



Interpretation

Section 21. General requirements

Rule 215C4b **Grounding of circuits, supporting structures, and equipment --
Non-current-carrying parts -- Use of insulators in anchor guys**
(2012 Edition, pages 75-76)
(2 October 2012) IR569

For dead-end and perpendicular (not parallel) down guys, does Rule 215C4b in the 2012 edition require guy insulators to be installed to fall in between all circuits on that structure if the down guy breaks below the insulator? The 2012 revised version of this Rule states the condition of this requirement to be “. . .in the event that the anchor guy becomes slack.”

Discussion: It is believed that Rule 215C4b in the 2012 edition **DOES NOT** require guy insulators to be installed to fall in between all circuits on that structure if the down guy breaks below the insulator on dead-end and perpendicular (not parallel) down guys. The belief is that the guy insulator placement configuration examples shown in the attached Figure 1 through Figure 8 meet the intent of NESC Rule 215C4. However, at a recent 2012 NESC Changes seminar, it was presented that these are all violations (citing 215C4b) because no insulation is installed to fall between the distribution primary and the secondary circuits. It is not believed that 215C4b is applicable to these installations because the Rule refers to the guy becoming slack, not broken. In none of these instances will a slacked guy become a conductive path between energized conductors or live parts of other circuits or equipment.

It is the belief (interpretation) that the Figure 9 guy insulator placement configuration attached represents the intent of NESC Rule 215C4b and 215C4c. In this example, sagging guys can present a safety (and reliability) hazard if the guy insulators are not located properly.

