Abstract

Transformer saturation is an area of major concern as the transformers are designed to run near peak magnetizing flux value and if voltage/frequency (V/f) ratio increases, it may cause the transformer to reach into saturation, which can affect normal operation of the transformer and even cause mal-operation of the protective equipments. This paper explains different techniques of transformer saturation detection and current waveform improvement.
Causes and Effects of Overfluxing in Transformers and Comparison of Various Techniques for its Detection

References

- Magdalena Puskarczyk, Brice Jamieson, Wojciech Jurczak "The influence of core shape and material nonlinearities to corner losses of inductive element" ABB Corporate Research Centre, Kraków, Poland.
- S. V. Kulkarni, S. A. Khaparde Transformer Engineering Design and Practice.
- Rebizant W, 2000, "ANN based detection of OS conditions in power systems" 12th Int. Conf. on Power System Protection, 51-56.


**Index Terms**

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