13.3 CIGRE liaison report JC Riboud

Study Committee A2 Transformers

Last SC committee met in Paris during the Cigré Session

Main members

Chairman is Mr Pierre Boss (CH) <u>pierre.boss@ch.abb.com</u> Secretary is Mr Claude Rajotte (Ca) <u>pierre.boss@ch.abb.com</u>

WG 24 Thermal

3 actions in 2006:

- Thermal ageing of paper
- Tutorial on thermal performances
- Two Task Forces one on new design and one on in service units

WG 23 Data management:

Brochure N° 298 "Guide for transformer lifetime data management "is issued and for sale The WG is disbanded.

WG 25 Bushing reliability conclusion

- Problems of moisture ingress in bushings
- Too many different capacitive taps creates misuse and danger

The WG is disbanded

WG 26 Mechanical conditions assessment using FRA

- Intermediate report shows problems of repeatability of tests in high frequency range due to cabling.
- Work planned to be finished in 2007

WG 27 condition monitoring facilities

- Make recommendation for provision for sensor, facilities or data's for new transformers.
- Will complete before end 2006

WG 28 HVDC

Failure rate was quite high in the past years

Main problems areas were:

- Turn to turn DC side
- Leads and cleat bars
- DC bushing
- Copper sulphur
- Commutation and high frequency transient

Design review guide is under editorial review before publication

Test specification:

 Proposal of a new extended polarity reversal test to better take care of the effect of conductivity.

WG 29 reliability survey

Disbanded because of lack of answers.

WG 30 Moisture in transformer brochure

Brochure will be submitted for ballot in February 07. It includes new information on how to protect transformer from moisture.

WG 32 Corrosive sulphur

A new test for corrosive sulphur detection in oil is proposed as Cigré standard it includes copper and paper.

New WORK

- Fire safety of transformers
- Guide for maintenance
- New state of the art on new liquids

Preferential subjects for 2008

PS1: Guidance in new insulation liquids and solids for improvement of performances and reliability

PS2: Life estimation / consumption of transformer in service

PS3: Shunt reactors and related items.

Next meetings: 2007 Bruges (Brugge) in Belgium.

You can find more on www.cigre-scA2.org