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MONITORING SYSTEM FOR POWER TRANSFORMERS

ABSTRACT

Power transformer is a complex and critical component of the power transmission and distribution system. The justification for on-line monitoring of power transformers is driven by the need of the electrical utilities to reduce operating costs and enhance the availability and reliability of their equipment. The evaluation of data acquired by an on-line monitoring system shows the capability to detect oncoming failures within active part, bushings, on-load tap changer and cooling unit. Using the benefits of modern IT-technology the distribution of information about the condition of the equipment can easily be done by means of standardised web browser technology.

Especially for aged transformers and in general at strategic locations in the electrical network on-line monitoring is necessary and valuable, because by the prevention of major failures costs for outages, repair, and associated collateral damages can be saved.

In this paper, we analyze the characteristics of monitoring system for power transformers.

Keywords: power transformers, monitoring system, loading.