensure that they can continue to operate
4 without having the machine stop.

5 In a sense, the detectors will reinforce all
6 the training we have been getting for the last several
7 years. It will create new habits. We anticipate most
8 miner operators will work entire shifts without
9 activating these systems. That will remain an immediate
10 removal that is not necessary.

11 I also want to address the enforcement again.
12 As proposed, 75.1713(b)(1), under that rule, a proximity
13 detection system must cause a machine to stop no closer
14 than 3 feet from a miner, except as otherwise provided.

15 Once the system is approved and implemented, it
16 is subject to visual examination before each working
17 shift, and a more thorough examination on a weekly basis.
18 The visual examination requirement requires the miner to
19 look at a visual signal that indicates the system is
20 functioning properly.

21 PCA is concerned that operators will be cited
22 for violations of the proposed standard when an inspector
23 believes the machine is stopping within the 3 feet
24 provided; if it stops within greater than 3 feet, rather
25 than within the 3 feet. It is unclear from the rule how

1 the 3 feet for stopping and 5 feet for warning is
2 measured. It is also not clear where the system must
3 simply stop; whether the system must simply stop or
4 whether the machine will shut down, recognizing that
5 stopping may be subject to some movement of the machine
6 when the motors are off.

7 These are large machines. Some of them don't
8 even have brakes, and for particular seams that are
9 steep, we may have an issue, which the Joy
10 representatives also identified. We have already seen
11 litigation over disputes of whether a miner was in the
12 red zone. We anticipate disputes as to whether the
13 system detects within 3 feet, precisely.

14 Operators are left with an environment in which
15 they are subject to violation based on the possible
16 vagaries of the electromagnetic fields upon which the
17 systems rely and the vagaries of where the miner
18 positions the sensor on his body. PCA instead believes
19 that the proposal should be clarified to provide that
20 once an approval system is installed and calibrated, the
21 visual signal could be relied upon by the operators.
22 Where the visual signal indicates proper operation, the
23 system should be assumed to be operating properly and no
24 violation would issue absent compelling evidence of an
25 operator's knowledge of a deficiency.

1 In addition, we believe that MSHA's training
2 assumptions are unrealistic and inconsistent with the 18-
3 month implementation period. Specifically, MSHA again
4 appears to be relying on anecdotal evidence from a
5 commenter that one hour of training for machine operators
6 and four hours for maintenance training will be adequate.
7 PCA members believe these approximations are too short
8 and significantly underestimate the amount of time that
9 will be necessary to provide adequate training.

10 PCA members call upon MSHA to update its
11 estimates to more accurately reflect the actual time
12 training will require. In addition to the added time
13 that will be required to provide training, PCA members
14 are concerned with ensuring that adequate numbers of
15 trainers are available.

16 I would also, in the rest of my comments, I'd
17 like to highlight on other issues; namely, the use of
18 deep or extended cuts. Several PCA members have received
19 permission to perform extended cuts and achieved greater
20 production while improving safety. As MSHA has specified
21 in their support for the proposed proximity detection
22 rule, the moving or tramming of mining equipment,
23 especially continuous miners, creates significant hazards
24 to miners and is the primary safety concern that the rule
25 seeks to address.

1 PCA believes that extended cuts are objectively
2 superior to conventional 20-foot cuts, and MSHA should be
3 doing more to champion their use wherever possible. The
4 most obvious and relevant safety benefit of deep cuts to
5 the present conversation is that extended cuts reduce the
6 number of equipment moves required.

7 For example, a 40-foot extended cut would
8 involve half of the equipment moves that a 20-foot cut
9 would necessitate. I know I've seen figures that cuts
10 the exposure by greater than 50 percent, but that's
11 enough of a calculation for my purposes here. It is
12 during the equipment moves that operators are most at
13 risk.

14 Safety data taken from the mines with extended
15 cuts supports its superior safety. There has been a
16 reduction in fatal accidents from mining of face
17 equipment since the advent of 40-foot cuts. PCA believes
18 this trend of safety improvements will continue if MSHA
19 liberalizes the use of extended cuts nationwide. We
20 recognize that the proximity detection is not a fail-safe
21 engineering solution to the issue of this type of injury.
22 We believe that the use of extended cuts is another
23 factor that has not been taken into account.

24 We support working to end red zone injuries.
25 We believe that the proximity detections can serve to

1 help work towards that goal. We believe that if MSHA
2 gives us more time to install the system and works with
3 mine operators to address our concerns regarding deep-cut
4 enforcement and malfunctioning systems, the rule will be
5 improved. Thank you very much.

6 Are there any questions?

7 MR. CHIRDON: Yeah. I have just a couple
8 questions for you.

9 You mentioned early on in your comments that
10 there have been conflicting accident data that --

11 MR. HENRY MOORE: That's my understanding.

12 MR. CHIRDON: Oh, okay.

13 MR. HENRY MOORE: I don't pretend to have
14 analyzed it all.

15 MR. CHIRDON: Does the Pennsylvania Coal
16 Association have any data that they will be submitting
17 with their comments, so we could also look at it?

18 MR. HENRY MOORE: We have no separate data from
19 what's available out there on this.

20 MR. CHIRDON: Okay.

21 Now, also, during your comments, you mentioned
22 the question regarding our 18-month time frame, and
23 you -- I believe you suggested 36 months?

24 MR. HENRY MOORE: Yes.

25 MR. CHIRDON: Will the Pennsylvania Coal

1 Association be submitting written comments? Do you know?

2 MR. HENRY MOORE: We can, yes.

3 MR. CHIRDON: Okay. Because I would be
4 interested to see what calculations you would use to
5 arrive at that 36 months, as well as -- and you mentioned
6 that we need to revisit our costs based on some flawed
7 assumptions.

8 If there was anything that -- any data that you
9 can provide, as far as how you think our economic
10 analysis might be flawed, that would be very helpful, as
11 well.

12 MR. HENRY MOORE: And I will tell you that, by
13 looking at the analysis, it looked to me like it was
14 underestimating, based upon what I had heard in the
15 industry of what it will actually cost to put the systems
16 in and get them up and running, so that they will do what
17 they're supposed to do. We all want them to do what
18 they're supposed to do. That's our concern, is to put
19 them in right and use them right, so that we have another
20 effective tool.

21 MR. CHIRDON: And one last question. You
22 brought up the concern about how we would determine the
23 3-foot stopping distance.

24 MR. HENRY MOORE: Yes.

25 MR. CHIRDON: When you submit written comments,

1 any suggestions as to a method that the Pennsylvania Coal
2 Association thinks would be appropriate would be
3 helpful --

4 MR. HENRY MOORE: Okay.

5 MR. CHIRDON: -- as well.

6 MR. HENRY MOORE: We'll do that.

7 MR. BAUGHMAN: Do you have an extra copy?

8 MR. HENRY MOORE: Sure.

9 MR. BAUGHMAN: Thank you.

10 MODERATOR FONTAINE: Thank you.

11 Our next speaker will be Jim Lamont, UMWA.

12 MR. LAMONT: If there will be no problem,

13 Roslyn, for Ron Bowersox and I, together, do this.

14 MODERATOR FONTAINE: Oh, sure, sure. Don't
15 forget to please spell your name for the court reporter.

16 MR. LAMONT: James -- J A M E S -- Lamont --
17 L A M O N T. I'm with United Mine Workers International
18 Union.

19 MR. BOWERSOX: Ron Bowersox -- B O W E R S O X
20 -- with the United Mine Workers, Safety.

21 MR. LAMONT: Okay. Not a whole lot to add.
22 Basically, this rule is something that we've been waiting
23 to see for a long -- quite some time.

24 I know Dennis O'Dell, with our International
25 Health, addressed you guys last week in Charleston. So,

1 basically, I don't have a whole lot to add to it, other
2 than something in the form of a question.

