CCASE:

WESTERN FUELS-UTAH V. SOL (MSHA)

DDATE: 19940204 TTEXT:

FEDERAL MINE SAFETY AND HEALTH REVIEW COMMISSION 1244 SPEER BOULEVARD #280 DENVER, CO 80204-3582 (303) 844-5267/FAX (303) 844-5268

February 4, 1994

WESTERN FUELS-UTAH, INC., : CONTEST PROCEEDINGS

Contestant

: Docket No. WEST 94-95-R

v. : Citation No. 3850092; 10/19/93

:

: Docket No. WEST 94-96-R

SECRETARY OF LABOR, : Citation No. 3850087; 10/05/93

MINE SAFETY AND HEALTH :

ADMINISTRATION (MSHA), : Deserado Mine

Respondent : Mine I.D. 05-03505

DECISION

Appearances: Karl F. Anuta, Esq., Boulder, Colorado,

for Contestant;

Margaret A. Miller, Esq., Office of the Solicitor,

U.S. Department of Labor, Denver, Colorado,

for Respondent.

Before: Judge Morris

These contest proceedings arose under the Federal Mine Safety and Health Act of 1977, 30 U.S.C. 801, et seq. (the "Act").

Contestant, Western Fuels Utah ("Western Fuels") requested an expedited hearing, which was held in Glenwood Springs, Colorado, on November 30, 1993.

Contestant filed briefs in support of its position and the Secretary submitted her views in oral argument.

In these cases Western Fuels requests that the Commission vacate Citation Nos. 3850087 and 3850092.

Citation No. 3850087, issued under Section 104(a) of the Act, alleges Western Fuels violated 30 C.F.R. 75.516-2(c).

The citation reads as follows:

Additional insulation was not provided for the communication wire (cable) where it passed under a 480 V.A.C. power conductor for the belt take-up winch of the 9th East belt drive between No. 1 and No. 2 crosscuts. The phone cable was hung approximately 3 inches under the power cable for the winch.

Citation No. 3850092, issued under Section 104(a), alleges the operator violated the same regulation.

The citation reads as follows:

Additional insulation was not provided for the mine phone cable where it was hung with the 480 V.A.C. power cable for the East Main No. 1 belt drive motor. The phone cable did not contact the power cable; however, both were supported by the same messinger wire.

The regulation relating to power wires (30 C.F.R. 75.516) provides as follows:

75.516 Power wires; support.

All power wires (except trailing cables on mobile equipment, specially designed cables conducting high-voltage power to underground rectifying equipment or transformers, or bare or insulated ground and return wires shall be supported on well-insulated insulators and shall not contact combustible material, roof, or ribs.

75.516-1 Installed insulators.

Well-insulated insulators is interpreted to mean well-installed insulators. Insulated J-hooks may be used to suspend insulated power cables for temporary installation not exceeding 6 months and for permanent installation of control cables such as may be used along belt conveyors.

- S 75.516-2 Communication wires and in cables; installation; insulation; support.
- (a) All communication wires shall be supported on insulated hangers or insulated J-hooks.
- (b) All communication cables shall be insulated as required by 75.517-1, and shall either be supported on insulated or uninsulated hangers or J-hooks, or securely attached to messenger wires, or buried, or otherwise protected against mechanical damage in a manner approved by the Secretary or his authorized representative.
 - (c) All communication wires and cables installed in

track entries shall, except when a communication cable is buried in accordance with paragraph (b) of this section, be installed on the side of the entry opposite to trolley wires and trolley feeder wires. Additional insulation shall be provided for communication

circuits at points where they pass over or under any power conductor.

(d) For purposes of this section, communication cable means two or more insulated conductors covered by an additional abrasion-resistant covering.

The Secretary relies solely on the underlined portion of 75.516-2(c)

STIPULATION

The parties stipulated:

- 1. That Contestant's Deserado Mine is an underground coal mine in Rio Blanco County, Colorado;
- 2. The operator is subject to the jurisdiction of the Act and the Commission; and
- 3. The citations were issued and duly served on Contestant.

