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SOL (MSHA) V. PYRO MINING
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Federal Mine Safety and Health Review Commission
Office of Administrative Law Judges

SECRETARY OF LABOR, MINE SAFETY AND HEALTH ADMINISTRATION (MSHA), PETITIONER	CIVIL PENALTY PROCEEDING Docket No. KENT 83-212 A.C. No. 15-10339-03516
v.	
PYRO MINING COMPANY, RESPONDENT	Pyro No. 11 Mine

DECISION

Appearances: Carole M. Fernandez, Esq., Office of the Solicitor, U.S. Department of Labor, Nashville, Tennessee, for Petitioner; Steven P. Roby, Esq., Pyro Mining Company, Providence, Kentucky, for Respondent

Before: Judge Fauver

The Secretary seeks civil penalties for four alleged violations of the Federal Mine Safety and Health Act of 1977, 30 U.S.C. 801, et seq.

The charges were issued in connection with the investigation of a fatal accident. Dean H. Lundy, a general laborer, was electrocuted while disconnecting a conveyor belt control line.

A hearing was held in Lexington, Kentucky. Having considered the testimony, and the record as a whole, I find that a preponderance of the reliable, probative, and substantial evidence establishes the following:

FINDINGS OF FACT

1. On the date of the accident, September 27, 1982, Lundy was assigned by mine foreman Barry Teaque to work with the belt crew. The crew, under lead belt mechanic and crew leader Harlan Belt, were extending a conveyor belt.

2. Extending the belt required, among other things, disconnecting a splice on a 110-volt pilot line for the belt control switch, splicing new line to the old line, and advancing the switch to the new location.

3. Contrary to a company rule against working on an energized line and a mandatory federal safety standard forbidding it, it was common practice for employees to disconnect, splice, and re-connect a live pilot line a number of times each week when the belt was being advanced. In addition, nonqualified employees were permitted to do this work on pilot lines. As a general practice, nonqualified employees would do this work on pilot lines (disconnecting, splicing, and re-connecting) 2 or 3 times a week. The crew leader, who himself was nonqualified, testified that he also worked on energized pilot lines, that he had seen others do so, and that this was allowed by mine foreman Barry Teaque so long as only 110 volts were involved.

4. On each belt, the pilot line was extended about once a week. About a third of the time, the power was left on when the line was being extended. As a general practice, the power was cut off during an extending operation only when the power center was being moved; that is, when the power center was not being moved during a belt advance, the pilot line was disconnected, extended, and respliced without cutting off the power.

5. On September 27, 1982, crew leader Harlan Belt told his immediate supervisor, Barry Teaque, that one crew member was absent, and requested a replacement. Teaque assigned Dean H. Lundy, a general laborer, to work on Harlan Belt's crew that shift. Lundy, age 24, had 2 years 3 months mining experience.

6. Shortly before the electrocution of Lundy, he was on one side of the tailpiece of the belt, the crew leader, Harlan Belt, was on one side, and the belt mechanic, Eddie Puckett, was near and in clear hearing of both of them. I find Puckett's testimony credible as to what was said by Lundy and Belt at that time, and the following part of his testimony is incorporated herein as factual and accurate (Tr. 191-193):

> Q Tell me what was happening right then, who was doing what, and where, and what conversation transpired between Harlan and Dean Lundy.
>
> Q Okay. Like I say, I had stripped outer layer of the dead end wire off.

Q Which end of the pilot was that?

A That was the end next to the tail piece. It hadn't never been hooked into the whole wire yet because I, prior to that, I had hollered up there and made sure Tommy Gatton or one of them--I hollered and made sure none of them had tied it in, made sure it wasn't hot. And Tommy Gatton told me, no. I stripped the wire back and started to pull tail piece. Steve Lone hollered down. Harlan said, "Let's wait on Eddie," and I told him then, I said, "Ya'll go ahead and when you pull it, I'll drop what I'm doing and help set the jacks on the tail piece," because when you pull the tension out on that belt, you need to get the jacks set as quick as you can because the scoop won't just sitting there and holding all the time.