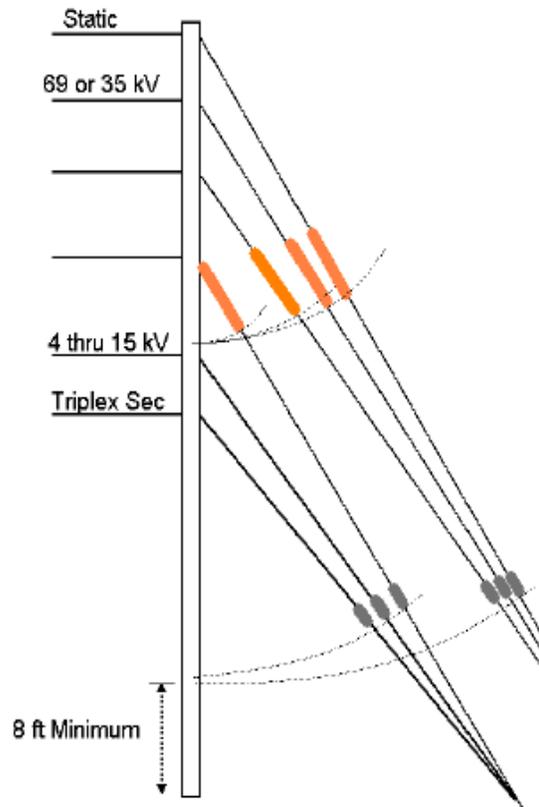


Figure 1
New 35 or 69 kV – With Under-Build
No Communications

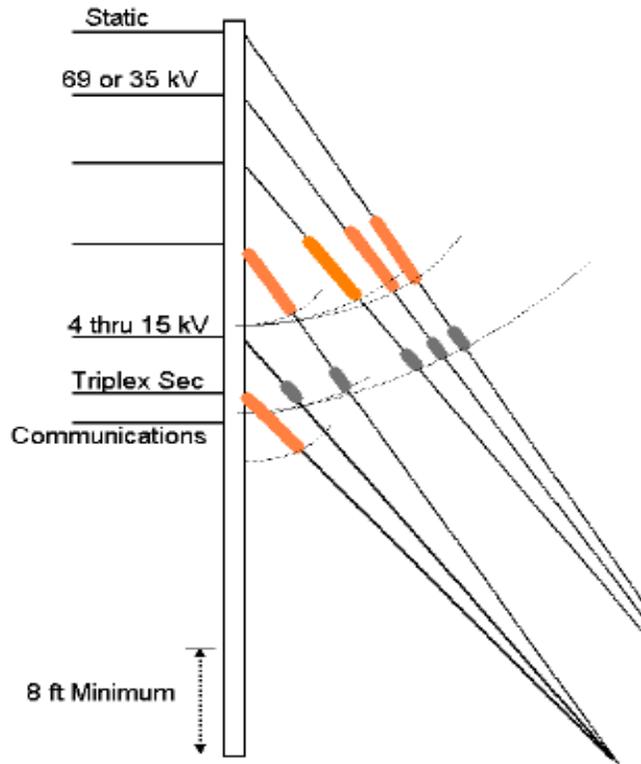


Figure 2
New 35 or 69 kV – With Under-Build
With Communications

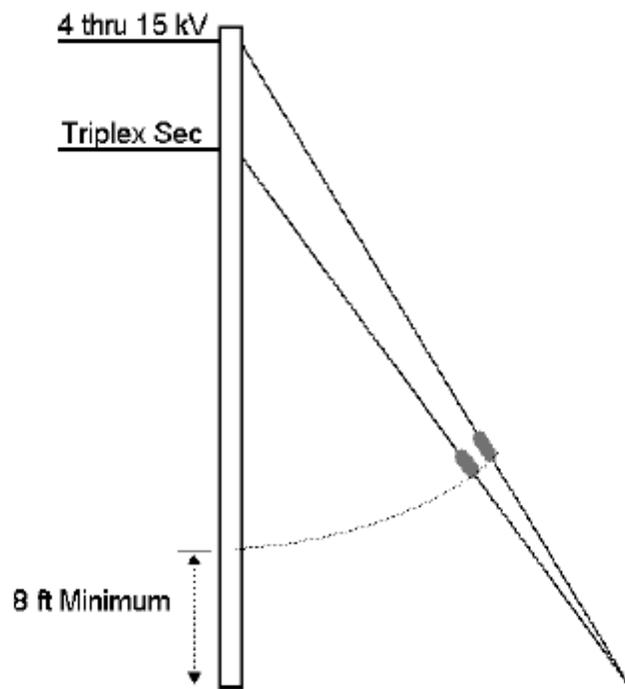


Figure 3
New Distribution Pri & Sec
No Communications

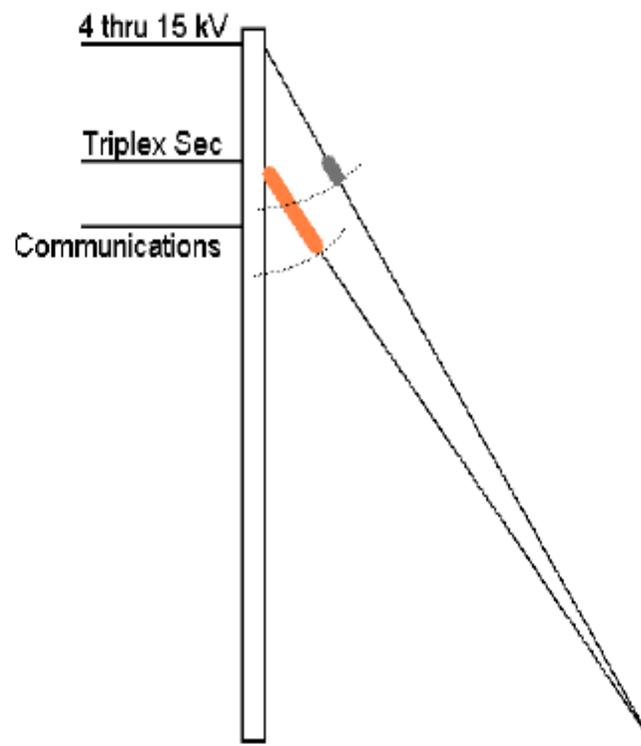


Figure 4
New Distribution Pri & Sec
