In-Span Structures and Overhead Unsupported Conductors

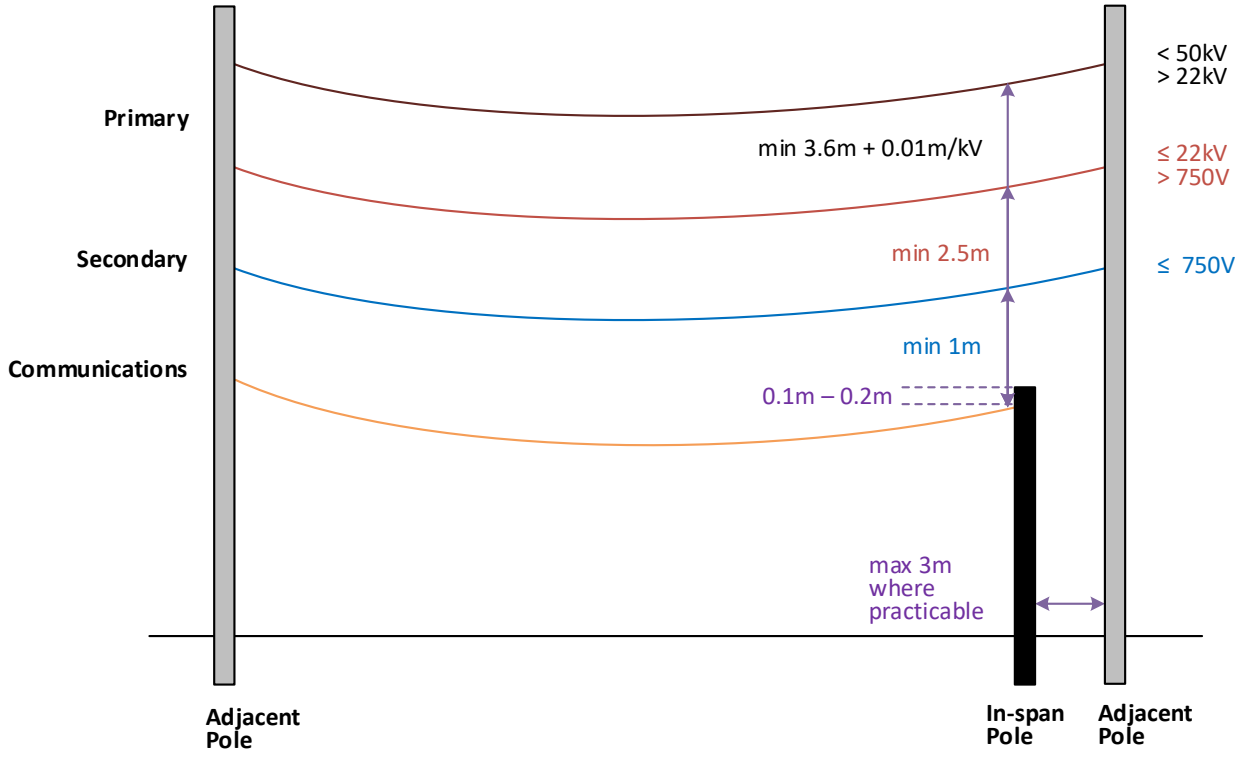
Distribution Company Awareness

The intent of this bulletin is to inform Electrical Distributors of Regulation 22/04 requirements with respect to the creation (by structure alteration) of an in-span structure (e.g. a pole) which does not support all supply and communication lines.

Introduction

Pole replacement project plans sometimes include in-span (i.e. mid-span) poles to be created for a temporary period of time. This work is commonly referred to as “pole stumping”, “double poling”, “cutting off the tops of poles”, “pole topping” or similar.

The ESA direction in this bulletin aligns with a proposal to amend subparagraph 5.8.3.3 of C22.3 No.1 Overhead Systems for that is under consideration for the 2025 edition.



ESA Direction

Electrical Distributors may follow the direction below in the preparation of plans or standard design drawings and specifications, and remain in compliance with Regulation 22/04.

Where communication lines are in joint-use with supply conductors rated up to 50 kV, in-span structures that do not support all supply and communication lines shall be avoided unless all of the following conditions are met:

a) The in-span pole is associated with a pole replacement project, and only exists for the duration of the pole replacement project. The pole replacement project should not exceed a 2 year period.
b) A working space at the in-span pole is provided by:
    I. mechanical protection that is installed for the safety of workers on the in-span pole, that is agreed upon by the parties involved; or
    II. the following minimum clearances are met between the communication attachment at the in-span pole, and the un-supported supply plant under maximum sag conditions:
        i. 1000 mm for supply plant less than 750V;
        ii. 2500 mm for supply plant greater than 750V and less that 22kV; and
        iii. 3600 mm + 0.01 m/kV for supply plant over 22kV.
c) The new pole is installed within 3m of the in-span pole's location, where practicable; **and**
d) The separation at the in-span pole between top of pole and the highest communication attachment point is between 100 mm to 200 mm, when mechanical protection is not installed.

Note: Voltages are rms line-to-ground.

ESA Recommends

- The best approach for transferring attachments is through proactive and adequate coordination between the pole owner and other attachment owners, which avoids in-span structures.
- All parties should be aware that when utilizing the direction in this bulletin, the clearances and separations within the bulletin are only applicable for the duration of the pole replacement project. Not complying with timeline provisions would result in breaching Regulation 22/04, Section 10 (entitled "Proximity to distribution lines").

- In-span structures which do not support all supply and communication lines should be documented and monitored for the completion of transferring communication attachments and removal of the in-span structures within 2 years.
- The milestones which represent the beginning and end of the pole replacement project are per the processes of the Electrical Distributor. For example, the Electrical Distributor may decide the beginning and end milestones to be the physical creation and removal of the in-span pole, respectively.
- The Electrical Distributor's agreements related to items such as timelines and safety measures (such as mechanical protection installed on the in-span pole), should be communicated with all parties involved.