

Electrical Distribution Safety

TECHNICAL AWARENESS – GUY INSULATORS

ESA bulletin DSB-01/11 was created to address the CSA 22.3 No.1 “**Section 4** - General Requirements” when it comes to guy insulator placement.

This bulletin will address the CSA 22.3 No.1 “**Section 5** - Clearances, Separations, and Spacings” and Annex A when it comes to guy insulator placement on a joint-use structure. This additional guy insulator placement information may be valuable to LDCs, especially when discussing 3rd Party Attachments.

CSA EXCERPT (C22.3 No.1-10) – Section 5

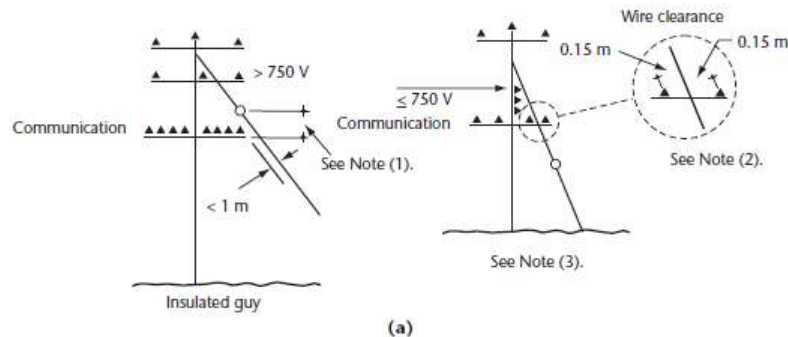
5.11.4 Guys attached above current-carrying supply plant

Where the guy attachment to a joint-use structure is located above any item of live or current-carrying supply plant greater than 750 V, and where the guy passes within 1 m of the communication line plant (excluding the communication guy), the guy shall be effectively grounded.

Where the guy cannot be grounded,

- (a) the portion of the guy having inadequate clearance from the communication line plant shall be electrically isolated with guy insulators; or
- (b) equivalent insulation shall be applied.

Figure A.8 of CSA 22.3 No.1-10 contains “Illustrations of minimum clearances for guy insulators as specified in Tables 25 and 26”. Part of Figure A.8 is shown below and relevant notes are detailed in the Standard.



NOTE: Equivalent requirements can be found in CSA 22.3 No.1 – **1987** and CSA 22.3 No.1 – **2001** in Section 4.11.4 – “Guys Attached above Current-Carrying Supply Plant”.

ESA RECOMMENDS

ESA recommends that LDCs review the applicable sections 5.11.4 or 4.11.4 and the informative annex (Annex A) of the CSA 22.3 No.1. Review of these sections may assist LDCs when discussing make-ready work with 3rd Party Attachments. For example, Annex A states, where a guy is attached above supply conductors less than 750 V to ground, no insulator is required above communication equipment and one guy insulator is sufficient below communication equipment. ESA notes that Regulation 22/04 requires the installation be based on approved plans or standard design drawings which may exceed what is documented in CSA 22.3 No.1 and that is up to the discretion of the approver of the plans or standard designs.

ADDITIONAL INFORMATION

If you can provide additional information on this Bulletin or any other Utility issue, please contact ESA to share your experiences. Additional information requests, and follow-up information, may be directed to ESA. Please be prepared to quote Bulletin “DSB-03/12”.