With Communications

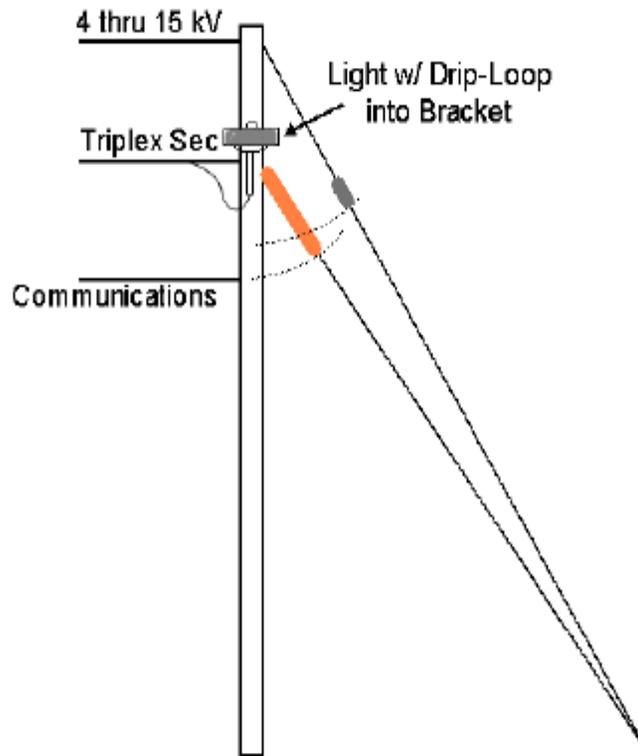


Figure 5
New Distribution Pri, Sec,
& Street/Area Light
With Communications

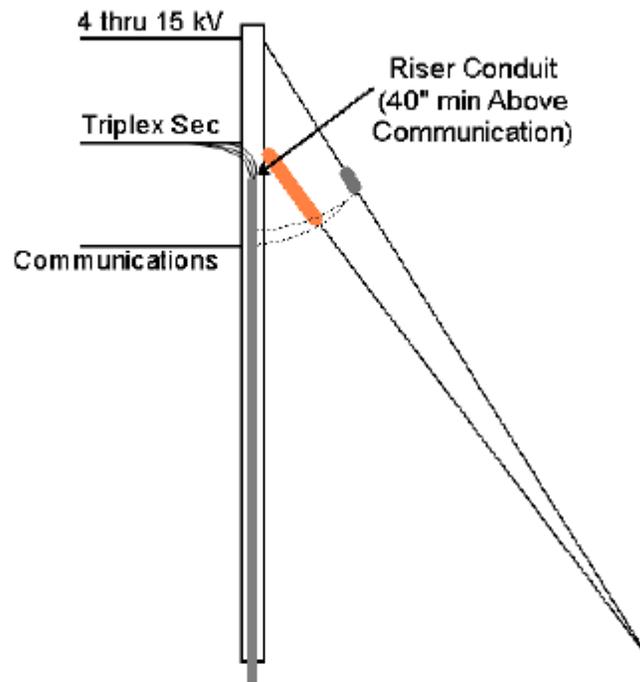


Figure 6
New Distribution Pri, Sec, & UG Riser
With Communications

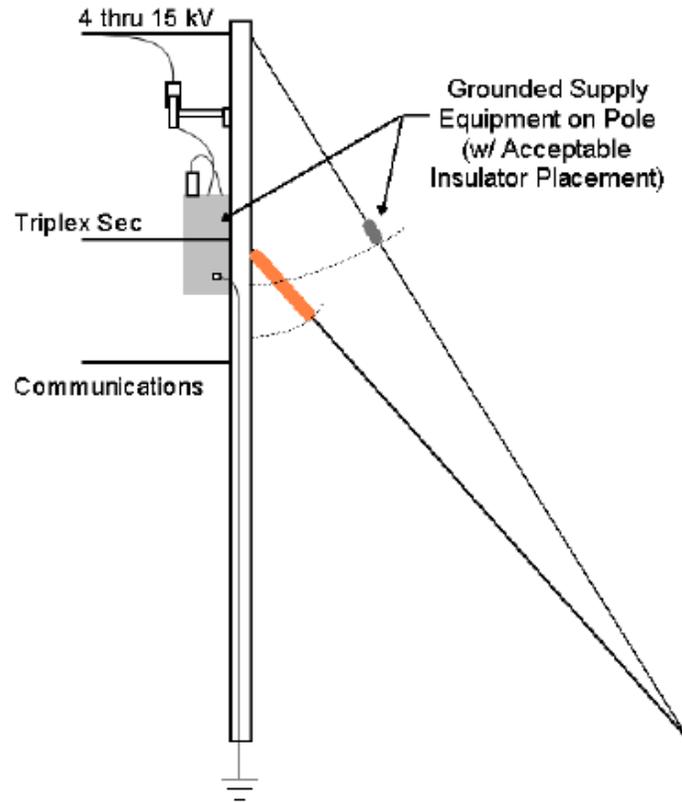


Figure 7
New Distribution Pri, Sec, & Grounded Supply Equipment
With Communications