THE EVIDENCE

The evidence is essentially uncontroverted.

Art Gore and James E. Kirk testified for the Secretary. Robert Daniels and Anthony Lauriska testified for Western Fuels.

Both contested citations allege a violation of 30 C.F.R. 75.516(2)(c). (Tr. 9). The areas cited involve a communication cable (phone cable) and a power conductor cable. There are no trolley wires in the area. (Tr. 9).

The Deserado Mine, a gassy mine, was inspected by Mr. Gore in October 1993. The mine was an underground coal mine with a longwall mining system. (Tr. 18).

Both of the citations involve a voice communication circuit, namely, a telephone. (Tr. 19). The communication cable is the wiring that connects the telephones. There could be literally miles of cable in the mine connecting the telephones. (Tr. 19, 20).

The telephone cable was insulated. The cable loops line-insulated conductors with another wrapping of insulation. This makes it a cable instead of a wire.

Usually, there are two conductors for the telephone system and one for the ground. The wires are wrapped within one cable. $({\tt Tr.\ 20})$.

The insulated communication cable normally carries about 600 volts. The cable serves the telephone system only. (Tr. 20, 21).

The telephone box in itself is a permissible unit when connected to a permissible telephone system. It becomes a part of it. (Tr. 21).

In the two cited areas, a 350-MCM power cable provided voltage to the belt motor which powered the conveyor belt. The power cable was a large 480-volt three-phase cable, which was insulated. (Tr. 23).

The power cable was not intrinsically safe. (Tr. 23, 24).

Citation No. 3850087 was issued because the telephone cable was hung three inches beneath and crossed a power cable. In Mr. Gore's opinion, the regulation requires additional insulation where the cables cross. This is because the last sentence of 75.516(2)(c) stands alone. (Tr. 25). Also Part 18.68(d) an .68(c) state that intrinsically safe systems cannot be mingled with power conductors.

At the crossover there was a three-inch space between the two cables. (Tr. 25, 26). This air gap is additional insulation but this could change if the gap closed. (Tr. 32, 33).

Additional insulation is required regardless of the insulation provided. The "additional insulation" must be in addition to the insulation already present. (Tr. 26, 29).

The telephone cable could be rendered unsafe by physical contact with a power cable or by induced voltage. If one component is rendered non-intrinsically safe, all components could be non-intrinsically safe. (Tr. 27).

MSHA standards require certain types of insulation on the cables. (Tr. 28). At other mines, Mr. Gore has seen a flame-resistant rubber hose where the cables intersect. Also, electrician's tape has been used. (Tr. 29).

In view of the three-inch air gap (Citation No. 3850087), the hazard potential is very low. However, hangers or cables break and scaling could occur and there could be contact between the cables. (Tr. 30). In addition, a hanger could break in a crosscut and cause the cables to touch. (Tr. 31). This condition has been cited in numerous other mines. (Tr. 32). The operator's cable was in good condition. (Tr. 34).

Citation No. 3850087 was abated by putting electrician's tape around the telephone cable where they intersected. (Tr. 34, 35).

Citation No. 3850092 involved a power cable and a communications cable hung on the same messinger wire. [A messinger wire is a steel cable strung and tensioned between two anchors.] The telephone cable was over the power cable for a distance of 10 to 12 feet, but the cables did not cross. (Tr. 35, 36). There was no additional insulation provided where the two cables ran in a parallel manner. (Tr. 37).

Mr. Gore has seen hooks fall; cables also become tense. (Tr. 38). The Deserado Mine was cited for a violation of 75.516(2)(c) in February 1992. (Tr. 39)

Mr. Gore agreed that the Communications Circuits involved in these two citations were voice communication (telephone) circuits and not CONSPEC circuits involving mine monitoring systems. (Tr. 43).

However, a data communication circuit would be a power conductor. (Tr. 43).

A belt control cable is 12 volts and is considered to be a control cable rather than a power conductor. (Tr. 44). A power cable supplies power or current to a device for the purpose of running it, not controlling it. (Tr. 45).

