

January 8, 1999

To: All Electric Utilities and Telephone Utilities and Cable Television Operators
in Oregon

RE: Installation of Fiber-Optic Cable on Poles in the (Electrical) Supply Space

This letter is in regard to an issue raised by representatives of an Oregon electrical utility. Specifically, it involved the installation of a fiber-optic system within the confines of their service territory and owned by them. The fiber-optic cable would be attached to their poles in the electrical supply system space.

When they explained the installation and the type of cable they plan to use, OPUC staff could find no conflict with the provisions of the National Electrical Safety Code (NESC), insofar as placement on the pole was concerned. NESC Rule 230F1 allows for treatment of fiber-optic cable as part of the electrical supply system, particularly cable that is "entirely dielectric," as theirs will be.

The portion of the project that staff took issue with, and viewed as a potential violation of the NESC, was their intent to use personnel trained as telecommunications linemen to install the facilities in the electric supply space of the pole. NESC Rule 224A1 states that "Communication circuits located in the supply space shall be installed and maintained only by personnel authorized and qualified to work in the supply space in accordance with the applicable rules of Sections 42 and 44." OPUC staff interprets this to mean that communications workers are prohibited from working in the electric supply space unless they: (1) are qualified to do so, (2) use the (electric) supply employee work rules, and (3) have permission of the (electric) supply utility to do so. This intent is further demonstrated in Section 43 (Additional Rules for Communications Employees), Rule 432 (Joint-Use Structures) that states that when employees are working on jointly used poles or structures, they "shall not position themselves above the level of the lowest electrical supply conductor" In this case, because the fiber-optic cable, consistent with NESC Rule 230F1, is designed to be a part of the electrical supply system and is located within the supply space, it becomes an "electrical supply conductor."

The position of OPUC staff on this issue is as follows: Use of insufficiently trained workers in the supply space constitutes a violation of the NESC, as well as creates the potential for a significant safety hazard for the employees involved. It is imperative that employers remain aware of their responsibility to

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provide training, thereby ensuring that their employees are in compliance with the NESC, Section 41. Likewise, employees must accept responsibility to perform only those tasks for which they are trained, equipped, authorized, and directed to perform, pursuant to the rules stated in NESC, Section 42. Finally, all the requirements of Section 44 are applicable to employees who perform work within the supply space.

The purpose of this letter is to prevent accidents, both to utility employees and members of the public. Unfortunately, electric contact incidents and injuries have been on the increase in the last couple of years for utility line workers. According to OPUC records, the state will set an unacceptable new record with at least 11 utility workers injured in 1998 because of contacts with electric supply lines. Please take special care to ensure that all workers on your respective systems are fully qualified, trained, and supervised. The rules and requirements of the NESC are not only state law, but are practical, time-tested rules designed to provide the proper latitude of safety for utility employees, as well as for members of the general public.

If you have any questions regarding NESC rules, feel free to call me (number below) or Bob Sipler at (503) 373-7451.

Jerome A. Murray
Program Manager
Utility Safety & Reliability Section
(503) 373-6626
e-mail: jerry.murray@state.or.us

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cc: Marilyn Schuster, OR-OSHA