

FEDERAL MINE SAFETY AND HEALTH REVIEW COMMISSION

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April 23, 1997

SECRETARY OF LABOR,	:	CIVIL PENALTY PROCEEDING
MINE SAFETY AND HEALTH	:	
ADMINISTRATION (MSHA),	:	Docket No. WEST 95-333-M
Petitioner	:	A.C. No. 04-03425-05503 TIR
v.	:	
	:	Washington Mine
UNIQUE ELECTRIC,	:	
Respondent	:	

DECISION

Appearances: Jan M. Coplick, Esq., Office of the Solicitor, U.S. Department of Labor, San Francisco, California, for Petitioner;
Kim Warnock, Owner, Unique Electric, Shasta Lake City, California, for Respondent.

Before: Judge Manning

This case is before me on a petition for assessment of a civil penalty filed by the Secretary of Labor, acting through the Mine Safety and Health Administration ("MSHA"), against Unique Electric, pursuant to sections 105 and 110 of the Federal Mine Safety and Health Act of 1977, 30 U.S.C. ?? 815 and 820. The petition alleges one violation of the Secretary's safety standards.

A hearing was held in Redding, California. The parties presented testimony and documentary evidence, and the Secretary filed a post-hearing brief. Unique Electric relies upon the hearing record.

I. BACKGROUND

At about 6:30 p.m. on September 5, 1994, Henry E. Feutrier, General Manager of the Washington Mine, went into the mine to check a pump on sub-level 2. He entered the mine alone and no one else was in the mine at that time. The following morning, miners traveled underground to commence work. Two miners discovered Mr. Feutrier face-up under the water. His body was removed from the mine and the appropriate authorities were notified of his death including the California Division of Occupational Safety and Health ("Cal/OSHA") and MSHA.

At the time of the accident, the Washington Mine was a small, underground gold mine in

Shasta County, California, that employed about six people. It was operated by the Washington/Niagara Limited Partnership ("Washington/Niagara"). MSHA conducted an investigation of the accident with Cal/OSHA and concluded that Mr. Feutrier sustained an electrical shock and subsequently drowned. (Ex. S-1 at 74). MSHA's accident investigation report stated:

The accident occurred because the neutral bar inside the breaker panel enclosure was not bonded to the grounded enclosure. There was no equipment ground path between the grounded enclosure and the transformer neutral for the fault current so that the circuit breaker could trip.

Id. at 77.

Washington/Niagara was issued a section 104(d)(1) citation for a violation of 30 C.F.R. ? 57.18025 because Mr. Feutrier entered the mine alone. (Ex. S-1 at 78). This citation was subsequently vacated by MSHA. (*Washington/Niagara*, WEST 95-310-M, January 11, 1996 (unpublished order of dismissal)). On September 9, 1994, MSHA Inspector Arnold E. Pederson issued a section 104(d)(1) citation to Unique Electric alleging a violation of 30 C.F.R. ? 57.12025, as follows:

The 1 HP submersible pump motor, located on sub-level 2 drift was electrically energized from a secondary of a 230/120-volt single phase transformer that was protected by a double pole 20-amp circuit breaker. The circuit breaker was located at a distribution panel at the track level wye. The neutral bar inside the breaker panel enclosure was not bonded to the grounded enclosure therefore there was no equipment ground path between the grounded enclosure and the transformer neutral for fault current so that the circuit breaker could trip.

A fatal accident occurred at the underground Washington Mine on September 5, 1994, at approximately 8:00 p.m., when the general mine manager received an electrical shock while moving an energized 1 HP submersible pump and subsequently drowned in a flooded drift on sub-level 2. This is an unwarrantable failure.

Inspector Pederson determined that the violation was of a significant and substantial nature, and that Unique Electric's negligence was high. The cited safety standard provides, in pertinent part, that all "metal enclosing or encasing electrical circuits shall be grounded or provided with equivalent protection." MSHA proposes a penalty of \$8,500 for the alleged violation.

II. DISCUSSION WITH FINDINGS OF FACT AND CONCLUSIONS OF LAW

This case does not present any legal issues; both parties agree that if the neutral conductor was not bonded to the ground circuit, ground fault protection was not provided for the pump in violation of the safety standard. The parties, however, vehemently dispute the facts.

