# OF NORTH CAROLINA RALEIGH, NORTH CAROLINA

COMMISSIONER OF LABOR FOR THE STATE OF NORTH CAROLINA,

COMPLAINANT,

OSHANC NO. 2001-4009 OSHA INSPECTION NO. 304282767 CSHO ID NO. P2687

v.

STATE UTILITY CONTRACTORS, INC.

**ORDER** 

RESPONDENT.

THIS MATTER was heard by the undersigned on July 31, 2002 in Charlotte, North Carolina. The complainant was represented by Susan Lundberg, Assistant Attorney General; the respondent was represented by Greg C. Ahlum.

After hearing and receiving the evidence and the arguments of counsel, including post-hearing presentation of authorities from counsel for both parties, the undersigned makes the following

#### FINDINGS OF FACT

- 1. The complainant as Commissioner of Labor for the State of North Carolina is charged by law with compliance with and enforcement of the provisions of the Occupational Safety and Health Act of North Carolina (the Act).
- 2. The respondent is a utility contractor located in Monroe, North Carolina. It employs 160 persons.
- 3. For some period of time prior to March 2, 2001, the respondent was installing a 36-inch water line underground along U.S. Highway 521 between John J. Delaney Drive and Ballantyne Commons Parkway in Charlotte, North Carolina.
- 4. This water line was being constructed for the City of Charlotte in a development where there was completed construction of infrastructure and other improvements.
- 5. As with much underground utility construction in developed areas, the respondent expected to encounter and did encounter other utility facilities underground. In this

area, Duke Energy had underground power lines for the street lights along Highway 521 and for electric power to a shopping center in the immediate vicinity of Highway 521.

- 6. A unified system has been set up in North Carolina for contractors to have existing underground utility facilities located before the new underground utility work is performed. There is a "one-call" telephone number a contractor can call to lodge a request for existing underground utilities to be marked on the ground. The "one-call" system and the companies that perform the marking are paid by the utility companies.
- 7. The respondent's superintendent for this project, Robert Scott Norwood, contacted the "one-call" number and placed an order or request for marking of Duke Energy's underground power lines along Highway 521. Marshall Caldwell of Utili-Quest responded to this order and marked the Duke lines by painting with red paint the ground above where the lines were buried.
- 8. In locating underground power lines, Utili-Quest uses a metritech device that works from an energized Duke transformer and locates the underground power lines using radio transmissions between a transmitter and a receiver. When the receiver passes over the underground wire, it emits a recognizable sound that indicates the wire is directly below.
- 9. The metritech device does not indicate the depth of the wire and cannot determine if the line is energized. Utili-Quest employees do not determine if a line is energized and do not discuss with a contractor whether a line is energized. It is left to the contractor to discuss with Duke Energy whether an underground power line is energized.
- 10. Installing underground pipe is a progressive project that moves along the route of the pipeline. As pipe is laid, the underground utility markings are covered by the inevitable disturbance of soil in the area of construction. As a result, Utili-Quest was called to come back to Highway 521 to continue to locate the Duke power lines as construction progressed.
- 11. Utili-Quest marked the Duke underground secondary line that fed the street lights along Highway 521 as well as an underground three-phase primary line that provided service to the aforementioned shopping center. Both were in the general path of the water line being installed by the respondent.
- 12. Marshall Caldwell of Utili-Quest was its employee who marked the power lines in the path of the water pipeline. He did not discuss with any employee of respondent whether any of the lines were energized. He did discuss with Mr. Norwood the

existence and location of the three-phase primary line that loops from the shopping center into the waterline path, then back to the shopping center.

- 13. The street light underground line is considered by Duke Energy to be a secondary line. It is smaller in circumference and carries less voltage, such as 120 or 240 volts. A three-phase primary line is a high voltage line. It consists of three cables, each of greater circumference than a secondary line. Each cable consists of an aluminum core, which carries the voltage, surrounded by a gel semi-conductor, which protects the core. The gel is surrounded by a copper sheathing, which constitutes the ground. All of this is protected by a black "jacket" which insulates the conductive parts of the cable.
- 14. If the cable is not damaged or defective, it can be handled while energized without escape of electricity. If the cable is cut or defective, a fuse is supposed to blow, breaking the circuit and reenergizing the line. However, the cable can be nicked, allowing electricity to escape without blowing the fuse. A person handling the line could be the path to ground for the electricity, causing electrical burns or electrocution.
- 15. In the course of installing the waterline, the respondent encountered several difficulties with existing infrastructure. On February 5, 2001, the respondent damaged a fiberglass light pole. On February 15, 2001, the respondent cut the secondary cable feeding the street lights along Highway 521.
- 16. On February 20, 2001, the respondent cut one of the three phase cables that loops from the shopping center. It was energized at the time.
- 17. Daniel Currie, an engineer with Duke Energy, responded in behalf of Duke to the damage to the light pole and the secondary power lines. He was familiar with the placement of Duke Energy lines in the area because he had been involved in their design and installation.
- 18. He met with Mr. Norwood and advised him that there were three phase primary and secondary lines in the area. He also told him about a de-energized three phase line in the same vicinity along that side of Highway 521, which line had been abandoned.
- 19. This conversation occurred on the scene of the water line installation after the secondary cable had been cut on February 15, 2001.
- 20. When the three-phase cable was cut by the respondent, Duke personnel responded to repair it.

