Interpretation

Section 44.
Additional rules for supply employees

Rule 444D  De-energizing equipment or lines to protect employees—

(29 October 2008) IR554

Rule 444D requires the application of protective grounds at each side of the work location, as close as practical to the work location, or at a worksite ground. When replacing a splice on a jacketed concentric neutral cable, it is not feasible to ground the phase conductor, nor is it practical to ground the neutral concentric wires (without cutting off a piece of jacket). This leaves the only practical grounding point at the remote ends of the cable, which could be thousands of feet away. Does grounding both ends of the cable meet the intent of this rule, or can it be considered “as close as practical?”

Discussion: When an employee is replacing a splice in a vault, the damaged splice must be removed and replaced. The cable is positively identified, and both ends are grounded at their termination points. At the worksite, the neutral concentric connection to ground is removed from both ends of the cable. The phase conductor is separated, and this leaves these ends of the cable ungrounded. There is the possibility that these ends of the cable are at different potentials, due to ground potential differences at the remote ends. Cutting off a piece of jacket on both cable ends to ground the concentric is possible, but not always practical, since the three phase cables are typically bundled together and difficult to separate for the jacket removal. Should employees treat these cables as hot or find some way to ground the cables at the worksite?

Interpretation

The Interpretations Subcommittee has considered the subject Interpretation Request for Rule 444D and has developed a consensus report as follows:

“Placing employees’ protective grounds at both ends of a cable meets the intent of Rule 444D, provided that it is not practical to place grounds closer to the work location.

Please note that other appropriate means or methods may also be required to ensure worker safety if there is a possibility of ground potential difference at the remote ends of the cable, as described in this request for interpretation.”