A. Summary of Uncontested Evidence

Some of the underlying facts were stipulated to by the parties through the Secretary's request for admissions, as set forth below. (Ex. S-1 at 4-11, 125-130). Other facts were not contested at the hearing. Unique Electric was a small, electrical contractor operated by Kim Warnock. Unique Electric was a sole proprietorship without any employees or assets. Unique Electric was simply the name that Mr. Warnock used when he provided services to his customers; it was not a separate legal entity. Mr. Warnock is a licensed electrician. He was a mine "operator," as that term is used in section 3(d) of the Mine Act because he was an "independent contractor performing services ... at [a] mine." 30 U.S.C. ? 802(d). Unique Electric performed electrical work for the mine between 1992 and 1994.

Sub-level 2 of the mine contained water in the drift which necessitated continuous pumping. Two pumps were used to remove the water. The pump in question in this case was an ABS one-horsepower submersible pump (the "pump") that was used to pump water at the face area of the drift. The pump was energized at 230-volts, single phase AC. Power to the pump was supplied by a 480-volt AC single phase circuit from a 3 KVA transformer, with a secondary voltage of 230/120-volts AC, single phase. The primary side of the transformer was wired directly to a 30-amp, 600-volt fused safety switch. The secondary circuit of the transformer was connected to a metal-enclosed panel board which contained a double pole 20-amp thermal magnetic circuit breaker (the "circuit breaker"). The pump was electrically energized from the secondary side of the transformer that was protected by the circuit breaker. The purpose of the circuit breaker was to protect the pump circuit from overcurrent, short circuits, and ground faults. A three-conductor cable was connected to the circuit breaker and the green equipment grounding conductor, which was bonded to the metal enclosure. A three-prong plug was attached to the end of the cord for the pump.

After the accident, MSHA's investigation revealed that there were two ground faults in the circuit that supplied power to the pump (the "pump circuit"). One ground fault was in the pump. This ground fault was caused by the pinching of the black conductor between the inside casing of the pump and the capacitor clamp. A second ground fault was in the cable between the circuit breaker and the pump where the cable was damaged. (Tr. 235-36).¹ The second fault created a phase-to-phase fault. (Tr. 259).

Sub-level 2 of the mine was opened in 1994. Unique Electric performed the electrical

¹ The transcript citations in this decision do not necessarily reference all testimony given on a particular subject.

work that was needed to open sub-level 2, including installing the transformer and the electrical panel board that contained the circuit breaker. (Tr. 24-25). Mr. Warnock worked alone in performing these tasks, made all the electrical connections, and conducted any tests to ensure that the connections were properly made. Mr. Warnock first installed the pump on a 110-volt circuit that was protected by a ground fault circuit interrupter ("GFCI"). (Tr. 26, 110-11). That circuit would not work because the pump overloaded the circuit thereby tripping the GFCI. *Id.* The pump was also designed to function at 230-volts, so Warnock rewired the pump for that voltage and installed it in the 230-volt circuit about one month prior to the accident. (Tr. 26, 101).

MSHA's investigation into the accident was conducted in two phases. Inspector Pederson investigated the accident at the Washington Mine. After his site inspection was completed, the pump and pump cable were sent to MSHA's Denver Safety and Health Technology Center, where it was examined by Terrance Dinkel, an electrical engineer.

The pump was an industrial, submersible pump, but it was designed to be suspended in a bore hole or well casing, not moved from place to place. (Tr. 264-66, 427-28). The pump was purchased by Washington/Niagara without consulting Mr. Warnock. It was the practice of Washington/Niagara to move the pump around in the water as needed. The pump was not equipped with an on/off switch and Washington/Niagara personnel would move the pump in the water while it was energized. Employees would wade into the water while holding the energized pump. (Tr. 113, 115). Sometimes the water was chest deep. *Id.* It is presumed that Mr. Feutrier sustained an electrical shock while moving the pump and subsequently died as a result of drowning. The cable to the pump was badly damaged. Washington/Niagara personnel apparently pulled the cable over the rocks when moving the pump. The pump was moved prior to blasting and when it needed to be repositioned in the water.

