National Electrical Safety Code Committee, Accredited Standards Committee C2

National Electrical Safety Code®

Interpretation

Section 27.
Line Insulation

Rule 279A2a, Use of Guy Insulators
(9 February 2003) IR531

1. Does this rule apply to guys, which may support or may come in contact with conductors of 300 V or less?

2. Is the answer to question 1) dependant on whether the supply conductors are a component of an open-wire secondary system with an effectively grounded neutral as opposed to a multiplexed system as described in NESC rule 230C3 with an effectively grounded messenger?

Discussion:

Rule 279A2a was recently revised.

NESC 1997 Rule 279A2a read as follows: "Ungrounded guys shall be insulated if attached to a supporting structure carrying any supply conductors of more than 300 V, or if vulnerable to accidental energization due to a slack conductor or guy."

The phrase "or if vulnerable to accidental energization due to a slack conductor or guy" could have been misconstrued to apply to *any conductor* regardless of voltage. However, we believe that the addition of the word *such* in the 2002 edition of the code makes it clear that guy insulation is required only when supporting supply conductors in excess of 300 V.

Interpretation

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

"Rule 279A2a requires that ungrounded guys be insulated if *all* of the following three conditions apply:

1. The guy(s) is attached to a supporting structure (pole) carrying supply conductors or the guy(s) is vulnerable to accidental energization by supply conductors due to a slack conductor or a slack guy, and

2. The supply conductors are of open conductor (open wire) construction. See Rule 270; this rule applies to all of Section 27, including Rule 279A2a. See also conductor definition number 10 for open conductor (open wire), and

3. The supply conductors are energized at more than 300 V. See appropriate voltage definitions for use of phase-to-phase or phase-to-ground voltages.

Consequently, the answer to your Question 1 is no. The answer to your Question 2 is also no, assuming that the "open-wire secondary system" is energized at less than 300 V. Note that a Rule 230C3 cable is not "open wire" construction and that it is not subject to Rule 279A2a application.

Finally, we concur in general with the last sentence in your discussion insofar as it applies to guys and supply conductors attached to the same supporting structure. Note that guy insulators may also be required if the guys and supply conductors are not attached to the same supporting structure."