3 Under 1732(b)(1), the 3-foot stopping distance,
4 the word "stop," I'm not real sure of what that means.
5 Does that mean when the machine, the body, the frame of
6 the machine gets within 3 foot of the miner or the
7 tailpiece; when it's swinging, gets within 3 foot of the
8 miner; does that mean the machine will shut off right
9 then and there, or will it just stop the function of
10 tramming or the tail swinging; or will the machine be
11 totally de-energized?

12 MR. CHIRDON: The intent of that, Jim, was that
13 the machine movement would stop, would cease, all machine
14 movement. Any movement that could come in contact with
15 the miner would stop. Again, that's something that we're
16 looking for commenters' input on, as well.

17 MR. LAMONT: So that, basically, would be all
18 hazardous movement in itself would be stopped, preventing
19 the machine from touching the miner, whether it be the
20 body of the machine or the tailpiece?

21 MR. CHIRDON: Correct.

22 MR. LAMONT: Okay. Full-face mining machines.
23 I just want to touch on that real quick.

24 In most cases, what I've seen, as far as the
25 full-face mining machine -- this would be under 1732(a) -

1 - whether the machine is wider than the normal continuous
2 mining machine or is it just the width of the entry, the
3 full-face miner cuts the width, basically, of what the
4 machine is. So, hence, when you're tramming from one
5 entry to another, you're going to have less clearance in
6 those developed sections than you would with a regular
7 continuous miner. So we would be in full favor of having
8 the proximity detection on the full-face miner, also.

9 And the last thing I would have is that I would
10 believe -- I know Ron is going to touch on some other
11 stuff, but the rule itself should be expanded, also, to
12 surface machinery and equipment. If we're going to start
13 it on one, let's complete it and do it with all of them.

14 MR. BOWERSOX: Okay. These numbers have been
15 repeated quite a bit. I don't have the exact numbers,
16 but I have -- since 1984 to present, there have been 34
17 fatalities with continuous miners. You had 12 with
18 shuttle cars. I think the numbers total 70 with all
19 different types of equipment.

20 Recently, we had two serious injuries, one in
21 District 9 and District 10. District 9, we had a miner
22 who was bolting a roof when he was struck by a scoop that
23 was delivering material to the to the face. The victim
24 was in his mid 20s; had both legs amputated above the
25 knee. He told others that he never seen the scoop

1 approaching. District 10, we had a section foreman
2 sitting next to a rib taking notes when he was struck by
3 a scoop. He has a fractured pelvis and internal
4 injuries; indicated his recovery will be lengthy.

5 I'm disappointed that MSHA was not requiring
6 proximity devices on all other mining equipment and would
7 urge the rule to be expanded to shovel cars, scoops,
8 loading machines, and new equipment. What I mean by "new
9 equipment" is, I set the Pennsylvania diesel approvals,
10 and a lot of operators now -- and they are nice pieces of
11 equipment.

12 They're building what they call a belt cleaner.
13 It's a small-type scoop bucket. They're remote control,
14 most of them, and they travel 60 feet per minute, so
15 that's pretty fast. You've got confined areas, and that
16 definitely should require a proximity device. You've got
17 manhole cutters. Same thing. They're 14-foot in length.
18 Some of these belt headings are 16 feet. So you can see
19 the type of machine you may have there.

20 And like Jim said, I also believe full-face
21 mining equipment should definitely have proximity,
22 because you tram from one place to another; you got some
23 tight situations there. Okay. You hear a lot of people
24 saying that technology is not really here yet, but I was
25 involved when the Sago disaster happened. I heard the

1 same thing about communications. And I'll tell you right
2 now, with tracking and communications, underground coal
3 mines is pretty good right now, and that's five years.

4 Proximity has been around for probably over 10
5 years now. Why should we take a back seat to countries
6 like South Africa, Australia, or Canada? We are
7 wondering what equipment we should put it on. So,
8 definitely, I think it should be on most all types of
9 mining equipment. And like Jim said, too, on the
10 surface, some of these big trucks, these dozers, they're
11 so big now. They're fast. So I think that should also
12 be expanded to surface.

13 Questions?

14 MR. CHIRDON: I don't have any.

15 MR. LAMONT: Thank you.

16 MR. BOWERSOX: Thank you.

17 MR. BAUGHMAN: Just one second, please.

18 MODERATOR FONTAINE: Thank you.

19 MR. BOWERSOX: Okay. Okay.

20 Our next speakers will be John Gallick and
21 Terry Theys.

22 MR. GALLICK: Okay. Are we ready?

23 We were going to -- we'll do it -- my name is
24 John M. Gallick -- G-A-L-L-I-C-K. I'm Vice President of
25 Safety and Health for Alpha Natural Resources.

1 MR. THEYS: I'm Terry J. Theys -- T-H-E-Y-S.
2 I'm Director of Safety and Engineering, Alpha Natural
3 Resources.

4 MR. GALLICK: For the Panel, I'm going to read
5 our prepared statement, and Terry and I will be available
6 for questions, both back and forth, whatever comes
7 forward.

8 MODERATOR FONTAINE: Okay.

9 MR. GALLICK: Good morning. I'm John Gallick.
10 I appreciate the opportunity to provide some additional
11 information on the Proposed Rule on Proximity Detection
12 Systems.

13 I am Vice President, Safety, for Alpha Natural
14 Resources, and I'll be speaking for Alpha and its various
15 affiliates.

16 Alpha's affiliates, as you know, operate a
17 number of underground coal mines ranging in size from our
18 large longwall operations to relatively small mines that
19 depend on continuous miners to produce coal. We operate
20 underground coal mines in Pennsylvania, West Virginia,
21 Kentucky, and Virginia.

22 In my position, I oversee the safety processes
23 of the company; including accident prevention, regulatory
24 mine safety issues, compliance issues, interpreting,
25 applying, and advising on compliance with regulatory

1 standards, and on mine rescue capability. I'm also
2 involved in the litigation process for contests of
3 citations and orders.

4 At the outset, I'd like to commend MSHA for
5 seeking to implement the proposed rule via notice and
6 comment rulemaking. It is far more appropriate for a
7 proposed regulation that has been discussed back and
8 forth for a number of years to move through the normal
9 channels in the regulatory process. This allows the
10 Agency an opportunity to hear from various stakeholders
11 who, for the most part, I believe, will support the
12 intention of installing proximity devices on continuous
13 mining machines, but will recommend changes in timing and
14 other issues in the proposed regulation.

15 The filing of notice and comment, rather than
16 the use of the Emergency Temporary Standards, provides a
17 proper setting to discuss these concerns in an open
18 setting. Alpha submits that, as a consequence of MSHA's
19 decision to proceed via notice and comment rulemaking,
20 any resulting rule will be necessarily strengthened by
21 the participation and the input of stakeholders in this
22 process.

23 In addition to improving the results, Alpha
24 strongly believes that where standard rulemaking power is
25 vested in an executive agency, due process and the

1 Administrative Procedure Act demand that notice and
2 comment rulemaking be utilized to create valid new rules
3 and regulations and standards. Operators and miners are
4 the ones who will be affected by any new rule, and it
5 only makes sense that we would be able to provide input
6 into that rule's creation.

7 Continuous mining machines have been involved
8 in numerous injuries and fatalities over the years. The
9 majority of injuries and deaths have occurred to miner
10 operators who normally control the continuous mining
11 machines' movement with a handheld remote control. The
12 majority of events have arisen as a consequence of miners
13 being pinned by the machine they are operating against a
14 rib while the machine is trammed or moved from location-
15 to-location. Significant progress has been made over the
16 past two decades concerning prevention of red zone
17 injuries.

18 I'm going to skip a few of the statistics,
19 because that's already been talked about. So I'll just
20 move on to another point.