B. Arguments of the Parties

The Secretary contends that when Mr. Warnock installed the transformer and the panel board, he neglected to properly ground the system. As a consequence, when the pump was installed, the metal casing for the pump was not grounded. As evidence, she points to the fact that the neutral link was not connected to the neutral bar in the panel board. She also relies on the fact that when Inspector Pederson tested the circuits at the panel board, his ohmmeter indicated that the neutral circuit was an open circuit. The Secretary also contends that when Mr. Warnock rewired the pump for 230-volts, a black current carrying wire was inadvertently crushed against the casing of the pump when it was put back together. The bare conductor contacted the casing of the pump creating a ground fault. She argues that the ground fault was not detected at that time because the circuit was not grounded at the panel board. The Secretary maintains that when Mr. Feutrier moved the pump on the evening of September 5, a second ground fault occurred in the cable to the pump. Because the circuit was not properly grounded, the circuit breaker did not trip.

Mr. Warnock disputes the Secretary's contentions. He testified that when he installed the transformer he grounded the center tap of the secondary side of the transformer to the frame of the transformer and connected the frame of the transformer to the grounding bar in the panel board. (Tr. 35-40, 65, 84-89, 350-52). He stated that he did not connect the neutral link in the panel board with the neutral bar because the system was grounded in the transformer. He stated that he tested the transformer before it was put into service and determined that it was grounded. (Tr. 40, 402-03). Mr. Warnock also testified that after he converted the pump from 110-volts to 230-volts, he tested the pump with an ohmmeter. (Tr. 27).

Mr. Warnock testified that the test Inspector Pederson performed to determine if the circuit was grounded was invalid. He contends that Inspector Pederson fumbled around with his ohmmeter and kept pushing buttons until he got the result he wanted. (Tr. 57, 104, 358-60). He believes that at the time he installed the pump, the circuit was grounded and the pump did not contain a ground fault.

Mr. Warnock maintains that when he was called to install the pump, he advised Feutrier that the pump was not designed to be moved around. (Tr. 74-75, 100, 372). He states that he told Mr. Feutrier that a compressed air pump would be more appropriate because air lines were already installed in sub-level 2. *Id.* He also stated that he recommended that an on/off switch be installed for the pump. (Tr. 74-75, 100, 277-79). Further, he testified that the cable used to power the pump was not strong enough to withstand being pulled over rocks when the pump was moved. *Id.*

Mr. Warnock states that when he converted the pump to 230-volts, there was no ground fault in the pump. He contends that he tested the pump after the work was completed and no ground faults were present. (Tr. 357). In addition, he states that miners holding the pump in the water would have been able to feel electric current if there had been a ground fault, even if they did not receive a strong electric shock. (Tr. 370, 374). He believes that the ground fault in the pump developed over time as the pump was moved about. Warnock maintains that the cable to the pump was seriously damaged by Washington/Niagara employees as they pulled it over the rocks. (Tr. 75-76, 79, 356, 375, 412). He believes that the grounding wire in the cable was severed at some point during this period. (Tr. 375-76). He thinks that the ground fault in the pump and the ground fault in the cable developed after he installed them. Thus, he believes that Mr. Feutrier received an electric shock because the ground wire in the cable had been severed preventing the circuit breaker from functioning.

C. Analysis of the Issues.

1. Violation of Section 57.12025

Mr. Warnock testified that he performed electrical work at the mine on an as needed basis. (Tr. 41). He did not have a contract with Washington/Niagara, but would come to the mine to perform a specific task when called by mine personnel. (Tr. 99-102). Thus, he did not have overall responsibility for or authority over the mine's electrical system. Ms. Mary Lou George, the office manager for the mine, testified that Mr. Warnock had broad authority with respect to the mine's electrical system. (Tr. 304). I agree with Ms. George that when Mr. Warnock was called to do electrical work at the mine, Washington/Niagara relied upon his expertise to perform the task in a workman-like manner. Nevertheless, I find that he only had authority over the specific tasks that he was called upon to perform. In this instance, he was instructed to install the transformer and pump in Sub-level 2, along with the associated wiring. Mr. Warnock did not purchase the pump nor does it appear that anyone from Washington/Niagara asked for his advice with respect to the type of electric pump that should be purchased. He was simply given the pump and told to install it. Accordingly, Mr. Warnock can be held liable for any violations of the safety standards that occurred at the time he installed the transformer and pump, but he cannot be held liable for any violative conditions that developed after their installation.

