

Meeting Minutes Summary
Task Force on PCS Revisions to C57.12.90

April 3, 2017, 11:00am-12:15pm
Grand Ballroom C, Astor Crowne Plaza, New Orleans
Hakan Sahin, Chairman; Craig Stiegemeier, Secretary

THE MEETING WAS HELD ON APRIL 3, 2017 MONDAY AT 11:00 AM.

There were 43 of the 65 Task Force members present for the meeting. With 66% of the membership in attendance, a quorum was reached. In addition, 85 guests and one of the 4 Corresponding Members were in attendance. The interest in the work of this Task Force remains high. The participant count is over 500, and many of those have not attended a meeting for quite some time. For the fall meeting roster, 310 people will be removed as those individuals have not made any of the past 5 Task Force meetings.

THERE WERE 2 OLD BUSINESS THAT NEEDED TO BE DISCUSSED RELATED TO THE ON-LOAD TAP CHANGER PERFORMANCE.

During the last meeting, it was agreed that the chair should write paragraphs about these two tests. One with voltage and the other with current. The new paragraphs with the new section numbers were reviewed. Many, many comments were made about the noise and the dga.

8.7 On-Load Tap Changer End to End Voltage Test

In order to verify the performance of a transformer that has a load tap changer (LTC), the LTC shall be operated through one end to end to end (from one extreme tap to the other extreme tap and back) with the transformer energized at rated voltage. The test may be performed in intervals if needed, but it is a requirement that the transformer be energized at no less than rated voltage for each tap change. The transformer shall be observed during this test and the operator shall identify that the sound during the tap changing operations was either normal or abnormal. Note that with some types of tap changers, there will be an abnormally loud sound if components are not connected properly. The transformer will have passed this test if the tap changer operates normally, with no abnormal sound and with no abnormal combustible gas generated in the insulating liquid of the transformer.

9.6, Load Tap Changer End to End Current Test:

In order to verify the performance of a transformer that has a load tap changer (LTC), the LTC shall be operated through one end to end (from one extreme tap to the other extreme tap) with the transformer current at the top nameplate MVA rating. The test may be performed in intervals if needed, but it is a requirement that the transformer current be no less than 80% of the top MVA nameplate current for each tap change. The transformer shall be observed during this test and the operator shall identify that the sound during the tap changing operations was either normal or abnormal. Note that with some types of tap changers, there will be an abnormally loud sound if components are not connected properly. The transformer will have passed this test if the tap changer operates normally, with no abnormal sound and with no abnormal combustible gas generated in the insulating liquid of the transformer.

After many comments and discussions on these two topics, it was agreed to revise the wording to try to define what is abnormal. DGA should be kept into the text, but better worded.

New Business

ZERO SEQUENCE MEASUREMENT

Subash Tuli asked for Clause 9.5 zero sequence measurement. 9.5.3 and 9.5.2 brought out or buried tertiary transformers. He proposed that 9.5.3 should have a disclaimer that the same value is only for two winding wye-wye transformers, not autotransformers.

Chair requested that this may need to be developed as a new business. Only 4 thought that this should be looked at as a new issue. Bertrams suggested that manufacturers offer data to prove the issue 9.5.3.

INFRARED SCANNING DURING TEMPERATURE RISE TEST

Kuchal sinned ComEd – no requirement for infrared scanning during temp rise. This needs to go to insulation life.

RATIO TEST ON SPLIT WINDINGS BETWEEN WINDING SECTIONS

Ronnie C57.12.90 talks about the ratio test. Looking for definition of ratio when a winding is split – is there something to allow for the comparison of the ratio test on a winding when it is split into two parts.

The Chair requested that the group decide that something needs to be added to standards for determination.

Dan Sauer – Marchel seconded to adjourn at 12:13pm.