ROBERT DANIELS, a company representative and an MSHA certified underground electrician, accompanied Inspector Gore. He terminated Citation 3850087 by applying additional insulation. (Tr. 83). The insulation went all the way around the cable.

There were no abrasions or breaks in the insulation of the communications cable. (Tr. 86, 87). There is no room for mobile equipment to travel in these four- to five-foot areas. The belt line goes down the entry. (Tr. 87).

In the area of Citation No. 3850092 there is fencing around the drive motors. To reach the cables, you have to go over the fencing. (Tr. 88).

The witness was not aware of any faulty maintenance. The cables are checked weekly. (Tr. 87). Further, the witness was not aware of the failure of any hooks or cables, nor have any rock falls occurred in the areas where the citations were written. (Tr. 89, 90).

There is induced RF voltage for the STOLAR radio system. The RF flows along the antenna itself. (Tr. 91).

Mr. Daniels agreed that he has always been trained to keep power and communication cables from touching. (Tr. 93). In weekly examinations, he has found cables that needed repair. He has also found fallen J-hooks. (Tr. 94).

ANTHONY LAURISKI, experienced in mining, is Western Fuels' maintenance superintendent. (Tr. 95, 96).

The witness is familiar with the insulation rating on the data communication line. The manufacturer's suggested working voltage is 400 volts. (Tr. 97). The line carries 24 volts. The power cable carries 480 volts phase-to-phase. The insulation on the power cable is rated at 600/2000 volts. This means it can be used on a 600-volt system up to 2000 volts. If not shielded in an underground coal mine, voltage above 480 needs a shielded cable. The communications cable was shielded. (Tr. 98).

The witness identified three exhibits: R-1 is a specification sheet for a power cable used in the mine. One of the citations involved a 350-MCM cable. The voltage rating on the insulation is shown as 600/2000 volts. (Tr. 100).

Exhibit R-2 lists the specific telephone cable used at the mine. The cable is shielded and the voltage rating is 400; that means it will carry up to 400 volts, but it carries 24 volts D.C. at the Deserado Mine. (Tr. 101).

Exhibit 3 is a 3-M data sheet on vinyl electrical tape. It is one of the electrical tapes used at the mine. (Tr. 101, 102).

 $\mbox{\rm Mr.}$ Lauriska supervises electricians and mechanics at the $\mbox{\rm mine.}$

The National Electric Code considers this to be a Class 2 circuit. At any place where a class 2 circuit crosses a power or a lighting circuit, a two-inch minimum separation between insulated conductors is recommended. (Tr. 103, 104).

Telephone lines were installed right after the mining was completed. (Tr. 104). The belts are also inspected every day by belt inspectors. Electrical inspections are done once a week. Power cables and telephone lines are inspected and repaired (or reported for repair) if a break is found. (Tr. 104, 105). Generally, a special cobalt jacketing material is used. (Tr. 105).

There are no bare electrical wires or telephone wires in the Deserado Mine. (Tr. 104, 105). There are no trolley wires in the Deserado Mine. (Tr. 105).

In the Kaiser Mine in Sunnyside, Utah, a rubber conduit material is placed where communication wires cross the trolley

line wires. (Tr. 106). The lines were six inches to a couple of feet apart. (Tr. 106, 107).

The signal wires carried 24 to 30 volts, about the same as the Deserado Mine. (Tr. 107). If a telephone wire fell against a power wire in the Kaiser Mine, it would probably cause an arc. (Tr. 107). If the 480-volt power line comes in contact with the telephone line at the place where the two citations were written, nothing would happen. (Tr. 110). Mr. Lauriska explained what might occur if bare conductors were touching. (Tr. 110-112).

Mr. Lauriska is familiar with the data line that operates the CONSPEC System. The line, a four conductor, sends two D.C. power signals and there are two D.C. power sources. It also has two data communication lines. The line carries 12 volts and the digital communication carries three volts. (Tr. 113). The line is used to connect the computer to sensors at various places throughout the mine. It monitors all the belt drives underground and all the gas monitoring, including carbon dioxide and methane.