21 This evidence of the various improvements
22 involving red zone safety highlights the strides that
23 operators have made on the issue and the power of
24 training and education in the elimination of red zone
25 hazards. It also serves to illustrate the positive

1 benefits of state and federal agencies working
2 cooperatively with operators to attack this problem.
3 Working together, we were able to successfully reduce red
4 zone injuries and fatalities. While any injury or
5 fatality is unacceptable, the joint efforts of the
6 parties to train, remind, and observe miner operators
7 concerning red zone hazards is part of any behavioral-
8 based safety process. This behavioral safety approach is
9 effective and needs to be incorporated with any
10 engineering device usage.

11 While work remains to eliminate the occurrences
12 of such events, we believe the record of progress
13 suggests that the necessity of the proposed rule's timing
14 for having proximity devices installed on all continuous
15 miners within 18 months is not as clear, and a more
16 rational implementation schedule can be incorporated into
17 the regulation. I'll return to that schedule and my
18 thoughts on that in a few minutes.

19 Alpha does not oppose the proposed rule.
20 Rather, it believes that proximity detection systems can
21 serve an important function in raising miners' awareness
22 of red zone issues, with a goal of eliminating red zone
23 injuries and deaths. While Alpha supports the use of
24 proximity detection systems, we have reservations about
25 the rule, as proposed.

1 I'd like to use the balance of my time and
2 testimony to discuss Alpha's concerns about the proposed
3 rule and our suggestions for its improvement.

4 The first issue that Alpha would like to
5 highlight is the 18-month implementation schedule for
6 existing continuous mining machines, as provided at
7 75.1732(a).

8 While Alpha represents longwall and room and
9 pillar mines, continuous mining machines are essential to
10 the operations of both. We believe that the 18-month
11 schedule is based upon overly optimistic assumptions that
12 have been adopted with little inquiry by the Agency.
13 Alpha believes that the most significant problems
14 implementing the rule can be addressed with additional
15 time. However, if more time is not provided, we fear
16 that some mines will be unable to complete the
17 installations in a timely manner.

18 MSHA estimates there are approximately 1,150
19 place changing continuous mining machines in the nation
20 that will need to be fitted with proximity systems in the
21 18 months following the final rule's promulgation.
22 Averaging slightly more than two mining machines daily,
23 this does not sound overly daunting, but the reality is
24 otherwise. I can tell you with certainty that 18 months
25 is not enough time. It is still unclear whether the

1 developers of the approved systems will be involved in
2 the installation while working to license and technology
3 others. In either case, Alpha believes that serious
4 delays will inevitably result.

5 In support of the 18-month period, MSHA is
6 citing comments it received in response to its request
7 for information indicating that, quote, "a proximity
8 detection system can be installed and calibrated on a
9 remote controlled continuous mining machine in one
10 midnight shift," unquote. That was found on 76 FR 54167.
11 Alpha's dubious about the efficacy of underground
12 installation and calibration.

13 Contrary to MSHA's assertion, our mines are
14 likely, wherever possible, to install and calibrate the
15 new equipment in a shop or during rebuild to ensure the
16 installation is performed properly and to minimize
17 proximity system failures. Installing the detectors
18 during the rebuild process is by far the better way to
19 accomplish this.

20 MSHA has stated in the Preamble, under
21 75.1732(b), that the, quote, "proper functioning of the
22 proximity system is directly related to the quality of
23 installation," unquote. We believe that this can only be
24 accomplished by equipping the continuous miners with the
25 proximity system during their initial construction or

1 during your rebuild.

2 For example, Alpha has in excess of 250 place
3 change continuous miners, of which 15 are now currently
4 prox ready. Sixty are scheduled for replacement and
5 rebuilds in 2012. An additional ten are scheduled for
6 rebuilding and replacement early in 2013. This leaves us
7 with 165 machines currently not scheduled for rebuild or
8 replacement by March 1st, 2013. The compliance date
9 would need to be extended another 33 months, until
10 approximately 12/31/2015, in order to properly install
11 proximity systems on all of our continuous miners,
12 according to the normal rebuild and replacement schedule.

13 Joy has plant and shop capabilities that permit
14 about 120 new continuous miners to 130 rebuilds -- new
15 continuous miners and 120 to 130 rebuilds per year. It
16 would take in excess of two years for Joy to provide
17 properly installed proximity systems during replacement
18 and rebuilds through the certified facilities for all our
19 machines if Alpha was their only customers.

20 It is assumed that some of our mines will use
21 local shops with which they have a pre-existing
22 relationship to perform the installation. If this
23 approach is utilized, we estimate the proximity
24 installation time frame to be approximately a week, based
25 on the amount of cutting, welding, and fabricating

1 required to temporarily install the system. Alpha
2 estimates that the total time for out-of-service --
3 that's from leaving the section to returning back to
4 production -- is six weeks for every machine. Moreover,
5 these shops tend to be small, local businesses, and are
6 not really of the ability to expand quickly to meet
7 excess demand that's going to be short-term. The proper
8 installation -- meaning, going to rebuild shops -- will
9 result in mining machines being out of service for
10 significantly longer than if they were performed
11 underground, as it appears, I believe MSHA has
12 contemplated. It will also strain the capacity of
13 vendors to keep up with the demand. To the extent that
14 these misconceptions guide MSHA's selection of the time
15 frame, I think the time frame should be reconsidered.

16 We recognize that a commenter stated the system
17 will be added in a shift, but we have never seen that in
18 practice. While MSHA may believe that an eight-hour
19 shift underground is adequate to perform an installation
20 and calibration, Alpha's certain that this is not the
21 case. Proper installation is required, since reliability
22 of the system is the most critical issue. Without proper
23 protection, the machine-mounted components for
24 reliability will never be accomplished. There is a
25 significant amount of cutting and welding required to the

1 recess, mount, and protect the exterior components.
2 Wiring must be routed internally in conduits. Cross
3 machine wiring must be in conduits throughout the
4 machine's frame center section. This work cannot be done
5 properly underground, let alone in a single shift. This
6 is especially true in low seams, where the work described
7 above would be extremely difficult, at best.

8 While MSHA apparently believes that no problems
9 will arise, that is contrary to our experiences. When
10 performing these sorts of installations with novel
11 technology, bugs and errors are inevitable. In addition,
12 while MSHA has sought to temper concerns about the
13 interference, the proximity detection systems will only
14 be one of several electrical devices operating
15 underground at risk for interference. We fear that
16 MSHA's forecast will be proven false, and that operators
17 will be left scrambling to comply within the time frame
18 that was inadequate from the start.

19 We operate a number of low-seam mines. There
20 is limited, if any, experience to date with proximity
21 detection in low seams. We're not sure the interference
22 will not occur with the detection device when kneeling in
23 close proximity to loops and cables. In a final
24 analysis, Alpha is concerned that MSHA has simply not
25 done enough to confirm the facts upon which it's relying.

1 It appears that this may have been based on
2 certain vendor statements while virtually ignoring the
3 other fact-based information. To date, successful
4 underground installations have only been achieved through
5 proper installations; those done in properly equipped
6 shops by thoroughly trained technicians. Trying to do
7 the installations any other way is foolhardy. The
8 question I have for the Panel is: Are any of you aware
9 of any vendor who has actually installed a proximity
10 system underground? And, if so, how reliable has that
11 system been?

12 Alpha views MSHA's failure to seriously address
13 these practical issues as a serious shortcoming in the
14 18-month period selected. MSHA needs to figure out how
15 long it will take to perform a single installation and a
16 calibration, and then determine how many providers will
17 be capable of performing these fixes.

18 A more detailed analysis will reveal the 18
19 months is untenable and will highlight the limited number
20 of facilities and persons certified to perform
21 installations. As it stands, there will be long waiting
22 periods because of the limited number of shops and
23 trained individuals who are capable of performing the
24 proximity installation and calibration.

25 In addition to these concerns regarding

1 manpower facilities, there's also the issue of
2 availability of specialized parts and equipment needed to
3 install proximity systems.

