

Characterization of leakage current on high voltage glass insulators using wavelet transform technique

Abstract

The measurement and analysis of leakage current (LC) for condition-based monitoring and as a means of predicting flashover of polluted insulators has attracted a lot of research in recent years. Leakage current plays an important role in the detection of insulator's condition. This paper proposes a method for reducing the noise included in the current signal. The tests were carried out on cleaned and polluted glass insulators by using surface tracking and erosion test procedure of IEC 60587. Wavelet analysis method is used to compress the leakage current data. Experimental results shows that the actual signals of leakage current are related to the levels of insulator contamination.