MEETING MINUTES

IEEE / PES Transformers Committee Performance Characteristics Subcommittee

WG to Investigate the Interaction between Substation Transients and Transformers in HV and EHV Applications and Revision of C57.142

Virtual Meeting
Tuesday April 27, 2021
2:20 PM – 3:35 PM Central Time Zone - USA

Chairman – Jim McBride
Vice Chair – Xose Lopez-Fernandez
Secretary – Tom Melle

1) Meeting called to order at 2:20 PM Central Time.
Welcome and Chair's Remarks

2) Attendance Poll was taken at 2:25 PM.
102 Attendees were present (66 Guests)?
36 of 54 Members present (quorum was achieved)

3) IEEE Patent Policy and Copyright slides (no essential patent claims or copyright issues)

4) It was noted the IEEE Transactions Paper developed by members of the C57.142 WG has been published and is now available on the IEEE website (https://ieeexplore.ieee.org/document/9161400).

5) Approval of meeting Agenda without objection. Approval of Fall 2020 Meeting Minutes without objection (motion to approve by Rogerio Verdolin / 2nd by Phil Hopkinson).

6) Switchgear Liaison Task Force Update – Dave Caverly
The WG continues to receive excellent comments from Switchgear experts via the Switchgear Liaison TF. The present Draft 9B was created to address all prior comments. The Switchgear task force met on April 21, 2021 and reviewed changes made in D9B. All prior comments were resolved to the satisfaction of the SG task force. There was a motion by the SG TF to take the current document to Ballot. The TF had a quorum and the motion passed by consensus with no objections or abstentions (The comments and conclusions were presented to the WG in this meeting and will be posted on the WG website).

7) Status of Draft 9B and comments – Jim McBride

A copy of the present draft of the guide (D9B) was provided to all WG members prior to the meeting and is posted on the WG webpage of the Transformers Committee (PCS) website. In summary, the old guide focused on primarily MV systems. The new guide adds HV systems as well as additional related examples and mitigations. The excitation mechanisms are now based on steep front voltages and/or repetitive "pulse train" excitations which may "line up" and coincide with transformer internal resonance frequencies.

The revision to the Guide is complete and the draft is ready to proceed to ballot. The Chair noted the WG has filed for a PAR extension as a precaution (since all work must be completed by the end of 2021).

A motion was made by Phil Hopkinson / 2nd by Rogerio Verdolin to take the present Draft 9B to ballot. The motion was approved by online ballot with 36 members approving (0 disapproving / 0 abstentions).

8) Mitigation methods task force update and presentation – Phil Hopkinson
The presentation is posted on the WG webpage. Following the presentation there was discussion on several topics, including the DEIS feature article from September 2016 IEEE Electrical Insulation Magazine 32(5):32-40 "Impulse voltage distribution and frequency response of inter-shield windings". There was also a lengthy discussion of the guidance requested from the Switchgear committee for fast/very fast reignition transients from the Transformers Committee.

9) New Business: the WG authorized the formation of the Ballot Resolution Group without objection.

10) Next Meeting: (Fall 2021 – Milwaukee, WI the week of October 17-21)

11) Motion to Adjourn made by Phil Hopkinson / 2nd by Tom Melle. Meeting was adjourned at 3:37 PM without objection.

Respectfully,
Thomas R. Melle
Secretary