Interpretation

Section 1.
Introduction

Rule 012A
General rules

Section 23.
Clearances

Rule 230A1
General – Application – Permanent and temporary installations

(18 April 2021) IR594

Question: At what point in time do the clearance requirements of Section 23 apply to new lines (wires and supporting structures) that are being constructed?

Does Rule 012A mean that all rules contained in the NESC apply during construction unless stated otherwise?

Discussion: This question pertains to the situation where an existing line is being rebuilt with the new line adjacent to the existing, while leaving the existing line energized. This occurs when an outage cannot be taken on the existing line. Construction in this manner is typically done in the following sequence: installing new structures, installing the new wire, energizing the new line, de-energizing the existing line, and then deconstructing the existing line.

There are several relevant clearances that may apply in this situation. Clearance from the existing (energized) line to the newly installed line and structures, and clearances from the newly installed line (once completed and energized) to the existing line being deconstructed. What needs to be clarified is if code clearances in Section 23 apply during the construction and deconstruction activities.

National Electrical Safety Code and NESC are both registered trademarks of The Institute of Electrical and Electronics Engineers, Inc. The NESC is available from The Institute of Electrical and Electronics Engineers, Inc. (https://standards.ieee.org/).
Interpretation

This interpretation request has raised some pertinent questions concerning the construction of lines. The following interpretation is based on language used in the 2017 NESC.

Question 1: At what point in time do the clearance requirements of Section 23 apply to new lines (wires and supporting structures) that are being constructed?

This question is covered by Rule 012A, which states “All electric supply and communication lines and equipment shall be designed, constructed, operated, and maintained to meet the requirements of these rules.” All lines and equipment must meet the NESC Section 23 clearance requirements once constructed (Rule 012A) and placed in service (Rule 214A1).

Question 2: Does Rule 012A mean that all rules contained in the NESC apply during construction unless stated otherwise?

The answer to Question 2 is no. Rules related to the second question, concerning clearances during construction, are not specified in the NESC. However, Rule 010 states “The purpose of the NESC is the practical safeguarding of persons and utility facilities during the installation, operation, and maintenance of electric supply and communication facilities, under specified conditions.” The key word is “practical.” Not only is it sometimes impractical to meet all the clearance requirements during construction, but it may not be possible to do so. There are variables during the process of construction that sometimes make it impractical to establish clearances with any degree of reasonableness. Since the NESC does not specify clearances during the process of construction, Rule 012C will apply, “For all particulars not specified, but within the scope of these rules, as stated in Rule 011A, construction and maintenance should be done in accordance with accepted good practice for the given local conditions known at the time by those responsible for the construction or maintenance of the communication or supply lines and equipment.”

As always, Rules 010 and 012A still apply. The construction work shall still provide safeguarding of persons and utility facilities during the installation process and, the resulting installation shall meet the requirements of Section 23.