There are about 13 belt drives underground. Each has 15 to 22 monitoring points. There are about 52 carbon dioxide and methane monitors underground. (Tr. 113). There are easily over 100 monitoring points. The witness was sure the data line crossed over or under the power line. (Tr. 114).

The Inspector and Mr. Lauriska disagree over whether cables should be run together. (Tr. 117).

Mr. Lauriska believes the cables are rated for protection. As a result, their rating protects the cable from whatever comes in contact with it. (Tr. 118).

Mr. Lauriska has never received from MSHA a definition of what constitutes "additional insulation." (Tr. 118). At a point where the cables were touching, some insulation was needed. An air gap could be the additional insulation. (Tr. 119).

There is a potential for the two cables to come in contact. A hazard would exist if both wires were bare and there was a potential for the current to flow back to the transformer ground. (Tr. 120). In the case of a power cable, several safeguards would be the circuit breakers and the ground fault interrupter. These safety devices come into play when necessary.

Mr. Lauriska considered air but not a piece of conduit to be additional insulation. (Tr. 121). It is Mr. Lauriska's opinion that the power cable and the telephone cable can touch. (Tr. 122). Mr. Lauriska agrees that power cables and intrinsically safe circuits should not touch. (Tr. 123).

The law requires the high voltage and low voltage to be separated. The communication cable is shielded to keep other induction like noise from interfering with the cable. (Tr. 127).

A data line is a hybrid, since it is both a power cable and a digital communication cable. (Tr. 127).

JAMES E. KIRK, an MSHA inspector as well as an electrical specialist, is qualified in all voltages for surface and underground. (Tr. 131-133). He has cited 75.516(2)(c) numerous times. Mr. Kirk has always considered the second part of the regulation separate from the first portion dealing with communication cables and trolley wires. (Tr. 133). Basically, MSHA contends that communication cables should be kept separate from other power circuits. (Tr. 134). The regulation prohibits communication cables from passing over or under power cables. (Tr. 135). Operators sometime use conduit called CANOFLEX or electrical tape. Air is also considered an insulator but cables and hooks could fall or tighten up. (Tr. 136, 137).

The purpose of the regulation is to keep the communication circuit separate from the power cable. (Tr. 138).

If a low voltage system (12 to 24 volts) intermingles with a high voltage system, it is possible that the high voltage system can be induced or transmitted to the low voltage. (Tr. 138).

In connection with this particular regulation, we look at the condition of both cables, the voltages, the shielding, and any damage. All of these things would not prevent a citation from being used but would make any hazard nearly non-existent. (Tr. 140).

If an induced or transmitted voltage enters a communication line it would travel throughout the line. (Tr. 141). Section 18.62(2) prohibits intermix of intrinsically safe circuits with power circuits. (Tr. 143). In a mine environment cables are damaged all the time. They are still damaged and can blow up. (Tr. 143).

Section 57.108(12) is the metal/non-metal regulation dealing with communication/power cables. The regulation requires the cables be kept separate. (Tr. 144).

If a 24-volt power cable came in contact with a high voltage cable or line that was not a communication line, a chain of events would occur. (Tr. 145, 146). A communication line is not considered to be a power cable since you don't find power cable voltages on a communication cable. (Tr. 147). The communication cable in the Deserado Mine is 24 volts. (Tr. 147, 148).

If a power cable came in contact with a communication cable, the latter could become energized. Under such circumstances, an intrinsically safe communication cable could be rendered unsafe. There is no intrinsically safe data cable at this time. (Tr. 148).

CONSPECT systems sense carbon dioxide and methane gas. The sensors themselves are intrinsically safe and they are attached to the CONSPEC line through a barrier box. (Tr. 150). Going through the barrier box is considered to be intrinsically safe because it goes through a protective barrier. (Tr. 152).

Today MSHA defines a data line to be a power cable (Tr. 152) but a communication line is not considered to be a power cable. (Tr. 152). A 480-volt power line is certainly a power cable.

Low voltage power lines can cross each other without any additional requirement. High voltage power circuits and low voltage power circuits must have additional protection where they cross. See 30 C.F.R. 75.80(7). (Tr. 153).

