DIAGNOSTIC OF SILICON CARBIDE SURGE ARRESTERS OF SUBSTATION

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Abstract: - This paper presents the results of a research project aiming the diagnostic of the silicon carbide surge arresters. These surge arresters are being gradually replaced by the gapless zinc oxide ones, therefore, it is very important to select the surge arresters that are more degraded in order to avoid failures in the field. Tests were performed at the laboratory and the results showed a good correlation between the leakage current measurement, radio-influence voltage test and thermovision and the presence of deterioration in the internal parts of the surge arresters. The results obtained in this research might help the utility to develop more adequate maintenance programs and to select the silicon carbide surge arresters that need replacement.

Key-Words: - Diagnostic, Leakage Current, Radio-Influence, Silicon Carbide, Surge Arrester, Thermovision.