

TASK FORCE FOR REVISION TO LOW FREQUENCY DIELECTRIC TESTS

Vancouver, BC – October 25, 2016, 1:45 p.m.

Chair: Bill Griesacker

Vice Chair: Daniel Blaydon

Secretary: Myron Bell

1. There were 129 attendees, 31 members and 98 guests present at the meeting; 10 guests requested membership, 5 of those will be granted. More than 50 % of the working group members were in attendance at the meeting, therefore a quorum was present.
2. The meeting was called to order at 1:45 PM
3. The agenda for the meeting was presented and unanimously approved.
4. A motion was made to approve the minutes from the Spring 2016 meeting in Atlanta, GA. The minutes were unanimously approved with no objections or comments voiced. One editorial correction was made to the minutes concerning the year referenced for the previous meeting.
5. New business
 - a. A presentation was given by Edgar Trummer concerning PD level criteria during induced voltage tests.
 - I. The presentation triggered a discussion concerning the current PD level criteria covered in IEEE standards. The general consensus of the group was that the guaranteed PD levels in the current standards need to be reduced.
 - II. Edgar Trummer made a motion to “Reduce allowable PD levels to 100 pC, allow no PD up to max operating voltage, call for a maximum PD @ 110% max operating voltage to be 20 pC, require maximum background noise level of 40 pC, and determine PD inception and extinction voltage.” The motion was rejected based on 0 votes in favor, 22 in opposition, and 4 abstentions.
 - III. A second motion was made by Steve Antosz to form a study group, under this Task Force, to investigate standard PD limits during induced voltage testing. The motion passed unanimously and volunteers were asked to approach the Chairperson after the meeting to participate in the study group. Volunteers are still needed and are encouraged to contact Bill Griesacker, Dan Blaydon, or Myron Bell if they would like to participate. A meeting time slot has been requested for Monday of the next Transformers Committee meeting to be held in New Orleans.
 - b. A suggestion was made to explore the idea of a Low Frequency Dielectric Test Guide, similar to the other companion guides that already exist for other sections of 12.90. Bertrand said this would be an issue for the SC to discuss and he would follow up with them.
6. Old business
 - a. Tap changer position during induced test (survey results).

Bertrand Poulan presented the results and comments of the survey conducted after the last meeting. A positive approval rate was observed, however, there is still no agreement. Bertrand offered a few options on how we could proceed and will follow up with an updated text for the survey and report back.

- b. Applying pressure inside a transformer tank during induced test (survey results)

Bertrand Poulan once again presented results and comments from the survey with an overall good approval rate. There are still too many valid comments opposing the wording and requirements, but has overall made everyone aware of the possibility occurring during factory testing. Bertrand will follow up with new wording of the proposal. Don Platts' survey response noted that some of the new wording sounded like more like a guide. It was suggested that one option would be to undertake a low frequency test guide, and maybe for now move the text to an informative annex until a guide is written.
 - c. Alternative Applied test method for HV Delta windings.

No further progress, this topic was tabled until the next meeting.
 - d. Gassing issue for certain types of transformers with wound cores: proposal for new design test

Carried over from last meeting, this topic was tabled until next meeting.
 - e. Dielectric testing in the field.

Carried over from last meeting. Mark Perkins will write the details of a motion to generally require field tests on transformers with new insulation to be tested in accordance with C57.12.00 test voltage levels and transformers with other than new insulation to be tested in accordance with C57.12.90 test voltage levels. Background levels for PD can be a problem in the field and will need to be addressed.
- 7. This Task Force plans to meet next in April of 2017 at the Spring Transformer Committee meeting to be held in New Orleans, Louisiana.
 - 8. The meeting adjourned at 3:00 p.m.