Low voltage is zero to 600, intermediate is 600 to 999 volts, 999 volts up to 13,700 volts is considered to be high voltage by MSHA. (Tr. 153, 154).

A 400-volt line without additional protection could erase a data line because they are both low voltage lines. Additional insulation can be a piece of tape wrapped around a cable or a piece of conduit or anything rated as a dielectric that is flame resistant or an insulator.

In Mr. Kirk's opinion, whatever the manufacturer provides is essentially irrelevant when one cable crosses a communication line. The regulation requires additional protection where the cables pass over or under. (Tr. 156).

If the communication line were a bare wire, the operator would comply with the regulation by putting a piece of tape on the wire. (Tr. 156-157). However, he would try to discourage that procedure. (Tr. 157-158). The regulation requires some additional insulation to be added regardless of what comes from the manufacturer. (Tr. 158).

A communication cable can be a telephone cable. Signal devices are also communication cables. Data cable is not a communication cable. (Tr. 160, 161). Communications are transmitted in a telephone cable through voltage signals. Communications are transmitted in a data cable in the same manner. (Tr. 162).

The citations involved in this case have nothing to do with the CONSPEC system. MSHA is now attempting to deal with the new concept of computer or data lines. (Tr. 168, 169).

In Mr. Kirk's opinion, Section 18.68(c)(3) can stand alone. (Tr. 169). Mr. Kirk didn't know if the telephones at the Deserado Mines are permissible telephones. (Tr. 170).

DISCUSSION AND FURTHER FINDINGS

As threshold issues, Western Fuels assets the "over" and "under" requirements of 75.516-2(c) are vague, unclear, and undefined. Therefore, they are subject to selective and unequal enforcement.

I disagree. The Commission has previously recognized that, in order to afford adequate notice, a mandatory safety standard cannot be "so incomplete, vague, indefinite, or uncertain that [persons] of common intelligence must necessarily guess at its meaning and differ as to its application." Ideal Cement Co., 12 FMSHRC 2409, 2416 (November 1990); Cyprus Tonopah Mining Corporation, 15 FMSHRC 367, 375 (March 1993).

The term "over" is defined in Webster's as "used as a function word to indicate motion or situation higher than or above another." (Footnote 1) "Under" is defined as "in or into a position below or beneath something." (Footnote 2)

Western Fuels further asserts that the above underlined portion of 75.516-2(c) cannot "stand alone" as an MSHA requirement. In particular, Western Fuels argues the "additional insulation" requirement is limited to wires and cables installed in track entries as provided in the first sentence of 75.516-2(c).

I disagree. The plain text does not support this view. Local Union 1261, District 22, United Mine Workers of America v. FMSHRC, 917 F.2d 42.45 (D.C. Cir.) is not inopposite to the view expressed here. Local union 1261 involved the same nexus, i.e., the construction of Section 111 of the Mine Act. In the instant case, no such nexus exists. In fact, there are few if any "Track entries" in coal mines in the Western United States.

¹ Webster's New Collegiate Dictionary (1979) at 810.

Webster's New Collegiate Dictionary (1979) at 1265.

The pivotal issue is whether the Secretary may impose "addi- tional insulation" where a communication cable passes "over/ under" a power cable. This requirement is sought to be imposed although it is uncontroverted that the MSHA approval cables were in good condition and without breaks or abrasions.

In enforcing this regulation requiring "additional insula- tion," an inspector merely has to visually determine whether extra insulation has been added where power cables and communi- cation cables meet. However, in considering a parallel regula- tion [30 C.F.R. 57.12-82], the Commission found such enforce- ment to be inadequate.