4 In the Preamble to the proposed rule, MSHA
5 indicates the manufacturers have indicated that they can
6 collectively produce approximately 350 units per month.
7 MSHA specifies the manufacturers can increase production
8 to about, quote/unquote, 400 to 600 a month, if necessary
9 (76 FR 54168). It is unclear if this is MSHA's forecast
10 or it's based on MSHA's consultation with all of the
11 manufacturers. In either case, I believe the 18-month
12 schedule listed in the proposed regulation was developed
13 using the vendors' capability in supplying proximity
14 devices as a timing consideration, and not the amount of
15 work the mining machine would need to assure a properly
16 installed proximity unit.

17 The units need to be installed so they are
18 mine-worthy. The work needed to install mine-worthy
19 devices and the logistics of scheduling and providing
20 shop space and trained installers should be the driver of
21 appropriate timing for completion of the proximity
22 devices on continuous mining units. Frankly, this is one
23 of the critical flaws in the timing issue in the proposed
24 regulation, in my opinion.

25 Even taking the vendors' production figures at

1 face value, at present, there are only three approved
2 proprietary proximity systems available. Each has its
3 own unique parts, software, and hardware. Any supply
4 shortfalls will inevitably lead to significant shortages
5 and, ultimately, with delays in installations. These
6 shortages and delays could be exasperated further if one
7 of the proximity systems proves more popular than
8 anticipated by the manufacturer.

9 Despite these variables, there's no indication
10 that MSHA's made significant inquiries into the capacity
11 of the manufacturers to manufacture and install the
12 number of units indicated, let alone the number that MSHA
13 has specified.

14 In addition, Alpha believes that MSHA's
15 training assumptions are unrealistic and inconsistent
16 with the 18-month implementation period selected.
17 Specifically, MSHA again appears to be relying on
18 anecdotal evidence from a commenter that one-hour
19 training for machine operators and four hours for
20 maintenance training will be significant. That was found
21 on 76 FR 54171. Alpha believes these approximations are
22 way too short and significantly underestimate the amount
23 of time that will be necessary to provide adequate
24 training. Alpha calls upon MSHA to update its estimate
25 to more accurately reflect the actual amount of time

1 training will require.

2 In addition to the added time that will be
3 required to provide training, Alpha is concerned with
4 ensuring that the adequate number of trainers are
5 available to provide that training. Further, we believe
6 it should be recognized that mine maintenance personnel
7 will not perform complex computer total adjustments.
8 Mine-level maintenance should be limited to
9 troubleshooting and component changes.

10 We are also concerned about the recordkeeping
11 requirements for training, as to the installation of
12 systems. It's impractical for mine operators if the
13 installation is performed by third parties. Alpha's also
14 concerned that the 18-month period fails to fairly
15 consider the time MSHA approvals will take.

16 The installation of each detector will be a
17 modification that will require approval. MSHA
18 permissibility approvals will include evaluation of
19 proximity device detection systems and the addition of
20 the systems to MSHA-approved continuous mining --

21 (Cell phone ringing.)

22 MR. GALLICK: -- sorry, I knew I should have
23 turned that off -- machines leaving aside the obvious
24 question of whether MSHA is doing enough to ensure the
25 effectiveness of the proposed proximity systems, Alpha's

1 concern that MSHA's Triadelphia office will be
2 overwhelmed and unable to respond in a timely matter to
3 the massive influx of requests for evaluation and
4 approval that will soon be inundating the office. Alpha
5 believes that with additional time and resources, the
6 Triadelphia office could be more able to respond to all
7 the requests.

8 MSHA also had not taken into account, I
9 believe, state approvals of the system. In Pennsylvania,
10 this could be a protracted process because of the
11 technical committee that will need to develop criteria.
12 West Virginia's recently circulated information that all
13 proximity systems must be tested and approved by their
14 own agency. I'll let the states respond to how they're
15 set up, but it seems to me that that's going to be
16 another issue.

17 Based upon our concerns, Alpha calls upon MSHA
18 to really reconsider its 18-month implementation. We're
19 recommending an extended period to at least 36 months to
20 better ease the transition to the new systems. We also
21 believe the rules should make it clear that out-by
22 construction continuous miners should be equipped only
23 after all the face equipment is done.

24 We are assuming that the mining machine total
25 listed in the proposed regulation Preamble is for mining

1 machines working in coal cutting faces, MMUs. There are
2 another group of machines that are used for construction
3 purposes. Proximity devices should be installed on these
4 machines, either when the machine is sent for rebuild or
5 no earlier than after all the face machines are
6 completed. This schedule should be part of the
7 regulation.

8 The Agency asked commenters to discuss full-
9 face mining machines. Clearly, these machines are
10 unique, and the risk of pinning an employee with these
11 machines is a lower risk probability. I don't think the
12 risk is such that these type of mining machines need to
13 be considered for proximity detection.

14 With that said, if the Agency determines that
15 these machines should be equipped with proximity devices,
16 I would modify the regulation concerning the installation
17 proximity on full-face miners to when tramming from
18 place-to-place only. This needs to be very clearly
19 stated in any regulation.

20 Also, since the risk of work or harm with these
21 machines is relatively low, I would list the installation
22 date to be when the new machine is purchased or the
23 machine is rebuilt. I would stay away from setting an
24 installation date, an arbitrary installation date, on
25 full-face miners.

1 Alpha's also concerned with the removal from
2 service provision provided in Sections 75.1732(b)(4). As
3 proposed, the rule requires a continuous miner with a
4 malfunctioning proximity detection to be immediately
5 removed from service. Alpha believes that such a result
6 is unnecessarily severe and provides little benefit to
7 the miners. The deployment of this novel technology
8 underground will be subject to errors and problems that
9 will need to be addressed.

10 In addition to software issues, there is also
11 likely to be problems with hardware, as the mining
12 operating conditions impact the system's functionality.

13 If the final rule remains as proposed, it will
14 significantly impact mine operations. Operators are
15 dependant upon these machines, obviously, to provide
16 production. If a continuous mining machine is removed
17 from operation, it is likely that, obviously, that whole
18 section will be down until it's repaired. Alpha believes
19 the rule should be revised to allow operators to use the
20 mining machine until the following maintenance shift.

21 In the event of a system malfunction, or as
22 75.1732(b)(4) specifies, miners will be alerted by the
23 use of distinct audio or visible alarm. As such, they
24 will be aware that the red zone proximity is not
25 operating normally. Moreover, the primary benefit of the

1 system will be as a training tool that will alert miners,
2 via audio or visual cues, when a miner is located or in a
3 red zone area. The miner shuts down when the miner is
4 within 3 feet. It can be properly assumed that
5 continuous miner operators will work to ensure that they
6 can continue to operate without running a foul system or
7 depending too much upon its proper operation for their
8 safety.

9 We are also not working with a blank slate.
10 Mining machine operators are aware of the dangers
11 involved and have reduced the number of red zone events
12 precipitously over the vast period of time. Thus, even
13 if the system is temporarily unavailable, miners will
14 still benefit from not only having the distinct warning,
15 but also from their prior experience, as well as their
16 work with proximity detection systems.

17 Lastly, the condition will be addressed on the
18 first non-production shift. As such, the condition
19 should be removed within 24 hours of its occurrence.
20 Alpha believes a modification rule to permit limited
21 production would ensure that the safety of miners is
22 protected while improving the operational efficiency and
23 down time.

24 Alpha would like to address the enforcement of
25 the Act. As proposed in 75.1732(b)(1), to be approved, a

1 proximity detection system must quote, "cause a machine
2 to stop not closer than 3 feet from a miner," unquote,
3 except as otherwise provided. Once the system is
4 approved and implemented, it is subject to visual
5 examination before each working shift, and a more
6 thorough examination on a weekly basis. The visual
7 examination requirement proposes at 17. 75.1732(b)(3)
8 requires a miner to look at a visual signal that
9 indicates the system is functioning properly. That's
10 5076 FR 54170.