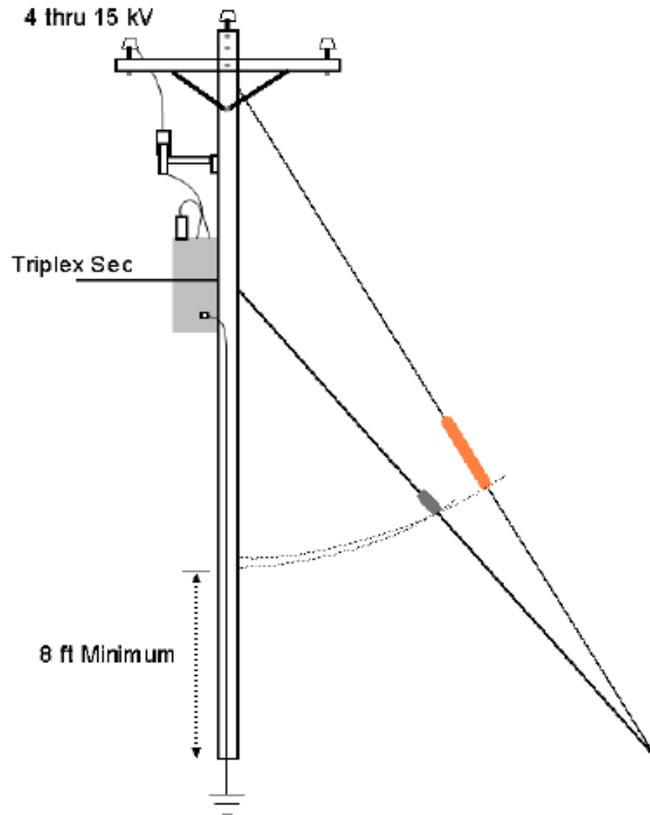


Figure 8
New Distribution Pri, Sec, & Grounded Supply Equipment
No Communications

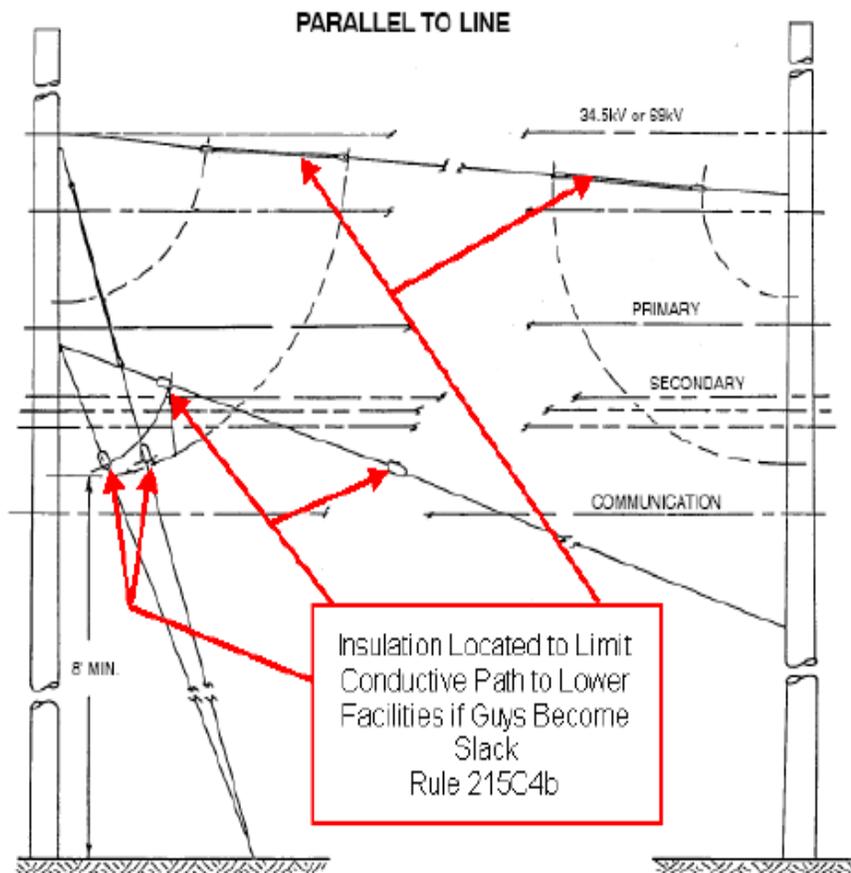


Figure 9
Span Guys Parallel with
Subtransmission, Distribution Pri, Sec, & Communications

Interpretation

The Interpretations Subcommittee has considered the subject Interpretation Request for Rule 215C4b and has developed a consensus report as follows:

Rule 215C4b does not apply to specific design configurations, but applies to any design configuration. The intent of this Rule is to limit the likelihood of voltage transfer between facilities due to a slack or broken anchor guy. Even though the Rule only uses the word slack to describe how voltage could be transferred, it also applies to broken guys since a broken guy is the ultimate in being slack. Note that the Rule is a performance rule, not specific to configuration (dead-end, perpendicular, parallel, etc.) or to clearance requirements.

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