So Steve pulled the tail piece out, and I dropped the wire on the ground. I went over and helped them set the jacks, me and Harlan. Well, Harlan was on one side of the tail piece and Lundy was on the other. I was pretty much in between the two. And Harlan told me to go get the feeder, and the mechanics was working on the feeder that night. Feeders was around 60 feet or better from where he was at then. And that's when Harlan--that's when Lundy had walked over there where I was stripping the insulation off the wire, and the three conductors, three there I had never stripped nothing off of them. And that's what Dean Lundy was doing, and that's when I heard Harlan told him not to fool with that, not to be fooling with the pilot wire because he might kick the belt on, and those guys was up there knocking clamps and might hurt one of them.

And Dean Lundy told him, he said, "No," he said, "What I'm doing," he said, "that end up there is not hooked in yet." He said, "I'm getting this end here ready, and I'll go up

> there and get the other end of it ready, and I'll make sure the clamps and everything is knocked off, and clear and all we have to do is take the box off and move it down here and hook it up." And then that's when I went off and got to go get the feeder, and they was putting the front bumper on the feeder.
>
> And I asked them how-- the mechanics--how long they was going to be, and they said probably five minutes. And no longer than after I said that, I heard Harlan scream for me, and told me to come up there. And I went up there, and that's when I seen Lundy laying down on the ground.

7. When Lundy screamed, Belt ran over to him. He found Lundy unconscious. He could see that Lundy had touched a bare wire in the pilot line. He assumed that a minor shock had frightened him and that he had hit his head on a top roller. When they (others arrived) turned Lundy over, Belt saw that Lundy's hand was burned, and he then realized that Lundy had probably been shocked with much more power than 110 volts. He told the rest of the crew, "Nobody touch this pilot line until it gets checked out. We got to get somebody down here so I know what's going on" (Tr. 167).

8. Lundy was breathing, but gasping for breath. Belt said, "He's all right. He's breathing. What we need to do is get him out of here. Somebody go get the golf cart so we can get him on and get him outside" (Tr. 167). Belt then went to the phone and called outside to tell them what had happened and to have a vehicle meet the cart at the end of the track.

9. There was room for only two people on the cart. Belt told Puckett to take Lundy out of the mine. The cart left and Belt called outside again, to make sure the vehicle on the outside was on its way to meet the cart.

10. Several men met the cart at the end of the track. Lundy had stopped breathing and they administered CPR. The mine foreman, Teaque, arrived and assisted in the CPR as they took Lundy to a helicopter, which took him to a hospital. Lundy did not regain consciousness. He died of the electric shock.

11. After seeing Lundy's burned hand, and suspecting that Lundy had been shocked by more than 110 volts, Belt went to the chief maintenance foreman for the third shift, Lowell Dukes, and told him he thought the pilot line had more than 110 volts, and asked him whether there was any way he could check the voltage on the line. Dukes said he could do that.

12. Dukes checked the pilot line and told Belt the pilot line had only 110 volts. With that, Belt resumed work on the belt move, so the next shift could mine coal.

13. After the accident, the belt move was completed by Belt's crew. When he had it hooked up and ran the belt, he got word from the surface to come out of the mine, because Lundy was dead.

14. MSHA's chief electrical investigator of the accident, Jewell Larmouth, arrived at the mine within three hours after the accident. The work of extending the belt and pilot line had been completed. He suspected, as Belt had, that more than 110 volts had been involved in the electrocution. He first inspected the 480 volt power center that supplied power to the entire belt system. The power was on; there was no evidence that the circuit had been deenergized; the cable coupler had not been removed and there was no lock-out device or tag available. Larmouth questioned those present to see if anyone had tags and no one did. He proceeded to check for a malfunction in the transformer and control circuit. Someone indicated that a check of the pilot line conductors had revealed only 110 volts; but Larmouth made a more thorough examination, testing from wire to earth and to the belt framework and discovered that the transformer was defective. A contact between the primary and secondary windings in the transformer resulted in 330 volts to ground in one of the pilot wires and 230 to ground in the other pilot current-carrying wire.

15. Larmouth immediately issued an imminent danger order forbidding use of the short-circuited transformer. The transformer had remained in service after the accident until Larmouth informed the operator that it was an imminent danger.