As stated above, the Secretary relies on three facts to establish a violation. First, she relies on the fact that the neutral link was not connected to the neutral bar in the panel board. By itself, this fact does not establish a violation. Mr. Warnock testified that he bonded the center tap on the secondary side of the transformer to the frame of the transformer and the frame of the transformer to the ground bar on the panel board. There is no dispute that if this bonding had been completed, the pump circuit would have been grounded in accordance with the requirements of the safety standard. (Tr. 156-57, 187-88, 218-19, 257). Inspector Pederson did not look inside the transformer to see if the circuit was grounded at that location. (Tr. 157, 204). Accordingly, the fact that the circuit was not grounded at the panel board does not establish a violation.

The Secretary also relies on the fact that the circuit breaker did not trip when the pump was first energized and placed in the water. She believes that Mr. Warnock created a ground fault when he replaced the casing on the pump after converting it to 230-volts. The Secretary reasons that if the circuit had been grounded, the circuit breaker would have tripped soon after the pump was installed. (Tr. 180). Because the circuit was not grounded, the fault current was not able to get back to its source (the transformer) and the breaker did not trip. Mr. Warnock argues that if that were the case, persons handling the pump would have been able to feel the fault current. For example, a person holding the energized pump while entering the water would feel at least a trickle of power if not an electric shock. The Secretary's witnesses did not agree with this statement and took the position that it is possible that employees would not know that there was a ground fault in the pump. (Tr. 182, 201-02, 239).

I find that it is highly likely that employees handling the pump in the water would have felt the current under the circumstances set forth by the Secretary. Fault current seeks the path of least resistance to its source, in this case the transformer. A person standing in water with some mineral content holding the metal casing of an ungrounded pump that has a ground fault in the

casing will act as a conduit for at least some current trying to reach the transformer. I believe that he would feel at least a trickle of current. Many employees had been in the water with the pump, including Mr. Kevin Baldwin. (Tr. 27). Mr Baldwin testified that he walked chest high into the water while holding the energized pump soon after it was installed and that he did not receive any electrical shocks. (Tr. 112-15, 119). I credit the testimony of Mr. Warnock and Mr. Baldwin in this regard. Accordingly, I find that the fact that the circuit breaker did not trip soon after the pump was installed does not establish that it was not grounded. The circuit breaker may not have tripped after the pump was installed because the ground fault in the pump developed later. Although a wire was pinched when Mr. Warnock reassembled the pump, it is not clear when the fault occurred. The conductor may have come into contact with the metal casing at a later time.

The third factor that the Secretary relies upon to establish a violation is the ohmmeter tests conducted by Inspector Pederson. He tested the pump circuit twice with an ohmmeter and determined that it was an open circuit, meaning that it was not grounded. Mr. Warnock disputes Inspector Pederson's findings. He believes that the inspector did not conduct a proper test and the fact that Inspector Pederson "fumbled" with the meter indicates that he did not know how to use it or that he set the controls on the meter so that it would show that the circuit was not grounded. (Tr. 57-60). He further stated:

My reason for contesting this [citation] is because I know this system was bonded. If Mr. Pederson would have taken the time to take that cover off that transformer, follow those wires down, he would have seen that the thing was bonded.

But he saw that the strap was not connected to that neutral bar. And right there, boy, they think they got the whole case solved....

(Tr. 368). Thus, Mr. Warnock believes that when the inspector saw that the neutral link (the strap) was not connected to the neutral bar, he concluded that the pump circuit was not grounded and conducted the remainder of the inspection in a manner to support this conclusion.

