Insulation Life Task Force C57.12.00, Clause 5.11.1.4

Tuesday March 24th 8am – 9:15am Mecklenburg 3 (1)

Background Information

Toby Johnson – TF Chair

Ronnie Minhaz – TF Secretary

This task force has been formed to resolve discrepancies between the heading and body of section 5.11.1.4 of C57.12.00. For example, the heading reads ***"5.11.1.4 Rises of metallic parts other than windings"*** while the content of the second paragraph discusses the core hot spot temperature limit. The discrepancy being that the title is discussing a temperature rise while the second paragraph is discussing a core hot-spot limit – which is not a "rise" as it is stated. The task is to produce wording, or make other changes, that will eliminate these discrepancies.

The definition of 'temperature rise' in C57.12.80 is: *The difference between the temperature of the part under consideration (commonly the "average winding rise" or the "hottest-spot winding rise") and the ambient temperature.*

As it is generally accepted that the core will begin to produce gasses at 130 °C, it seems best to remove language that infers temperature rises with regards to the core. When calculating the core hot-spot, the design must consider the worst case scenario for the transformer based on the known conditions of its location(s) and operating conditions.

It may also be advisable to look at the wording of the title of section 5.11. It may need to also be modified to say something like ***"Temperatures, rises and loading conditions"***.

We invite all interested members and guests of the Insulation Life Subcommittee to attend and participate. The desired outcome is to resolve this task during this meeting and have a recommendation for the Insulation Life Subcommittee on Wednesday at the subcommittee meeting.