In Homestake Mining Company, 4 FMSHRC 146 (February 1982), the Commission stated, in part, that

... the interpretive memorandum imposes a blanket requirement that additional insulation be placed between power cables and metal pipelines, regardless of the cable's existing insulation, dielectric strength, the conditions under which the cable is to be used, or the composition or design of the cable and its insulation. We recognize that enforcement of the standard would be simpler if an inspector merely has to visually determine whether extra insulation has been added where power cables and pipelines meet. We fail to see, however, how this superficial examination bears any relationship to the purpose of the standard. Rather, in order to make a bona fide determination that insulation adequate to prevent the transmission of current to adjacent pipelines is present, the adequacy of the added insulation must be evaluated, and this determination must be based on the objectively determinable character of the powerline and the existing insulation. In order to achieve the purpose of the standard, enforcement should not turn on the subjective evaluation of an inspector, without the objective revaluation of whether a hazard is or may be present. Further, section 57.12-82 does not state that "additional insulation" must be placed between powerlines and pipelines; it merely requires separation or insulation. 4 FMSHRC at 148, 149 (Feb. 1982).

Further,

... [t]he purpose of the standard, as written, can more accurately be achieved by an examination of the suitability of the insulation that is present at crossover points where water, telephone or air lines are in proximity to powerlines. 4 FMSHRC at 149. To like effect, see Climax Molybdenum, 4 FMSHRC 159 (February 1982).

In Cyprus Emerald Resources Corporation, 11 FMSHRC 2329 (November 1989), Commission Judge George A. Koutras, relying on

Homestake and Climax, supra, vacated an alleged power cable vioolation 30 C.F.R. 75.517. In Cyprus Emerald, the Secretary alleged that "the light switch block indicator was not protected at the point where the power cable crossed over the trolley wire." (11 FMSHRC at 2330).

Judge Koutras, in vacating this citation, ruled:

That in order to support any finding that a power cable is not fully protected in violation of Section 75.517, an inspector must, on a case-by-case basis, make an objective evaluation of all of the circumstances presented, including the use to which the power cable is being put, its condition, the location and distance from equipment or other physical objects which may reasonably expose it to physical damage, its proximity to miners who are required to work or travel in the area, and any other relevant factors which may support a reasonable conclusion that the cable is located and utilized in such a manner as to expose it to physical damage. Reliance by an inspector on the mere location of the cable listed among unexplained policy "location examples" is insufficient, in my view, to establish a violation. If an inspector followed the literal language of MSHA's policy, as the inspector did in this case, without any evaluation of all of the circumstances presented, he could issue a citation simply because the power cable crossed over a trolley wire, even thought the cable passed any number of feet over the trolley wire and could never conceivably come into contact with the trolley wire. Such an interpretation and application does little to foster mine safety, and simply encourage litigation. 11 FMSHRC at 2345.

In the instant cases, the Secretary does not seek to impose a blanket requirement that additional insulation be installed at all crossover points. Rather, the Secretary's citations deal with specific conditions at particular locations.

In connection with the regulation, Inspector Kirk aptly stated that we (MSHA) look at the condition of both cables, the voltages, the shielding, and any damage. (Tr. 140). Such an approach is on a case by case basis.

It is, accordingly, appropriate to review certain evidence as to the citations.

Citation No. 3850087 was issued because the communication cable was beneath the power cable. At the point where they crossed there was a three-inch gap.

In Mr. Gore's opinion, "additional insulation" was required at that crossover. The Judge has considerable difficulty in finding that the installation of mere electrician's tape remedies

a problem. However, an insulation could include a flame-resistant rubber hose or Canoflex. In any event, the method of abatement is generally within MSHA's discretion.

Based on the uncontroverted evidence, I conclude that Citation No. 3850087 was properly issued. It accordingly follows that the contest should be dismissed.

Citation No. 3850092 involved a situation where the communication cable was above the power cable for a distance of 10 to 12 feet. However, the cables did not cross. In Mr. Gore's opinion, additional insulation was required in the 10- to 12-foot distance where the cables ran parallel to each other.

It is uncontroverted that the cables did not cross. (Tr. 35, 36).

Additional insulation is required where the cables pass "over or under" any power conductor. Since there was not "over or under" passage in connection with this particular location, Citation No. 3850087 should be vacated.

For the foregoing reasons, I enter the following:

ORDER

- 1. The contest of Citation No. 3850087 is DISMISSED.
- 2. The contest of Citation No. 3850092 is SUSTAINED.

John J. Morris Administrative Law Judge

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