11 Alpha's concern is that operators will be cited
12 for violation of the proposed standard when the inspector
13 finds that a machine is stopping within the 3 foot
14 provided. It's unclear from the rule how the 3-foot for
15 stopping and 5 feet for warning is going to be measured.
16 It's also not clear whether the system will simply stop
17 the machine's movement or totally shut it down.

18 Operators believe they should be able to rely
19 on the visual signal to establish a machine's proper
20 function. Otherwise, operators are left with the
21 environment in which they are subject to violations,
22 based on the vagaries of the electromagnetic field upon
23 which the systems rely. Alpha instead believes that the
24 proposed rule should be clarified to provide that once an
25 approved system is installed and calibrated, that the

1 visual signal can be relied upon by the operators to be
2 sufficient. Where the visual signal indicates proper
3 function of the system, it would be assumed to be
4 operating properly, and no violation would be issued,
5 absent compelling evidence of an operator's knowledge of
6 such a deficiency.

7 Earlier, I said I would return to the issue of
8 scheduling. The schedule needs to be extended to a more
9 realistic time frame to accommodate a more normal rebuild
10 schedule. I believe that Joy testified last week that
11 that the time frame is closer to 38 months than to the 18
12 months in the proposed regulation. I would recommend
13 that the Agency extend the time frame to install
14 proximity units to 36 months to allow for a more logical
15 schedule. I would couple this time extension with
16 another round of red zone awareness training.

17 As stated in the Preamble, and I quote: "In
18 2004, MSHA initiated a safety campaign to raise the
19 mining industry's awareness of pinning, crushing, and
20 striking hazards associated with the remote control of
21 continuous mining machines. There were no fatalities
22 associated with the continuous mining machines between
23 2005 and 2007, indicating the safety campaign may have
24 had a positive impact on fatal accidents." That was
25 found on 76 FR 54168 and 69.

1 My suggestion is for the Agency, along with
2 industry and labor, to reinitiate a strong behavioral-
3 based approach to red zone issues and, at the same time,
4 move ahead with proximity detection installation on a
5 more reasonable schedule. Combining them together, I
6 believe we can meet both needs, proper timing and the
7 safety of our employees.

8 In my remaining time today, I'd like to
9 highlight another underappreciated means of reducing
10 potential for red zone injuries, namely, via the use of
11 deep or extended cuts. Several Alpha mines have received
12 permission to perform extended cuts and have achieved
13 greater production while improving safety.

14 As MSHA has specified in their support of the
15 Proposed Proximity Detection Rule, the moving or tramming
16 of mining equipment, especially continuous miners,
17 creates significant hazards to miners and is the primary
18 safety concern the rule seeks to address. Alpha believes
19 that the extended cuts are objectively superior to
20 conventional 20-foot cuts. Rather than discouraging deep
21 cuts in various ways, MSHA should do more to champion
22 their use wherever possible. The most obvious and
23 relevant safety benefit of deep cuts to the present
24 conversation on proximity is that extended cuts reduce
25 the number of equipment moves required. For example, a

1 40-foot extended cut would involve half the equipment
2 moves that a 20-foot cut would necessitate. It is during
3 equipment moves that operators are most at risk. It is
4 not during the maneuvering in the cut that the mines have
5 been using. The rule of this proposed regulation is to
6 reduce the risk of miners being pinned by mining
7 machines.

8 History has shown that this risk is most likely
9 to occur during place changing. If we are looking to
10 implement a system that reduces this risk, then we need
11 to review the system issue in a more holistic manner.
12 That is we need to combine the value training the workers
13 receive on red zone issues using the engineering design
14 of proximity detection and, where possible, reduce the
15 tramming by the use of deep cuts. Safety data taken from
16 mines with extended cuts supports a superior safety.

17 There has been a reduction in fatal accidents
18 from mining of face equipment since the advent of 40-foot
19 extended cuts. Alpha believes this trend of safety
20 improvements will continue if MSHA will liberalize the
21 use of extended cuts nationwide.

22 In conclusion, Alpha supports working to end
23 red zone injuries. We believe that the proximity
24 detection system can serve to help work towards that
25 goal. We believe that if MSHA gives us more time to

1 install the systems and works with the mine operators to
2 address our concerns regarding the deep cuts, enforcement
3 and malfunctioning systems, and a new red zone training
4 initiative, the rule can be improved and mining can be
5 done safely during that period. Thank you.

6 Now, I'd like to add a couple questions for the
7 Panel, and then I know you're going to have questions for
8 me.

9 I'm going to mark this one under the Law of
10 Unattended Consequences. The accelerated rebuild
11 schedule will require operators to either idle a session
12 while the mining machine is being modified or another
13 mining machine will need to be used as a replacement.
14 Logical.

15 Has the Agency considered the impacts of that
16 transfer? For instance, prescribe the LUST plan and
17 controls for different MMUs, etc. We anticipate an
18 administrative nightmare switching machines around. You
19 know, they will not be the normal -- we'll have machines
20 switching from mine-to-mine, which brings different plans
21 and different administrative stuff that we'll have to
22 deal with the respirable dust level with the Agency.

23 And my next question is: Has the Agency considered
24 some type of system approval to minimize individual
25 inspector enforcement? You know, I'm thinking of some

1 system, such as the SDE lighting, where the system is
2 checked and in place. Then individual measurements are
3 not part of the enforcement process, as long as the SDE
4 is in place.

5 I know I spoke to that earlier about setting a
6 calibration, and once it's set, as long as it stays
7 there, we're not measuring 2'11" versus 3'1". You know,
8 that type of thing that inspectors can get into involving
9 individual stuff. If they can support it, we can think
10 about those questions. I know Terry had another one,
11 also.

12 MR. THEYS: Yeah. Basically, we've got
13 multiple machine manufacturers. To name a few, we've got
14 Caterpillar. We have Joy. We got Sandvik. We have
15 Fairchild. We've got three different proximity systems;
16 Nautilus, Strata, and Joy available on the market. And
17 you can take any one of those seven names and come up
18 with various combinations.

19 And my question is: Has MSHA considered the
20 time required for the various machine manufacturers to
21 work with the proximity vendors to incorporate their
22 systems on each individual machine? We have some
23 experience now with trying to make the Caterpillar
24 machines accept the Joy system. Believe me, the time
25 involved between the engineers at Caterpillar and Joy, as

1 well as getting people down into the shop to actually
2 make this thing prox ready has been extensive.

3 And I've got real concerns with the various
4 machines that we have out in the field and the various
5 proximity vendors, of how we're going to take the
6 engineering time into consideration on what's needed to
7 actually install these systems.

8 MR. GALLICK: This is my last comment. Not a
9 question. Just a comment.

10 We do intend to put written comments in and
11 detail more discussion of some of the questions that the
12 Panel has asked and try to get some of that looking
13 forward.

14 Do you have any questions for us? We're
15 finished.

16 MR. CHIRDON: Yeah. I do have a couple, John.
17 I appreciate those comments.

18 First of all, in response to your questions, we
19 have spent a lot of time looking at the approval issues
20 that would arise out of this Proximity Detection Rule,
21 and we have developed a Proximity Detection Acceptance
22 program.

23 Manufacturers like Strata, Matrix, Nautilus can
24 get their own acceptance number for their system, which
25 includes a complete intrinsic safety analysis. And then

1 all that's necessary for the continuous mining machine is
2 that Joy, Bucyrus, Caterpillar or Voest Alpine would just
3 submit a RAMP to us. And all it has to do is add that
4 proximity detection acceptance to the machine. And for
5 those older machines or the machines that the
6 manufacturers aren't interested in, or aren't interested
7 in submitting a RAMP, or they're no longer supporting
8 those machines, there is the field modification program.

