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Overvoltages on LV networks associated with direct strokes on the primary line

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Abstract – Lightning is one of the main reasons for disturbances in electric systems and their effects are more frequently noticed by consumers nowadays. The possible consequences of such effects go from the malfunction to the damage of electronic appliances and equipment. Several studies have been done in recent years aiming at better power quality indexes and a more effective protection of appliances and devices. In this work, the amplitudes and waveforms of the overvoltages transferred to the low voltage network via transformer are analysed, with the occurrence of direct strokes on the primary line being considered.

***Index Terms*-Distribution lines lightning, ATP-EMTP.**

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