

McQueen and Steven Gregg Taylor, employees of KU, were injured while checking the rotation of a transformer belonging to KU and located in the Lexington Civic Center. The injury occurred when Taylor attempted to check the rotation of a transformer whose secondary voltage ranged from 2,400 volts to 4,160 volts. The volt sequence meter that Taylor was using had a maximum capacity of 550 volts and when he applied the meter to the transformer, the meter's capacity was overwhelmed causing it to explode. Both Taylor and McQueen, who were standing side by side, were injured.

Both men are long-term employees of KU. McQueen has been employed by KU since September 8, 1969 and is currently a line supervisor. Taylor has been employed since November 28, 1979 and is a line technician. Both have apparently recovered from their injuries and have returned to work.

Transformers are most often used to reduce the voltage of electricity to useable levels. They consist of a primary and secondary side. Electricity enters the transformer on the primary side, is reduced, and leaves the transformer on the secondary side. Different transformers emit different levels of voltage depending upon the needs of the electric customers they serve.

On the day of the accident, McQueen was working with a crew of five men, including himself, who had been assigned to him for the purpose of checking the phase sequence of all three-phase transformers serving customers in downtown Lexington whose secondary voltage did not exceed 600 volts. The crew was divided into teams, one of which consisted of McQueen and Taylor. There

were approximately 40 transformers of this type spread throughout locations in the downtown area, including one in the Civic Center with a secondary voltage of 480 volts.

The transformer in the Civic Center is located in a vault that is kept locked for safety purposes. Two other transformers are also located in the vault, each having a secondary voltage ranging from 2,400 volts to 4,160 volts. The two other transformers were not in the group of transformers to be tested. Nevertheless, even though each transformer's voltage was posted on a large plaque affixed to the door, upon entering the vault, McQueen unlocked the doors to all three. Taylor first checked the sequence on the transformer whose secondary voltage was 480 volts and was within the group included in the testing program. After completing the check of the first transformer, he then attempted to check the sequence of one of the higher voltage transformers not included in the group to be tested. When Taylor applied the meter to the second transformer, the accident occurred.

Apparently, there is little or no need to test the phase sequence on the higher voltage transformers. In the unlikely event that the phase sequence on the higher voltage transformers needs to be tested, it must be done at the customers' transformers after the voltage has been reduced. For that reason, KU does not have any equipment which would enable it to make such a test.

CONCLUSIONS OF LAW

KU is a utility subject to the jurisdiction of the Commission and required to comply with the Commission's regulations, including

807 KAR 5:041. Section 3 of that regulation requires utilities to construct and maintain their plants and facilities "in accordance with good and accepted engineering practices." In determining what constitutes good and accepted engineering practices, the Commission has adopted by reference the standards found in various codes including the National Electrical Safety Code (ANSI C-2 1990 Edition). Section 42, paragraph 421 of that code provides in relevant part as follows:

a. Duties of first level supervisor or person in charge:

This individual shall: . . .

(5) Prohibit the use of tools or devices unsuited to the work at hand, or which have not been tested or inspected as required.

This standard is clearly intended to require employers to provide their employees the proper tools to perform the work they are assigned. Because the meter used to check the phase sequence of the higher voltage transformer was not suitable for that purpose, the investigator investigating the accident concluded that its use was a violation of the standard and the regulation.

While KU agrees that the meter was not suitable for testing the high voltage transformers, it contends that there was no violation of the standard because those transformers were not included in the group to be tested and were, instead, inspected by accident. KU's argument might have merit if it were not for the fact that Taylor, while testing the high voltage transformer, was acting under the direct supervision of his immediate supervisor, McQueen. McQueen unlocked all three transformers in the room where

they were situated, including the two high voltage transformers, so Taylor could test them. As Taylor's supervisor, McQueen was required by the standard to see that the proper equipment was furnished to Taylor to perform the test. By failing to do so, the standard was violated.

KU also contends that even if the regulation was violated, no penalty should be assessed because the violation was not willful. KU relies upon the language of KRS 278.990(1) which provides that a utility will be subject to civil penalty if it "willfully violates any of the provisions of this chapter or any regulation promulgated pursuant to this chapter. . . ." (emphasis added)

Willful conduct consists of intentional acts committed with knowledge of their probable consequences. Ford Motor Company v. Smith, 283 Ky. 795, 143 S.W.2d 507, 509 (1940). Knowledge includes not only one's actual knowledge, but what one is reasonably expected to know under the circumstances. McQueen knew, or should have known, that the meter KU furnished Taylor was not suitable for testing the high voltage transformers in the Civic Center. Directing Taylor to use it for that purpose, KU was in willful violation of the regulation. Under the circumstances, a penalty of \$1,750 would be appropriate for the violation.

This Commission being otherwise sufficiently advised,

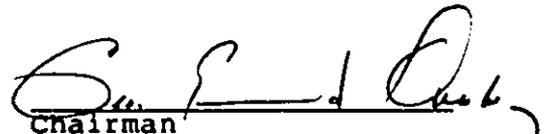
IT IS ORDERED that:

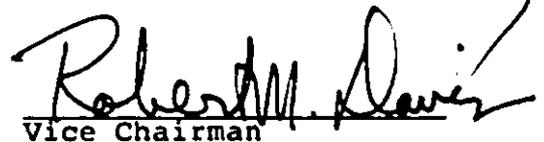
1. KU did willfully violate 807 KAR 5:041, Section 3(1), by furnishing an employee equipment that was not suitable for its intended purpose.

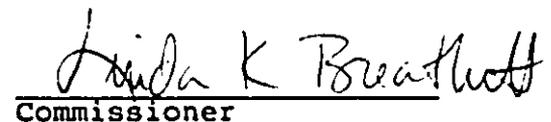
2. KU shall pay to this Commission for the violation a penalty of \$1,750 within 20 days of the date of this Order. Payment shall be made by certified check or money order payable to the Kentucky State Treasurer and mailed to the Office of General Counsel, Public Service Commission, P. O. Box 615, Frankfort, Kentucky 40602.

Done at Frankfort, Kentucky, this 16th day of September, 1993.

PUBLIC SERVICE COMMISSION


Chairman


Vice Chairman


Commissioner

ATTEST:


Executive Director