CCASE:

SOL (MSHA) V. INDUSTRIAL GENERATING

DDATE: 19830708 TTEXT: Federal Mine Safety and Health Review Commission
Office of Administrative Law Judges

SECRETARY OF LABOR,
MINE SAFETY AND HEALTH

CIVIL PENALTY PROCEEDING

ADMINISTRATION (MSHA),

PETITIONER

Docket No. CENT 79-203

A. C. No. 41-00356-03008

v. Mine: Sandow Strip

INDUSTRIAL GENERATING COMPANY, RESPONDENT

DECISION

Appearances: Donald W. Hill, Esq., Office of the Solicitor

U.S. Department of Labor, Dallas, Texas, for Petitioner Mike Holloway, Esq., Dallas,

Texas, for Respondent

Before: Judge Morris

The petitioner, the Secretary of Labor, charges respondent with violating Title 30, Code of Federal Regulations 77.701, a safety regulation promulgated under the Federal Mine Safety and Health Act, 30 U.S.C. 801 et seq. The cited regulation provides as follows:

Metallic frames, casings, and other enclosures of electric equipment that can become "alive" through failure of insulation or by contact with energized parts shall be grounded by methods approved by an authorized representative of the Secretary.

After notice to the parties a hearing was held in Dallas, Texas on October 26, 1982.

Procedural History

This matter was originally scheduled for hearing on August 21, 1980 before Judge Jon D. Boltz. A continuance was granted and the case was reset for December 4, 1981. That hearing date was vacated and this case was transferred to the writer on February 5, 1982.

At a hearing that commenced on October 26, 1982, in Dallas, Texas the Secretary's inspector was unavailable because of a recent injury. The judge denied the Secretary's motion for a continuance. Respondent requested a hearing on the merits.

After considerable discussion on the record the parties stipulated to certain facts. The judge prepared the formal stipulation and submitted it to the parties for comments. No person objected to the facts as prepared by the judge.

The parties waived post hearing briefs.

Issues

The issues are whether respondent violated the above regulation and, if so, what penalties are appropriate?

Stipulated Facts

Inside its maintenance building, or shop, respondent maintains three overhead cranes. The cranes have a capacity of 5, 10, and 20 tons (Tr. 10, 14, 16; Exhibit R1-R4). They rest and move on railroad rails 30 feet above the concrete floor. The cranes, with attached cables, move heavy equipment such as bulldozers and scrapers (Tr. 10, 15).

The area in front of the maintenance building is paved and the area to the side of the building is paved with rock (Tr. 18). Lignite, moved by a closed conveyor system, passes in front of the shop (Tr. 17).

There is no significant accumulation of dust particles in the building. Any accumulation would be routine dust such as the dust particles in the air in any room (Tr. 10, 17).

The cranes sit on rails which are attached to the sides of the building which are grounded (Tr. 6).

The strip mining itself does not cause any significant amount of dust or other substance to accumulate in the air at the maintenance shop (Tr. 10). The crusher is two miles away and the strip mining is three miles away (Tr. 10, 17). No spray painting or anything of that nature is carried on in the shop (Tr. 16).

The MSHA inspector did not go up and look at the wheels and the rails (Tr. 19).

The citation was issued because of some past experience with crane systems supposedly similar to this system (Tr. 20).

The Secretary acknowledges that respondent's expert witnesses, present for the hearing, are very knowledgeable (Tr. 19).

Expert Pittman [who was to have been a witness for respondent] has been with the Alco Company for 34 years. The company has over 1,000 cranes worldwide. Respondent's cranes, manufactured by HARNISCHFEGER CORPORATION, have steel wheels and steel rails that are as shiny as a mirror (Tr. 21, 22). The shiny portion is polished raw steel. In 34 years expert Pittman had never experienced a failure of a ground because of a dust condition between the wheels and the rails. Respondent's expert in his research contacted many operators. They all indicated there was no need for an additional ground (Tr. 23).

