

## Evaluation of Distribution Line Spacers Located Near the Coast

WALTER PINHEIRO<sup>1</sup>

ARNALDO G. KANASHIRO<sup>2</sup>

GERALDO F. BURANI<sup>2</sup>

<sup>1</sup>Consultant Engineer

<sup>2</sup>University of São Paulo

Av. Prof. Luciano Gualberto, 1289, São Paulo / SP

BRAZIL

arnaldo@iee.usp.br <http://www.iee.usp.br>

**Abstract:** - An excellent option to the utilities has been the utilisation of covered cable fixed to the insulator or to the line spacer. However, distribution lines located near the coast are often exposed to marine pollution and then the superficial resistance of the polymeric material can be reduced and leakage current can flow on the polymeric surface. This paper shows the results of investigation considering covered cable and line spacers. By testing the polymeric material, the behaviour of the leakage current and the evolution of degradation were analysed, aiming the on-line monitoring of the leakage current of line spacers.

**Key-Words:** - covered cable, degradation, erosion, leakage current, line spacers, pollution, tracking