9 But we're also doing work with the districts.
10 Not all of these are even going to require a field
11 modification. You can go through a district field change
12 and just notify your districts that you're adding a
13 proximity detection system to a machine. And that way we
14 can reduce the amount of approval burden. So this
15 addresses Hank's previous comments on the subject, as
16 well.

17 Now, a couple questions I had for you. You
18 don't need to answer these now; if you can just address
19 them in your comments; whatever you prefer.

20 MR. GALLICK: You're leaving me an outlet.

21 MR. CHIRDON: Nobody ever does that for us.

22 But the rebuild process, we'd be interested in hearing
23 more about how that actually works. What's the life of a
24 machine? How long until it goes out for a rebuild? How
25 do they maintain continuity of operations when that

1 machine goes out? So that would be good data to provide
2 with your written comments, as far as that goes.

3 You know, we've gotten a lot of input, as far
4 as the rebuild process goes and that 18 months that we
5 propose, we're going to, obviously, have to re-evaluate
6 that. With that, the more data that you can provide, the
7 better.

8 MR. GALLICK: We'll be glad to. We've talked
9 to our maintenance people and scheduling. We'll put that
10 into a, hopefully, clearer picture.

11 MR. CHIRDON: And our economists, I think,
12 would appreciate any impact on the economics, as well,
13 when you submit that.

14 MR. GALLICK: We can also do that, to some
15 extent, I think.

16 MR. CHIRDON: Okay. Then just one other
17 question.

18 MR. THEYS: Related to that, Dave, how do you
19 want that addressed? What we have in hand is our rebuild
20 schedule, based on an unemployed machine, that kind of
21 thing.

22 The economics where it really is going to come
23 into play is, if we can't follow that schedule and we
24 have to start pulling other machines out of the face that
25 are not scheduled for rebuild, that's where the true

1 economics would be a tough number to come up with. You
2 know, there's two ifs there. You know, if we can follow
3 our rebuild schedule, we can provide the data easily. If
4 we are forced into pulling machines out that are not
5 scheduled for that, then it's just going to be a ballpark
6 estimate of how long we think it's going to come out;
7 where we're going to get machines to put back in the
8 face; what kind of loss of production there is with it.
9 So --

10 MR. CHIRDON: Yeah. The best that you can
11 provide us is what we're looking for.

12 The other question, you mentioned maybe adding
13 a consideration to our schedule for out-by machines, for
14 machines used for construction. I'm curious of the
15 population of those machines.

16 Do you know, is that 1 percent, 5 percent, 10
17 percent?

18 MR. GALLICK: Yeah. We'll get you what we
19 have. What I wasn't sure of, Dave, where the number came
20 from; whether they were the MMUs that MSHA pulled up or
21 whether the vendor said: "These are how many machines we
22 have out in the field somewhere." So I wasn't sure -- I
23 assumed they weren't counted in that 1,150. That's just
24 a guess on my part. But I also assumed that they would
25 require proximity.

1 MR. CHIRDON: Yes. Yes, that's true. I'm not
2 exactly sure. We'd have to go back and look at our
3 numbers. But if you could provide us that --

4 MR. GALLICK: Our 265 number does not include
5 those. I will tell you that. Those 265 are what we
6 consider to be production machines. We'll get that
7 number for you.

8 MR. WARD: I have one question. Can you hear
9 me?

10 COURT REPORTER: Barely.

11 MR. WARD: Just one quick question.

12 You also mentioned the training estimates for
13 training in continuous machine operators and the training
14 for maintenance personnel. If you could, provide
15 estimates for those, as well.

16 MR. GALLICK: I will. I'm assuming you may get
17 more of that on the evidence rule, also, from the fellows
18 who have the most field experience.

19 MR. WARD: Thank you.

20 MR. GALLICK: I wanted to testify thereafter
21 more, but I couldn't make my schedule work. But we will
22 do that.

23 MODERATOR FONTAINE: Okay.

24 To follow up on what Matt just asked, could you
25 also give a rationale as to what you think would be an

1 appropriate amount of time for the training.

2 MR. GALLICK: That's fine.

3 MODERATOR FONTAINE: Okay.

4 And as far as your comments on extended cuts, I
5 want to thank you for that.

6 But the purpose of this hearing is to gather
7 information on proximity detection technology.

8 MR. GALLICK: No. We understood that.

9 And what I tried to say was, if you look at
10 pinning miners, workers being pinned, there were three or
11 four pieces -- the proximity's -- our concern -- we
12 didn't really -- maybe I didn't articulate it well
13 enough.

14 Terry is pounding me hard on this, but -- is,
15 are we -- our workers have to understand that, like any
16 device, like a pull switch on a belt line, how much do
17 you trust that switch? How much do you want to trust the
18 proximity? You have to still be trained; you have to
19 still be observed; and in our running safety process, we
20 have to still require our workers to stay out of those
21 systems, as part of their behavioral safety. What I'll
22 call the people-side safety.

23 And what we said is, if you looked at this more
24 multifaceted, then you would look at, what are the risks?
25 Well, the risks are moving the machine. The fewer times

1 we have to move the machine, the less likely someone is
2 going to be pinned. And, I think, frankly, that's one of
3 the issues of a full-face miner. When it moves after it
4 completes a full block of cutting -- granted it's pretty
5 big and you're not going to stand alongside of it, very
6 logically, but it's also the tramming. For foot of
7 production, the amount of tramming from place-to-place is
8 the lowest. The next lowest would be the deeper cut
9 mining systems. Therefore, we've reduced the risk each
10 time we can minimize the amount of tramming done. And,
11 you know, I appreciate, you know -- just want to clarify
12 that. Even though I'd like to make it a political
13 statement on that issue, that was not our intention.

14 MODERATOR FONTAINE: Okay.

15 MR. GALLICK: Wait a minute. Terry has
16 something to add.

17 MR. THEYS: Just kind of related to that.
18 Looking at this from a risk management side, the three
19 parts you have, you want to minimize your exposure, of
20 course. That's where the deep cuts come into play. You
21 have engineering controls where the work proximity comes
22 into play. And then, we have the behavior of our people.
23 And we need to work on all three of these. We can't just
24 focus on one.

25 Even though the rule is focusing on the

1 engineering control, as I refer to it, you have three
2 parts there. And we want to be sure that we address all
3 portions of this. And going into this just a little bit
4 deeper, we need to work on all three of these, because we
5 need to minimize the exposure, no matter what. That's
6 where the deep cuts are.

7 The engineering controls, we're not against
8 proximity. We're for proximity. We think it's a good
9 idea, truly. But the behavior of our people is where our
10 concern comes in, relating back to our time frame, also.
11 The engineering controls, people are people. Even though
12 we teach them they've got to stay out of there, people
13 are going to take the easy way out in most cases, over
14 time. And that engineering controls data proximity has
15 to be reliable, because people will, over time, learn to
16 trust that system.

17 And the first time that system fails and that
18 person has maybe put his trust a little too deep on the
19 engineering control side, we're going to have a serious
20 accident. That's where the reliability comes into play.
21 So they do all role together. We have to work on the
22 behavior; we have to minimize the exposure; and then we
23 need the engineering controls for the added layer of
24 protection, but it can't be the only protection.

25 MODERATOR FONTAINE: Thank you. We're going to

1 take a five-minute break.

2 (Off the record.)

3 (On the record.)

4 MODERATOR FONTAINE: Okay. We're ready to get
5 started.

6 Our next speaker will be Todd Moore from
7 Consol.

8 MR. TODD MOORE: Good morning. Hello. My name
9 is Todd Moore -- T O D D, M O O R E.

10 I am speaking here today as the Director of
11 Safety for Consol Energy Coal Operations. I am also a
12 member of the West Virginia Safety and Technology Task
13 Force.

14 First, let me thank you for affording me the
15 opportunity to make comment here today. I may also be
16 submitting written comments before the November 14th
17 deadline.