Inspector Pederson is an experienced MSHA inspector, who specializes in electrical inspections. (Tr. 131). When he opened the door to the panel board, he observed that the neutral link was not connected to the neutral bar. Inspector Pederson then used his meter to take a continuity test between the neutral bar and the frame of the panel board, the neutral link. (Tr. 157-58). The test show on open circuit, which indicates that the pump circuit was not grounded. *Id.* He performed this test at the panel board and at the transformer, which were adjacent to each other. (Tr. 157-58, 177). The first time he conducted these tests he was accompanied by MSHA Inspector Eugene Lopez, Cal/OSHA Associate Safety Engineer Gordon Taylor, and Mike Burgess, the acting general manager of the mine. (Tr. 158). Inspector Pederson testified that his meter was functioning properly and that the meter's two probes had good contact with the circuit. (Tr. 161, 172). He testified that his tests showed that the neutral was not connected to the

ground. (Tr. 174). If the circuit was bonded in the transformer, the test would have indicated that the circuit was grounded.

He tested the circuit at the panel box again in the presence of Mr. Warnock. (Tr. 159, 174-75). The test results showed that the pump circuit was not grounded. *Id.* He does not recall any conversation with Mr. Warnock. (Tr. 175, 183). Inspector Pederson used a multi-meter tester. This tester can be used for many purposes, including measuring resistance, voltage, and testing electronic devices. When conducting continuity tests, the meter has a number of scales. Inspector Pederson denies that he fumbled with his multi-meter, but admits that he adjusted the scale several times when he conducted the continuity test for Mr. Warnock. (Tr. 164-68, 173, 204-209). A continuity test with the multi-meter is only meaningful when it is set at the appropriate scale. (Tr. 170-71, 249). He has been using this tester for about 18 years. (Tr. 203). I find that Inspector Pederson knew how to properly use his multi-meter when testing for continuity in circuits.

Mr. Warnock testified that when he questioned Inspector Pederson about his test of the circuit, Inspector Pederson cut him off by stating "it wouldn't make any difference in this case anyway." (Tr. 51, 53, 92). Mr. Warnock testified that he was about to explain to Inspector Pederson that the circuit was grounded in the transformer when the inspector cut him off. *Id.* Mr. Warnock interpreted the inspector's statement to mean that grounding of the circuit did not have anything to do with the case, so Warnock kept quiet. (Tr. 65-67). Mr. Warnock believes that the circuit breaker would not have tripped in any event because the pump was in a large body of water, which would have dissipated the current. (Tr. 67, 97). I credit the testimony of Mr. Dinkel that the circuit breaker would have tripped if the pump were properly grounded, even though the pump was in a large body of water. (Tr. 237-39, 242). As stated above, fault current will seek the most efficient route back to the transformer, which would be the copper ground wire if it is not broken. Although Warnock apparently interpreted Inspector Pederson's statement as an attempt to cut him off, I believe that their conversation was simply a miscommunication.

Based on the tests that Inspector Pederson made with his multi-tester, I find that the pump circuit was not properly grounded at the time of the accident in violation of 30 C.F.R. ? 57.12025. As stated above, Unique Electric was only responsible for the work that it performed at the mine. Thus, if Mr. Warnock properly grounded the pump circuit when he installed the pump, he can not be charged with a violation. Washington/Niagara was responsible for the conditions in the mine and if the grounding system was damaged in the interim, Mr. Warnock can not be held responsible. Based on the evidence presented in this case, I find that it is highly unlikely that a grounding system in the transformer would have been damaged. Mr. Warnock testified that he grounded the pump circuit by bonding the neutral to the frame of the transformer at the time the transformer was installed. The transformer is a stationary piece of equipment that is not in an area that would be subject to damage. It was a few feet from the panel board. The photographs introduced in this case do not show any damage. (Ex. R-1). While it is possible that the wire bonding the transformer came loose, such an event is extremely unlikely in this case and there is no evidence that it had. Mr. Warnock's test of the transformer following its installation

must not have revealed the problem. Accordingly, I find that the pump circuit was not properly grounded at the time Warnock installed the pump at 230-volts about a month prior to the accident. Therefore, Unique Electric violated the safety standard.

In theory, the Secretary did not bring this case against Unique Electric to establish responsibility for the fatality. (Tr. 28, 414). Statements in MSHA's accident investigation report and the amount of the proposed penalty, however, indicate that the Secretary believes that Mr. Warnock was responsible for the accident. Many events led up to this tragic accident, in addition to the events discussed above. As stated above, Washington/Niagara received one citation as a result of the accident, which was subsequently vacated by the Secretary.