16. The operator sent the defective transformer to Minesafe Electronics, Inc., for an opinion as to the cause of the defect. The opinion stated that the failure resulted from inadequate insulation between the primary and secondary windings and one of two other conditions: "(1) a large voltage

transient pierced the varnish shorting primary and secondary, effecting shorted turns, which in time generated sufficient heat to destroy the insulation . . . or (2) sustained overload condition causing overheating weakened the insulation to the point that the area of weakest insulation broke down under normal operating voltages, thus welding primary to secondary."

17. Misuse of a cable could cause an overload of the transformer, but there was no evidence of misuse of a cable.

18. During his inspection on September 27, 1982, Inspector Larmouth discovered that the automatic circuit breakers for the No. 16 AWG (American Wire Gauge) No. 2 conveyor belt control line were 20 amperes and were so stamped; the No. 16 gauge cable was also clearly stamped as to size. Twenty amperes exceeded the correct amperage for this No. 16 standard wire.

19. The remote control pilot line extended from the conveyor belt starter for approximately 480 feet to the existing start-stop switch. The remote line was type S O neoprene No. 16-3 AWG; the ground wire was continuous from the conveyor belt starter metal frame to the start-up switch metal frame. The purpose of the control line was to start or stop the No. 2 unit conveyor belt remotely when necessary. The remote control line involved in the accident was supplied power from a Westinghouse .500 KVA, 480 volt to 110 volt single-phase control transformer located in the conveyor belt starting enclosure.

20. Tests conducted during the investigation revealed that a primary to secondary winding fault had occurred in the control transformer. Resistance readings were approximately 2 ohms from primary to secondary windings of the control circuit transformer. Voltage readings were: XI to ground 330 volts, X3 to ground 230 volts. As a result of the fault in the transformer the white insulated conductor of the remote control line became energized at 330 volts to ground.

21. The last weekly examination (as required by 30 C.F.R. 75.512) prior to the accident was conducted by Bill Gatton on September 22, 1982, and no defects were recorded.

22. No one deenergized the remote control line before Lundy started to disconnect the switch. Lundy was not wearing gloves, and he was not wearing insulated (shock hazard boots) footwear. The accident area was very wet with some surface water. Lundy contacted the white conductor, which was energized at 330 volts to ground as a result of the primary to secondary fault in the control transformer.

23. Lundy was not qualified to do electrical work as required by 30 C.F.R. 75.153 and was not working under the direct supervision of a qualified person. The scoop type tractor operator (Steve Long) was the qualified person on the conveyor belt move crew; however, he was not performing or supervising electrical work at the time of the accident.

24. Respondent is a substantial sized mine operator, producing about 3,500 tons of coal daily and employing about 270 underground miners.

25. Respondent's compliance history from April 7, 1981, until the inspection in this case shows 128 violations for which civil penalties totaling $6,894 were paid.

DISCUSSION WITH FURTHER FINDINGS

As a result of his investigation, Inspector Larmouth charged Respondent with four violations of mandatory safety standards.

Citation No. 2075231

This citation charges a violation of 30 C.F.R. 75.509, which provides:

> All power circuits and electric equipment shall be deenergized before work is done on such circuits and equipment, except when necessary for trouble shooting or testing.

The citation alleges that the pilot line was not deenergized before work was done on it and a fatality occurred.

Even though Respondent published general instructions against working on energized lines, it was a common practice for work to be done on the belt pilot line while it was still energized. This was a common practice which management knew or should have known and should have prevented by better training and supervision of its line supervisors and miners. Lundy's immediate supervisor, Harlan Belt, acknowledged that the pilot line was frequently re-connected without deenergizing it, and that Belt's immediate supervisor, Teaque, allowed this practice. Belt and others assumed that the pilot line would always conduct only 110 volts and that this amount of power would not be hazardous to touch. This attitude reflects a patent disregard of a mandatory safety standard (75.509). It also shows gross error in judgment, since 110 volts, depending on conditions such as wetness, body resistance, clothing, duration of contact, etc., can inflict serious injury, even death. Crew Leader Belt's attitude is imputable

to management. His failure to have the pilot line deenergized for the belt move was gross negligence, which is imputed to management.

