A REVIEW STUDY ON LIGHTNING PROTECTION SYSTEM RISK ASSESSMENT AND APPLICATION

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ABSTRACT

In the blink of an eye, a lightning strike may deliver thousands of mega-amperes of electricity. As a consequence, if the strike is not grounded, it may cause severe damage to household and industrial equipment and devices. As a result, the current transmission system requires a lightning protection system. Lighting is an inevitable natural occurrence. As a result, studying lightning's qualities and characteristics is essential for developing a lighting protection system. Each application has its own set of requirements that must be met. The location and user of the lighting protection system determine the kind of lighting protection system. A public space, transportation system, power system transmission, and generating system, all of which contain renewable energy sources, are examples of various types of locations. Each region may achieve a different degree of security. The potential and probability of transitory effect on all applications, including public areas, power system lines, and producing systems, is assessed in this study. The evaluation included a countermeasure that addressed a few procedures to evaluate the impact of lightning and protective countermeasures.

KEYWORDS: *Industrial, Charge, Lightning Protection System, Surge Protection Devices.*

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