18 Secondly, I would like to thank you for
19 following the prescribed method for rulemaking, as
20 intended by Congress, instead of inappropriately using
21 the Emergency Temporary Standard Approach.

22 Consol energy currently operates approximately
23 60 MMUs; 11 which are longwalls and approximately 48
24 continuous underground mining machines, of which 11 are
25 place change miners, and 37 are full-face machines with

1 integral bolters.

2 We, at Consol, have been working with proximity
3 manufacturers for several years and we are currently
4 utilizing the Strata Proximity Detection System on a
5 place change miner in our Buchanan Mine, and have been
6 doing so continuously since March of this year. It
7 should be noted that this system, as being operated in
8 Buchanan, covers every person that may be exposed to
9 hazards of the miner while working on this miner section,
10 rather than a typical approach of covering only the miner
11 operator in regard to providing crushing and pinning
12 hazards.

13 We are also operating Strata Proximity
14 Detection Systems on a Joy 14-BU loading machine, two Joy
15 10 SC-32 shuttle cars, and a 582 Sandvik battery scoop at
16 our Bailey Mine. These systems have been in operation
17 since July of this year. Again, these systems provide
18 proximity detection for all individuals on this section,
19 not only the equipment operator. We are currently in the
20 process of equipping a Joy 14-BU loading machine, a Joy
21 shuttle car, and a battery scoop in our new miner
22 underground training section in our BMX Mine in
23 Pennsylvania.

24 We have been and continue to install proximity
25 detection hardware on all new and rebuilt place change

1 miners moving forward. As you can see, Consol Energy
2 clearly supports the adoption of proximity systems on
3 section equipment to provide training, alerts, and alarms
4 to all miners, in order to prevent equipment-related
5 injuries and fatalities to the underground mining
6 environment.

7 Having said that, there are a few issues with
8 the Proximity Detection Proposed Rule that I would like
9 to expand upon.

10 I am concerned with the timeline that MSHA has
11 proposed for proximity detection and adoption. I believe
12 that the statement quoted by MSHA that a system can be
13 installed in a single eight-hour shift has caused MSHA to
14 miscalculate the actual installation time for a properly
15 installed and maintainable system.

16 During the public comments last week in
17 Charleston, West Virginia, we heard from one of the
18 leading worldwide underground mining equipment
19 manufacturers. He stated: "Proper installation requires
20 multiple shifts of cutting and welding." This commenter
21 went on to add that this work "must be completed in a
22 workshop to ensure proper protection." Regarding
23 training, this commenter stated that: "Training requires
24 an absolute minimum of three days. Usually, more like
25 two weeks." Those are quotes. We agree with this

1 commenter's statements on installation and training.

2 We have installed our systems during the normal
3 rebuild process in an outside maintenance shop, and we
4 certainly were not able to accomplish this in a single
5 eight-hour shift. These installations took several days
6 and required even longer to locate the optimal location
7 for the cables and generators, and for the proper
8 calibration of the system.

9 During our startup, we have found that after
10 installation is completed and the equipment is moved
11 underground and is ready for operation, the next step
12 involves a one-week cold startup, during which time the
13 employees wear their active personal wearable devices,
14 PWDs, and the generator units are energized, but
15 incursions into the warning and shutdown zones only
16 result in audible and visual alarms on their PWDs,
17 without actually stopping machine movement. We believe
18 that this learning period allows the miners to become
19 accustomed to the new system and ultimately results in
20 better employee acceptance.

21 At the end of the one-week period, we activate
22 the generators and begin stopping machine movement with
23 any incursion into the machine stop zone. We have had
24 good success with this training procedure, and we plan to
25 continue the same process for our future installations,

1 if possible. We believe this two-week period is needed
2 to provide for proper, reliable, and maintainable
3 installation of the system for equipment operator
4 training, maintenance employee training, parts
5 management, troubleshooting, written system and
6 documentation, cold start familiarization, component
7 infant mortality failures, and employee acceptance.

8 Using the 1,150 place change miner number
9 provided in the proposed rule, and assuming that industry
10 equally place orders for the systems to the three
11 currently MSHA-approved proximity manufacturers, this
12 would result in 383 systems per approved manufacturer,
13 which would, in turn, result in each manufacturer being
14 required to install five systems per week, every week, in
15 order to attain the 18-month proposed requirement. This
16 requirement could result in poorly installed and
17 unmaintainable systems, which could result in employee
18 nonacceptance, and ultimately result in an improper usage
19 and, thusly, slow the intended purpose of this proposal
20 well beyond the time frame of a more reasonable
21 installation time requirement.

22 Given the normal time for a new product to move
23 through the MSHA approval process, it seems highly
24 unlikely that the number of MSHA-approved proximity
25 detection systems will increase substantially during the

1 18-month period. This seems like the appropriate time to
2 suggest that the current MSHA approval system be
3 thoroughly examined, and to suggest the possibility of
4 MSHA accepting intrinsic safety, or IS, approval by other
5 countries. The current system of MSHA approval seems to
6 inhibit the development of new and emerging technologies
7 that are being more readily utilized in other mining
8 countries, and also slows the desire of new manufacturers
9 to seek MSHA approval.

10 Perhaps MSHA IS approval could be achieved in
11 new ways, provided by new technologies, such as improved
12 barriers, redundant safety systems, or standardized
13 protections and designs. I am not suggesting that the
14 current level of IS safety be reduced, but, rather, I am
15 suggesting that, if some type of technology is available
16 somewhere in the developed world, the U.S. should not
17 inhibit the adoption of that technology through a series
18 of complex and antiquated requirements.

19 Evidence of the seriousness of this issue can
20 be seen in regard to proximity detection person wearable
21 devices, or PWDs. When we first began testing proximity
22 detection systems, we thought that the best way to ensure
23 that the miner would always wear his PWD was to integrate
24 it into his cap lamp, like is currently being done in
25 other parts of the world. We quickly found that the

1 approval process for cap lamps here in the U.S. appears
2 to be much more demanding than the requirement in that
3 country, and waiting for this approval would result in a
4 serious time delay.

5 We decided to remove the cap lamp and cord to
6 obtain an experimental approval for the modified PWD in
7 order to expedite our system. This did help move our
8 system test forward, and I would like to thank Dave
9 Chirdon and the group at MSHA approvals for helping with
10 the issue, but I think it highlights some of the issues
11 and difficulties, which impede the new technology
12 development.

13 Currently, the proximity system that we're
14 installing includes an MSHA-approved belt-wearable PWD.
15 We have some concerns that miners may, at times, feel the
16 need or desire to remove the PWD from their belt, for
17 some unknown reason.

18 While reinstalling the cap lamp to the PWD may
19 not be the answer to this issue, I believe that the PWD
20 might remain with the miner if it were attached to his
21 helmet, as no miner moves very far without his helmet to
22 protect his head. But this, too, will present issues,
23 such as how to measure the 3-foot stopping distance from
24 an employee's helmet. In either case, I have severe
25 doubts that such a helmet-worn device could be approved

1 before the passage and implementation of the proposed
2 rule.

3 In addition to my concern regarding the 18-
4 month installation requirement, I am equally concerned
5 with the 3-foot stop movement and the 5-foot audible and
6 visual warning alarm requirements. Electromagnetic
7 fields can be influenced by many factors, including loops
8 or coils of energized cables and large metal objects, as
9 well as environmental issues, such as floor pitch and
10 hardness.

11 The requirement for exactly 3 feet could allow
12 for mischievousness in enforcement action, resulting in
13 numerous violations being issued for a system that would
14 adequately protect for warning and equipment movement
15 stop before allowing accidental contact with the employee
16 when, indeed, the actual intent of this proposed rule is
17 to eliminate crushing and pinning-type accidents, not to
18 create an additional avenue for violations.