The National Electrical Code, 1978 Edition, Section 610-61 entitled "Grounding" provides as follows:

All exposed metal parts of cranes, monorail hoists, hoists and accessories, including pendant controls, shall be metallically joined together into a continuous electrical conductor so that the entire crane or hoist will be grounded in accordance with Article 250. Moving parts, other than removable accessories or attachments having metal-to-metal bearing surfaces, shall be considered to be electrically connected to each other through the bearing surfaces for grounding purposes. The trolley frame and bridge frame shall be considered as electrically grounded through the bridge and trolley wheels and its respective tracks unless local conditions, such as paint or other insulating material prevent reliable metal-to-metal contact. In this case a separate bonding conductor shall be provided. (Transcript at 28).

Discussion

Respondent asserts it did not violate 30 C.F.R. 77.701 since there is no possibility that the equipment could become "alive" because of a failure of insulation or through contact with energized parts.

I agree with this view since the metal wheels of the cranes roll on metal rails; accordingly, the equipment is grounded by virtue of the continuous metal to metal contact between the two surfaces.

This method of metal to metal grounding is recognized under the National Electrical Code (NEC) 610-61. In its pertinent part it provides as follows:

All exposed metal parts of cranes ... shall be metallically joined together into a continuous electrical conductor so that the entire crane ... will be grounded in accordance with Article 250 The trolley frame and bridge frame shall be considered as electrically grounded through the bridge and trolley wheels (emphasis added).

The gist of the Secretary's case appears to be that metal to metal grounding is inadequate and that an additional grounding mechanism is necessary to insure proper safety. He suggests that dust particles or other insulating materials could collect on the wheels or rails and thereby eliminate the metal to metal ground. This occurence would allow the crane to become "alive."

I find the Secretary's argument unpersuasive for several reasons. The cranes are all housed inside a building. They are 30 feet above a concrete floor and they are located approximately three miles from the mining area. The amount of dust particles accumulating in the building is minimal and insignificant. The citation issued at the inspection is void of any notation concerning any dust accumulation. Further, the inspector did not examine the wheels and rails for any such accumulation.

In addition, respondent's expert, (whom the Secretary recognizes as very knowledgeable), indicated that the ground of the metal to metal contact would not be lost due to the amount of dust that could accumulate here (Tr. 14, 17, 21). Further, in his 34 years in the field, respondent's expert had never seen a ground loss occur under the conditions urged by the inspector. Respondent's expert, in researching other operators, universally found no need for an additional ground.

Due to the considerable expertise of respondent's experts I find such evidence to be very credible.

The Secretary appears to advance an argument that the grounding method used by respondent is inadequate because accidents, or loss of grounding, had occurred where such cranes were not equipped with a supplemental grounding mechanism. No documentation or evidence was produced showing loss of ground in these or similar circumstances. On the other hand respondent's expert testimony, reviewed above, was directly to the contrary indicating no history of such accidents. I therefore conclude that there is no history of accidents in similar circumstances to suggest that the electrical equipment cited here could become alive.

Section 610-61 of the NEC does indicate that a separate ground would be necessary if, "[1]ocal conditions, such as paint or other insulating material prevent reliable metal-to-metal contact." However, the parties have stipulated that no significant accumulation of dust occurs in the area of the cranes. The record shows that there is no painting in the building which houses the cranes and that the building is used exclusively for maintenance purposes. No mining activity takes place (Tr. 16). There was also testimony by respondent's expert that there were no insulating materials on the wheels or rails (Tr. 23).

I conclude that there is no realistic possibility that the cranes operated by respondent could become alive by reason of failure of insulation or contact with energized parts. No violation of 30 C.F.R. 77.701 occurred.

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It further follows that respondent is not required to maintain additional grounding that it installed to abate the citation issued in this case.

Based upon the foregoing findings of fact and conclusions of law I enter the following

ORDER

Citations No. 792310 and 792311 and all proposed penalties therefor are vacated. $\,$

John J. Morris Administrative Law Judge