First, Mr. Feutrier was alone at the time he received the electric shock. Even if the circuit breaker tripped, he could have received a serious electrical shock and, with no one to pull him out of the water, he may have drowned in any event. Second, the cable to the pump was seriously damaged because it had been pulled over the rocks by Washington/ Niagara employees. (Tr. 197-200, 217, 224-25, 255, 269; Ex. S-1 at 56-63). It is possible that the ground wire in the circuit was sufficiently severed that the circuit breaker would not have tripped even if the circuit was grounded at the panel board. (Tr. 209-12, 375). Third, Washington/Niagara employees were holding the energized pump while standing in deep water when it was moved. In moving the pump, the cable was often pulled over rocks, which seriously damaged it. One does not need to be an expert in mine safety or electricity to recognize that this practice was inherently dangerous.

Finally, Ms. George called Mr. Warnock sometime in July 1994 to ask him to perform the annual continuity tests for the grounding systems at the mine, as required by 30 C.F.R. ? 57.12028. (Tr. 289). She left messages for him on a number of occasions. (Tr. 289). At one point in mid-August, Mr. Warnock told Ms. George that he would perform the tests before the Labor Day weekend. (Tr. 295). This test on the pump circuit would have revealed that the circuit was not grounded. Mr. Warnock arrived at the mine the day after Labor Day to perform the test. (Tr. 48, 296-97). Mr. Warnock testified that he could not get out to the mine to perform the test any earlier because he was "very busy" with other work. (Tr. 44). The accident occurred on Labor Day.

2. Significant and Substantial

I find that the Secretary established that the violation was of a significant and substantial nature. The failure to ground the metal parts enclosing electrical circuits creates a discrete safety hazard. There is a reasonable likelihood that this hazard will result in an injury of a reasonably serious nature. The parties do not dispute that a serious hazard is created when a circuit is not grounded. (Tr. 81).

3. Unwarrantable Failure

The Secretary did not present any evidence with respect to the unwarrantable failure

allegation contained in the citation. The Secretary's brief does not mention the unwarrantable failure allegation. The Secretary bears the burden of proof on this issue. Accordingly, the unwarrantable failure allegation is vacated and the citation is modified to a section 104(a) citation.

D. Appropriate Civil Penalty

Section 110(i) of the Mine Act sets forth six criteria to be considered in assessing an appropriate civil penalty: "the operator's history of previous violations, the appropriateness of such penalty to the size of the business of the operator charged, whether the operator was negligent, the effect on the operator's ability to continue in business, the gravity of the violation, and the demonstrated good faith of the person charged in attempting to achieve rapid compliance after notification of the violation." 30 U.S.C. ? 820(i).

Unique Electric has no history of previous violations of the Secretary's safety standards. Unique Electric was very small. Mr. Warnock is now employed by an electrical contractor that works exclusively at state and federal installations, so Unique Electric no longer exists. Mr. Warnock will have to pay any penalty assessed.

In *Basin Resources, Inc.*, 19 FMSHRC 211 (January 1997), I held that if a mine operator is no longer in business and does not intend to return to the mining business, this fact should be taken into consideration in considering the ability to continue in business criterion. I held that civil penalties are remedial, not punitive, and are designed to "induce those officials responsible for the operation of a mine to comply with the Act and its standards." *Id.* at 212 (citation omitted). There is no question that Mr. Warnock is no longer performing electrical work at the Washington Mine or any other mine.

I find that the violation was serious and that Unique Electric was negligent in failing to ground the pump circuit. Mr. Warnock must have neglected to effectively bond the pump circuit in accordance with his normal practice. The violation was abated in good faith. Mr. Warnock connected the neutral link to the neutral bar in the panel board as soon as the mine was released from the section 103(k) order. Based on the penalty criteria, I find that a civil penalty of \$400.00 is appropriate for this violation.

III. ORDER

Accordingly, Citation No. 3910427 is **MODIFIED** to a section 104(a) citation, the citation is **AFFIRMED**, as modified, and Unique Electric is **ORDERED TO PAY** the Secretary of Labor the sum of \$400.00 within 40 days of the date of this decision. Upon payment of the penalty, this proceeding is **DISMISSED**.

Richard W. Manning
Administrative Law Judge

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