- 21. During this time, Mr. Norwood contacted Mr. Currie concerning location of the power lines in the area along the east side of Highway 521, north of John J. Delaney Drive and south of Ballantyne Commons Parkway. This was the same area in which the three phase primary line had been cut on February 20, 2001.
- 22. Both Mr. Currie and Mr. Norwood testified and each offered differing accounts of the communication that they had. Mr. Norwood claims that he was told on the telephone that the three-phase cable in the path of his water line was not energized. Mr. Currie stated that no one at Duke ever would advise by telephone that a line was de-energized. He stated that the response to such a question would be to assume the line is energized unless a Duke Energy employee physically inspected and tested the line.
- 23. Although it is possible that Mr. Norwood was told by telephone that a specific three phase line was not energized, the more persuasive evidence is that Mr. Norwood was not told that a specific three phase cable was not energized, only that there existed a de-energized three phase cable in the area. Mr. Norwood was already on notice that an energized three-phase line was in the area since he had just cut it on February 20, 2001.
- 24. On February 23, 2001 respondent's workers unearthed a three-phase line while excavating for the water line installation. Thinking this line was de-energized, the workers lifted the line from the trench with a track hoe and tied it to bushes along the trench line.
- 25. On March 1, 2001, Mr. Norwood contacted Duke to inspect the exposed line before it was reburied. Gary Nixon, a Duke employee, responded to this request. Upon arriving at the site, he saw the exposed cable. Not knowing whether it was energized, he immediately summoned a Duke line technician, who confirmed that the line was energized.
- 26. At the time this line was out of the ground, respondent's workers were exposed to the energized line. This was the same line that respondent had cut on February 20, 2001. The line carried 13,800 volts on each phase.
- 27. The customary procedure for removing a power line from the ground is to contact Duke Energy to have Duke personnel move the line. It usually takes a week from notification to removal. The cost of removal is charged to the contractor.
- 28. The respondent did not realize that the three phase cable it exposed was energized. The respondent did not request Duke to move the exposed three-phase cable.

- 29. Mr. Nixon observed that approximately 300 feet of the three-phase cable was exposed. He also observed that the cable was swollen and fractured due to the stress of stretching it when removing it from the ground. The report of this incident indicated that the cable was nicked.
- 30. There was a capped end of a de-energized three-phase line sticking out of the ground near the exposed line. This was the line Mr. Norwood thought he was digging up.
- 31. The complainant conducted an inspection of this site on March 2, 2001, based on a referral from Duke pursuant to the national emphasis program for trenching and the complainant's Mecklenburg County emphasis program, due to the large amount of construction in that county. This inspection was conducted by safety compliance officer Lee Peacock.
- 32. Based on this inspection, including interviews with all persons named in these Findings of Fact, Mr. Peacock cited respondent with a serious violation of 29 CFR 1926.416 (a)(3), with a proposed penalty of \$1,225.00.

### 33. This standard reads as follows:

Before work is begun the employer shall ascertain by inquiry or direct observation, or by instruments, whether any part of an energized electric power circuit, exposed or concealed, is so located that the performance of the work may bring any person, tool, or machine into physical or electrical contact with the electric power circuit. The employer shall post and maintain proper warning signs where such a circuit exists. The employer shall advise employees of the location of such lines, the hazards involved, and the protective measures to be taken.

- 34. At the hearing, the respondent stipulated that if a violation of this standard was found, it would be a serious violation as defined in the Act. The respondent also stipulated that the penalty of \$1,225.00 was correctly calculated pursuant to the <u>Field Operations Manual</u>.
- 35. Webster's Encyclopedia Unabridged Dictionary (of the English Language)(1996) defines "ascertain" as "to find out definitely; learn with certainty or assurance; determine".

Based on the foregoing Findings of Fact, the undersigned makes the following

### **CONCLUSIONS OF LAW**

- 1. The foregoing Findings of Fact are incorporated by reference as Conclusions of Law to the extent necessary to give effect to the provisions of this Order.
- 2. The respondent is subject to the provisions of the Act.
- 3. The respondent did not ascertain, before work began, that there existed an energized electric power circuit in the work area that employees could come into contact with and did not advise employees of the location of the circuit, the hazard involved and the protective measures to be taken.
- 4. The respondent had knowledge of the existence of the circuit and could have with the exercise of due diligence confirmed that the cable was energized.
- 5. The respondent violated the provisions of 29 CFR 1926.416 (a)(3) by exposing its employees to the energized cable without warning them of its danger.
- 6. Such a violation is a serious violation of the cited standard.
- 7. The proposed penalty of \$1,225.00 was properly calculated.

