

## عنوان مقاله:

An Alternative Technique to Assess Transformer Dry-out Process

## محل انتشار:

اولین کنفرانس و نمایشگاه بین المللی ترانسفورماتور (سال: 1393)

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## خلاصه مقاله:

Frequency Response Analysis (FRA) has been implemented since the last decade as an accurate method in transformer mechanical defect recognition. Recent studies revealed that this method is quite effective to trace the transformer insulation behavior. This study has concentrated on FRA capability to access transformer winding dry-out process. To this end, a single phase glassy model transformer involving concentric LV and HV windings is fabricated and taken as a test object. FRA spectra for HV and LV windings of the test object are recorded for wet and dry condition of the paper insulation. Karl-Fischer Titration (KFT) is employed to determine the moisture content of the oil, and paper insulation humidity is derived using equilibrium curves. Deviation in FRA spectra for HV and LV windings before and after dry-out process are elaborated and total capacitance variations due to the moisture diffusion through transformer windings are calculated and discussed.

## کلمات کلیدی:

Frequency response analysis, Moisture content, Temperature, Transformer dry-out

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/303178>

