

عنوان مقاله:

A New Technique for On-line Monitoring of Transformer Bushings

محل انتشار:

بیستمین کنفرانس بین المللی برق (سال: 1384)

تعداد صفحات اصل مقاله: 7

نویسندگان:

Alireza Setayeshmehr - *Institute of Electric Power Systems, High Voltage Engineering Section (Schering – Institute), University of Hannover, Callinstr. ۲۵ A, D-۳۰۱۶۷ Hannover, Germany*

Alireza Akbari - *Institute of Electric Power Systems, High Voltage Engineering Section (Schering – Institute), University of Hannover, Callinstr. ۲۵ A, D-۳۰۱۶۷ Hannover, Germany*

Hossein Borsi - *Institute of Electric Power Systems, High Voltage Engineering Section (Schering – Institute), University of Hannover, Callinstr. ۲۵ A, D-۳۰۱۶۷ Hannover, Germany*

Ernst Gockenbach - *Institute of Electric Power Systems, High Voltage Engineering Section (Schering – Institute), University of Hannover, Callinstr. ۲۵ A, D-۳۰۱۶۷ Hannover, Germany*

خلاصه مقاله:

Bushings are essential components of power transformers and are one of the common causes of catastrophic failure for transformers. The majority of bushings are as old as the transformers and therefore maintaining and monitoring of bushing condition is essential. The power factor and capacitance (PF&C) are the best indicators of the bushing's condition. Off-line measurement of the PF&C needs to remove the power transformer from the network and a normal capacitance (NC) must be installed in the substation. In this contribution a novel method for on-line measuring of PF&C for power transformer condenser bushings with the software, hardware and sensors used in this method are introduced. According to laboratory measurement results this method can be used with acceptable accuracy in measurement of PF&C to detect a change in the bushing oil level, an increase in the oil moisture of the bushing and the temperature variation of the bushing oil.

کلمات کلیدی:

Power Transformer, Condenser Bushing Monitoring, Power Factor and Capacitance Measuring

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/20560>

