Dimensioning of SPD for the protection against surges due to lightning to LV overhead lines

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Abstract— The papers deals with the problem of proper selection of an SPD with aim to protect apparatus within a structure against lightning overvoltages from the connected LV power supply lines. The basic arrangement includes an aerial ten poles low voltage line closed on one side by MV/LV transformer and on other side by apparatus to be protected. By several computer simulations information have been obtained for the selection of SPD installed at the entry point of the structure and discussed on the light of international standard.

Index Terms - Lightning protection; Surge Protective Device; SPD protection level