

Interpretation

Section 11. Protective arrangements in electric supply stations

Rule 110A1 General requirements – Enclosure of equipment – Types of enclosures

(2023 Edition, page 38) (7 December 2022) IR596

Question: Rule 110A1c allows for types of barriers other than a fence to enclose electric supply stations, given that they provide a level of restriction equivalent to the fence options described in Rule 110A1a and Rule 110A1b. Regarding the potentially equivalent natural barriers of steep terrain and water, can either of these barriers be considered equivalent? If so, what conditions (for example, elevation change, minimum grade, width or depth of water, etc.) would need to be met for equivalency?

Discussion: Distributed solar or wind generation can be located on smaller sites and in more rugged terrain than traditional fossil fuel or nuclear generation. Such sites may have natural barriers that present more formidable restriction than a 7-ft fence. Additionally, these sites are more likely to contain fully insulated and/or locked electrical components that are compatible with restricted access by non-qualified personnel.

Interpretation

The basic question is whether a natural barrier may be used to meet the requirements of Rule 110A1? The answer is no.

The list provided in Rule 110A1 includes fences, screens, partitions, or walls. All of these barriers are man-made items. Rule 110A1c does allow other types of construction to be used if they are an equivalent barrier to climbing or other unauthorized entry. The term *construction* implies something that is built, i.e., man-made. Additionally, the other types of construction must be not less than 7 ft (2.13 m) in height.

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Additionally, the definition of *substation* begins with "An enclosed assemblage of equipment...." The definition of *enclosed* is "Supply or communication facilities surrounded by case, cage, housing, fence, or wall(s) designed to protect persons and/or the contained facilities under normal conditions." All items in the list to enclose a substation are man-made.