The exchange between Harlan Belt and Lundy is not a defense to this charge. When Belt told Lundy "not to fool with" the pilot line, Belt was not concerned with the fact that Lundy might receive an electric shock. Belt was simply concerned about the possibility that touching the pilot line at that time might accidentally start the belt and injure the men who were removing clamps from the belt. Belt did not tell Lundy he should not touch the energized pilot line. When Lundy replied, as follows, Belt did not forbid him to do any work on the pilot line:

> [Testimony of Puckett]:
> He [Lundy] said, "I'm getting this end here ready, and I'll make sure the clamps and everything is knocked off and clear and all we have to do is take the box off and move it down here and hook it up. [Tr. 192].

I find that Respondent, through gross negligence, violated 75.509 by failing to see that the pilot line was deenergized before work was done on it. This violation was a major causal factor in the death of Lundy. Belt did not know that the pilot line conductor wires would conduct 330 volts or 220 volts, respectively, instead of 110 volts, because of an unknown short-circuit in the transformer. But the risk he permitted of even a 110-volt electric shock was a most serious violation; a shock of that amount could cause serious injury, even death, depending on conditions.

Gross negligence and severe gravity as to this violation are well established by the probative, relevant, and substantial evidence. In considering the six statutory criteria for assessing a civil penalty, I find that a penalty of $7,000 is appropriate for this violation.

Citation No. 2075232

This citation charges a violation of 30 C.F.R. 75.511, because (1) an unqualified person was permitted to perform electrical work on an energized conveyor belt control line and (2) a disconnecting device for the 480 volt A.C. cable coupler was not provided and a method of tagging was not used.

Section 75.511, 30 C.F.R., provides:

> No electrical work shall be performed on low, medium, or high-voltage distribution circuits or equipment, except by a qualified person or by a person trained to perform electrical work and to maintain electrical equipment under the direct supervision of a qualified person. Disconnecting devices shall be locked out and suitably tagged by the persons who perform such work, except that in cases where locking out is not possible, such devices shall be opened and suitably tagged by such persons. Locks or tags shall be removed only by the persons who installed them or, if such persons are unavailable, by persons authorized by the operator or his agent.

Dean Lundy was not a qualified person under 30 C.F.R. 75.511-1 and 30 C.F.R. 75.153. At the time of the accident, Steve Long had not required the system to be locked out and there is no indication of any electrical supervision at that time. I conclude that "direct supervision" within the meaning of the regulations would require that the circuit be deenergized and examined by a qualified person and the unqualified person's work be examined prior to reenergizing the circuit. Neither of these things was done in this case.

I find that Lundy's supervisor, Harlan Belt, permitted Lundy to attempt the splice change by failing to order him specifically not to work on the pilot line after Lundy told Belt the following:

> . . . I'll go up there and get the other end of it ready, and I'll make sure the clamps and everything is knocked off, and clear and all we have to do is take the box off and move it down here and hook it up.

Considering management's lax safety attitude toward working on the energized pilot line and permitting nonqualified

persons to work on the pilot line, I find that Lundy's attempt to disconnect the pilot line was permitted by Harlan Belt's attitude and conduct. Harlan Belt did not specifically and effectively order Lundy not to do any work on the pilot line and he did not follow up by seeing that Lundy did not do so. Belt's actions in not exercising proper supervision over the belt move and Lundy's performance constituted gross negligence in allowing a nonqualified employee to work on an electrical circuit. This was a violation of 75.511. Also, Belt did not attempt to have the pilot line deenergized before working on it. The pilot line was not locked out at the power center or disconnected and tagged before work was done on it. This condition was also a violation of 75.511 due to gross negligence. The violations of 75.511 had a direct causal relationship with Lundy's death.

In considering the six statutory criteria for assessing a civil penalty, I find a penalty of $5,000 is appropriate for Respondent's violation of 75.511.

Citation No. 2075233

This citation charges a violation of 30 C.F.R. 75.518, because the automatic circuit breakers in use were of too high a capacity (20 amperes) to provide adequate short circuit and overload protection for the No. 16 American Wire Gauge (AWG) No. 2 conveyor belt control line.

Section 75.518 provides:

> Automatic circuit-breaking devices or fuses of the correct type and capacity shall be installed so as to protect all electric equipment and circuits against short circuit and overloads. Three-phase motors on all electric equipment shall be provided with overload protection that will deenergize all three phases in the event that any phase is overloaded.