## **DISCUSSION**

At the request of the undersigned, the parties submitted authorities subsequent to the hearing in support of their respective positions, The decision in this matter primarily hinges on the definition of "ascertain" as it is used in the cited standard.

The complainant urges that "ascertain" be given its ordinary dictionary meaning, which can be summarized as "to make certain". The respondent contends that if the word "ascertain" is defined that way, the standard is transformed into a strict liability regulation. Should an employee fail "to make certain" that an employee was not exposed to an energized line, it would have violated the standard, according to the respondent.

The respondent cites <u>Commissioner v Romeo Guest Associates</u>, <u>Inc.</u> NCOSHD, , 96-3513 (RB 1997) in support of its position. The Review Board reversed the decision of the hearing examiner and dismissed a serious citation item for violation of 29 CFR 1926.416(a)(3). A reading of the decision in that case indicates that the holding hinged on two facts. First, the employer was a general contractor in a multi-employer worksite, where the employee exposed to the energized line was working for a subcontractor and the worker who probably contributed to the electrocution of that employee was working for an unauthorized second tier subcontractor. Second, this tandem of workers from the subs were installing the metal canopy fascia in a different

and more dangerous way than the rest of the work had been performed. With the energized line in plain view and ten feet above the canopy, the Review Board believed the Romeo Guest superintendent could not have expected the subcontractor's workers to change the method of installation from horizontal fascia attachment using ladders to handing up vertically a 24 foot section of fascia, which contacted the energized line.

The respondent also cites In re MP Industries, Inc., 1984 OSAHRC LEXIS 159; 11 OSHC (BNA) 2103; 1984 OSHD (CCH) P 26, 968 (1984). In that case, the respondent was not cited with the prior codification of 29 CFR 1926.416(a)(3) but the standard was discussed in the decision. MP was a painting contractor at a large duPont chemical plant under a contract that required duPont personnel to be responsible for de-energizing electrical circuits to which MP's painters would be exposed. Due to a breakdown in communication, the circuits in the area to be painted were not de-energized and an MP employee was electrocuted. The Review Commission determined that MP personnel, none of whom were electricians, had made sufficient inquiries of duPont personnel to be satisfied that the electric circuits were not energized and vacated the citations.

While this would seem to be a closer factual situation to the instant case, factually the cases are different. Here, the respondent had already encountered this same energized line and cut it. The evidence indicated that respondent's personnel knew there were several energized lines in the area and one abandoned line. It did not make any real inquiry at the time of confronting the three phase line it exposed to determine that this line was the abandoned line. Respondent's foreman made an assumption that the line was deenergized in the face of conflicting or confusing evidence. Moreover, it would have been a simple matter to have the line tested for energy, either itself, by calling Utili-Quest or by calling Duke Energy. The respondent did not call Duke until after it had exposed 300 feet of the high voltage cable. Fortunately, none of respondent's exposed employees was injured.

These facts also distinguish the present situation from the decision in <u>Brooks v L.P. Cox Co., Inc., 2NCOSHD 637 (RB 1985)</u>. Although not decided on the cited standard in the instant case, the holding in <u>Cox</u> requires the complainant to prove that the respondent knew of the offending condition or that it had sufficient notice of irregularity that a reasonably prudent person would have made further inquiry. The Review Board believed that Cox could rely on the architect and structural engineer when pouring concrete on the roof of a hospital wing where the structure was built in accordance with the plans and specifications.

In that case there was insufficient evidence that Cox knew that the formwork and shoring were inadequate to support the concrete being poured on the roof or that Cox had notice of any irregularity on it. Here, as noted, there is sufficient evidence that the

respondent knew there were energized lines in the area and if it uncovered one it would need to check to determine if it was live.

The complainant cites several cases which support the undersigned's decision, although none are from North Carolina. These decisions dealing with cited standard are Secretary v Black Construction Corporation, 1998 OSAHRC LEXIS 76; 18 OSHC (BNA) 1517; 1998 OSHD (CCH) P31,653, August 3, 1998, Secretary v CMC Electric, Inc., 2000 OSAHRC LEXIS 80; 19 OSHC (BNA) 1145; 2000 OSHD (CCH) P32, 190, September 18, 2000 and Secretary v Miller Electric Company, Inc., 2001 OSAHRC LEXIS 75; 19 OSHC (BNA) 1666; 2001 OSHD (CCH) P32,423, July 27, 2001.

Based on the foregoing Findings of Fact and Conclusions of Law, IT IS ORDERED as follows:

- 1. Citation 1, Item 1 is affirmed as a serious violation of 29 CFR 1926.416(a)(3) with a penalty of \$1,225.00.
- 2. Such penalty shall be paid within twenty (20) days of the filing date of this Order.
- 3. All violations not previously abated shall be immediately abated.

This 30th day of September, 2002.

RICHARD M. KOCH HEARING EXAMINER