19 Another item to be concerned before adopting
20 the 3-foot zone for proximity detection is the term
21 "cutting coal or rock." The operator must have an area
22 in his current work location where he is safe from
23 crushing and pinning accidents from shuttle car, ram car,
24 scoop, or other coal conveyance systems. This area is
25 usually alongside of the mining machine when he is

1 performing some function, other than cutting coal or
2 rock, such as setting a machine over from one cut to
3 another, conveying coal into a piece of coal-hauling
4 equipment, or simply awaiting the arrival or departure of
5 a piece of coal-hauling equipment. This 3-foot
6 requirement, when combined with the "cutting coal or
7 rock" definition, may actually force the operator to move
8 away from the actual safe haven provided by the miner and
9 into the actual red zone of the arriving or departing
10 haulage equipment.

11 I believe that more study is required before
12 deciding that 3 feet is the preferred stop distance for
13 protecting employees working in all seam heights and
14 entry widths.

15 In any case, I also believe that a silent zone,
16 or zones, must be provided to prevent forcing the miner
17 operator out of his safe area and into the red zone of
18 another piece of equipment.

19 In addition to those issues, we must think
20 beyond this proposed rule and think of future possible
21 consequences caused by the 3-foot distance and the
22 cutting coal or rock requirement. We must consider where
23 the miner operator will stand after the installation of
24 proximity detection onto place change miners now, and we
25 must consider where the miner operator will stand when

1 proximity detection is required on all underground mining
2 face equipment, Particularly, shuttle cars, ram cars,
3 loading machines, and scoops.

4 The actual time that the miner is actively
5 cutting coal or rock, unfortunately, is a very small
6 percentage of the time during the shift. The vast
7 majority of the time, the machine is in the process of
8 waiting on haulage equipment, loading the cut coal out,
9 or performing some other function. If the requirement
10 remains that proximity must be acted any time other than
11 when the miner is cutting the coal or rock, and the stop
12 zone remains at 3 feet, this will require the operator to
13 step at least 3 feet away from the machine to reset it
14 each and every time that he disengages the cutter head.
15 The consequences of this will most likely result in the
16 operator spending a very significant time in the red zone
17 of the coal haulage equipment.

18 While I support the requirement for a visual
19 and audible alarm somewhere around the 5-foot zone, I do
20 not believe that the failure to alarm at the 5-foot
21 distance should always result in a violation. I also do
22 not believe that the 5-foot visual and audible alarm
23 should be continuous, but, rather, the alarm should
24 activate to warn the employee that they are getting close
25 to the machine, and then it should stop alarming until

1 the employee moves into the stop zone; at which time, the
2 alarm should activate and remain activated and continuous
3 until that employee moves back out of the stop zone.

4 Due to the width of some mine entries,
5 depending on the seam being mined, some operators' work
6 positions may require them to remain in the 5- to 3-foot
7 zone for long periods while operating the mine. Allowing
8 or requiring the 5-foot alarm to continue to sound and
9 flash until the operator steps out of the 5- to 3-foot
10 alarm zone could, and most likely would, result in
11 operators either ignoring or circumventing the system.

12 Let me now address the issues concerning the
13 possibility of requiring proximity detection on full-face
14 miners with integral bolters.

15 First, let me say that, to my knowledge, there
16 have been few, if any, issues during my career involving
17 crushing-type injuries that were caused by the normal
18 movement of a full-face machine with integral bolters.
19 These machines are much larger and much slower than our
20 place change miners. They are not equipped with the
21 high-speed turbo tram, which I believe has been a factor
22 in most place change miner accidents. These miners have
23 limited space around them and they stay in the same
24 mining place until that place is completed.

25 During the mining process, our full-face

1 machines will have as many as seven employees in close
2 contact with the machines while they are performing their
3 duties. One miner operator, two roof bolters, two rib
4 bolters, one tube man, and, at times, one foreman. These
5 individuals are always within 3 feet of the stopping zone
6 for their entire shifts. This makes proximity detection
7 impossible for these units during the actual mining
8 process. I have considered the possibility of providing
9 proximity detection during the moving from one place to
10 another, but that appears to be an issue in itself.

11 Namely, how would you activate the proximity system?

12 You could activate it by the reverse tram
13 feature, because we're in reverse many times during the
14 shift. You could not activate it by high tram, because
15 we rarely go into high tram, and that wouldn't cover
16 anyone while backing out. Also, during mining, the
17 tracks are sometimes driven in the higher speeds to spin
18 the track chain, or the cats, and dig down into the floor
19 for leveling the machine. So higher tram speeds are
20 required in the actual mining process at the face. You
21 could not activate it by the cutter head function,
22 because our roof bolter and rib bolter are continuously
23 in contact with the machine when it is cutting and when
24 it is not cutting coal or rock. You could not have a
25 proximity on-and-off switch that has to be activated

1 manually, because you would not trust that miners would
2 turn it on, when required. These are all issues that
3 should be resolved before deciding to require proximity
4 on full-face machines.

5 In closing, I want to say that I support the
6 installation of proximity detection systems for the
7 purpose for which they are intended; to provide an
8 additional training tool and warning device. I do not
9 believe that the current technology is sufficient to deem
10 proximity as a fail-safe system. Miners should never
11 rely on proximity detection to protect them from the
12 hazards of crushing and pinning-type accidents, just like
13 drivers should never depend on seatbelts or airbags to
14 protect them from injury resulting from unsafe driving.

15 Thank you for your time to listen to my
16 comments, and thank you in advance for taking time to
17 consider them before making your final determination of
18 this proposed rule.

19 MODERATOR FONTAINE: Thank you.

20 Do you have anything?

21 MR. CHIRDON: I do not have anything.

22 MODERATOR FONTAINE: Do you have anything?

23 MR. WARD: You said you had 11 place change
24 machines now with the proximity detection systems?

25 MR. TODD MOORE: I have 11 place change miners.

1 Not all of them. I have one miner equipped.

2 MR. WARD: And with the one equipped, at what
3 point does the system stop? Do you use a 3-foot
4 distance? Do you have a set distance?

5 MR. TODD MOORE: Yeah. The 3-foot is pretty
6 close to where we have it set. It kind of varies around
7 the area of the machine. The generators aren't
8 consistent all the way around the machine. They're all
9 through. Some on the left or the right. But 3 to 4
10 feet.

11 MR. WARD: And when the machine is cutting rock
12 or coal, is it still 3 feet?

13 MR. TODD MOORE: We've tried a couple different
14 approaches. We tried tying it to the low tram speed, and
15 we've also tried tying it to the cutting. We have
16 currently just switched it back to the cutting, so
17 whenever the miner head is turning, the unit is off; the
18 system is off.

19 MR. WARD: Okay. Thank you.

20 MR. CHIRDON: I don't have anything.

21 MR. TODD MOORE: You're too easy, Dave.

22 MODERATOR FONTAINE: Thank you. Okay.

23 We don't have anybody else signed up to
24 present.

25 Is there anyone that would like to? No? Okay.

1 Well, if nobody else wishes to make a
2 presentation, I, again, want to say that the Mining
3 Safety and Health Administration appreciates your
4 participation at this public hearing.

5 I thank everyone who has made a presentation,
6 as well as those who did not present, for your attendance
7 at this hearing and your interest in this rulemaking.

8 I want to emphasize that all comments must be
9 received or postmarked by November 14th, 2011. MSHA will
10 take your comments and your concerns into consideration
11 in developing the Agency's final rule.

12 I want to encourage all of you to continue to
13 participate throughout the rulemaking process.

14 This public hearing is concluded. Thank you
15 very much.

16 (Whereupon, at 11:07 a.m., the hearing in the
17 above-entitled matter was concluded.)

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REPORTER'S CERTIFICATE

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

HEARING DATE: October 25, 2011

LOCATION: Washington, Pennsylvania

I hereby certify that the proceedings and
evidence area 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 25, 2011

ANTHONY & ASSOCIATES, INC.


SHEILA A. ROZANC
(Official Reporter)

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