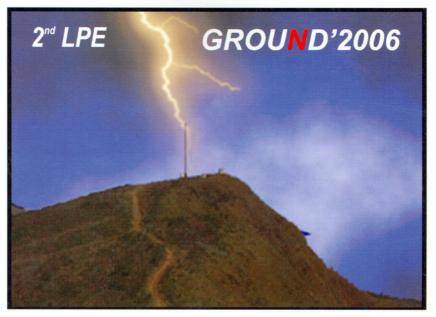
Conference Proceedings



Morro do Cachimbo Station - LRC - Brazil

GROUND'2006

International Conference on Grounding and Earthing

and LPE

International Conference on Lightning Physics and Effects

> November 26-29, 2006 Maceió - Brazil

SB-RAI: Brazilian Society for Electrical Protection Lightning, Earthing and EMC

LRC - Lightning Research Center UFMG - CEMIG ELAT - Atmospheric Electricity Group INPE

GROUND'2006 and 2nd LPE

International Conference on Grounding and Earthing & 2nd International Conference on Lightning Physics and Effects Maceió - Brazil November, 2006

OVERVOL TAGES CAUSED BY DIRECT STRIKES ON DISTRIBUTION LINES

Paulo Futoshi Obase Alexandre Piantini Amaldo Gakiya Kanashiro Institute of Electrotechnics and Energy - Lightning & High Voltage Research Center (CENDAT/USP) University of São Paulo, Brazil

Abstract - This paper presents the amplitudes and waveforms of the overvoltages on distribution network due to direct strokes on the primary tine. Computer simulations were performed by using the ATP (Alternative Transients Program) in order to analyse the influence of some distribution tine parameters. Firstly, the overvoltages on medium-voltage (MV) network were considered and later, their respective transference to the low-voltage (LV) network taking into account the distribution transformer, the coupling between the medium and low voltage conductors and the operation of surge arresters.