The condition alleged was discovered during Inspector Larmouth's examination of the control circuit just after the accident. Although there was no direct relationship between this violation and the fatality, it was a serious electrical violation, concerning an integral part of the circuit involved in the fatality and in and of itself a danger to human life. Short circuit and overload protection is an important safety standard to prevent fires, electric shock, explosions, etc., in connection with electrical equipment and circuits.

The operator's negligence is high as to this violation because the violation was clearly visible and should have been apparent to qualified electrical personnel.

Inspector Larmouth relied upon the National Electric Code table, pursuant to 30 C.F.R. 75.518-1, which provides:

> [a] device to provide either short circuit protection or protection against overload which does not conform to the provisions of the National Electric Code, 1968, does not meet the requirement of 74.518.

The operator at hearing called attention to a private publication, the Electrical Protection Handbook, assertedly based on the 1980 National Electric Code, to support the use of 20 ampere fuses for the circuit in question. However, as Larmouth pointed out, the publication refers to fuses, not circuit breakers. Further, the handbook is not relevant as a mitigating factor because there was no showing of reliance by the operator. Nor was it shown that the operator actually relied on the diagram by Long Aldrex Manufacturing Company for belt starting boxes, also presented by the operator at hearing. Reliance on this diagram would not have been justified in any event since the diagram did not accuractely reflect the size of the wire in use.

In considering the six statutory criteria for assessing a civil penalty, I find a penalty of $200 to be appropriate for this violation.

Citation No. 2075924

On November 19, 1982, MSHA Inspector Jewell Larmouth issued a section 104(a) citation, No. 2075924, for violation of 30 C.F.R. 75.1725(a) because of the hazardous condition of the control circuit transformer. A previously issued 107(a) Order of Withdrawal, No. 2075234, was the basis for issuance of this citation.

Section 75.1725(a) provides:

> Mobile and stationary machinery and equipment shall be maintained in safe operating condition and machinery or equipment in unsafe condition shall be removed from service immediately.

The stepdown transformer referred to in the citation was supposed to have a primary voltage of 480 volts and a secondary voltage of 110 volts; however, Larmouth's investigation disclosed that on one conductor of the remote control line, at the scene of the accident, there was 330 volts, and on the other conductor of that line there was 230 volts. This increased voltage resulted from a fault in the transformer which created a connection between the primary and secondary windings.

Because of this condition, (1) the pilot line conductors carried 330 volts and 230 volts, respectively, instead of 110 volts, and (2) touching either conductor could create an electric shock whereas under normal conditions the pilot line conductors could shock a person only if both conductors were touched. This condition made the pilot line a deathtrap for the unwary. The transformer was thus an imminent danger, as the inspector found in ordering it out of service after the accident.

Respondent was not negligent before the accident, because the transformer short-circuit was not known or reasonably forseeable, and because this condition would not be detected by ordinary electrical tests required by the regulations. However, after the accident, a reasonably prudent operator would have suspected that there was a malfunction of the transformer. Harlan Belt did in fact suspect that there was a malfunction. The operator was guilty of gross negligence in failing to take immediate and appropriate action after the accident to detect the hazard in the transformer and to remove the transformer from service until proper repair or replacement

was made. An imminent danger existed at the time, yet work was allowed to continue. The electrical equipment which was in an unsafe condition should have been removed from service immediately.

Respondent's attitude and conduct, through its supervisors, in resuming operations with the defective transformer after the accident shows gross negligence. This violation is of a most serious nature. In applying the six statutory criteria for assessing a civil penalty, I find that a penalty of $5,000 is appropriate for this violation.

Proposed findings of fact and conclusions of law inconsistent with the above are hereby rejected.

CONCLUSIONS OF LAW

1. The Judge has jurisdication over the subject matter of this proceeding.

2. Respondent violated the safety standards as charged in the four citations involved herein and is assessed the civil penalties stated above.

ORDER

WHEREFORE IT IS ORDERED that Respondent shall pay the above assessed civil penalties, in the total amount of $17,200.00, within 30 days from the date of this Decision.

William Fauver
Administrative Law Judge