Meeting Minutes of Working Group
C57.142 Guide to Describe the Occurrence and Mitigation of Switching Transients Induced by Transformers, Switching Devices and System Interaction

April 21, 2021 online meeting

Chair: David Caverly

Vice-Chair: Jim McBride

Secretary: Carl Schuetz

Introduction of members and guests

Attendees:

Members: 5, Corresponding Members: 1, Total: 6

Guests: 8

Quorum requirement: 6. … Quorum met

Review of patent slides and call for patent identification

Result: No patents or copyright claims were identified.

Approval of meeting minutes from F20 online meeting

Motion to Approve: Jim Van de Ligt

Second: Nenad Uzelac

Document Status and Timeline

Present revision is draft 9B and is located on the iMeet Central site.
Guide expires in 2020, PAR extension has been applied for.

Motion to Approve: Jim McBride

Second: Arben Bufi

Discussion of draft 9

A new draft 9B was released via electronic mail before the meeting. A review of new content within draft 9B was made by the WG chair.

The WG vice-chair discussed the document example changes. Resonant excitation needs to include the composite waveform over time. Internal resonances can be excited by the frequency content of the waveform.

When overvoltage protection is applied inside a transformer winding it is important to remember that this is different than applying external arresters to limit the transformer terminal voltage. With external arrestors, voltages below the clamping level of the external arrester can still contain harmonic content that could excite the winding at a natural frequency and produce over-voltages of concern, and greater than the terminal voltage, within the winding – hence the value of internal mitigation methods such as internal arrestors.

The chair shared the location of the document on iMeet central.

New business

The chair shared TRFCOM intent to ballot the document and requested comments. No comments were provided and a motion to vote on ballot request was made.

Motion to submit document for ballot: Arben Bufi

Second by: Jim McBride

Discussion: none

Voting results: passed unanimously

The vice-chair explained that within TRFCOM the dielectric test study group continues work on new test requirements for power transformers due to system interactions.

An attendee commented some users are inserting large resistance values into the power transformer HV neutral and requested an example that used such a configuration be included in the future revision. The reason for this request is to provide demonstration that inserting high values of resist in the neutral should be done after analysis and with consultation of the transformer manufacturer.

Next Meeting

Transformer Committee: April 28 , online

Switchgear Committee: Oct. 2021, Reno, NV.

Motion to Adjourn: Carl Schuetz

Second: Jim Van de Ligt

Submitted by: Dave Caverly, chair

Carl Schuetz, secretary

Attendance – April 21, 2021

Michael	Boulus	PSE&G	Guest
Arben	Bufi	Meiden America Switchgear, Inc.	Member
David	Caverly	Trench Ltd.	Chair
Edgar	Dullni	retired	Member
Raymond	Frazier	Ameren	Guest
John	Harley	FirstPower Group LLC	Guest
Albert	Livshitz	CE Power Engineered Services	Guest
Steven	May	Southern Company	Guest
James	McBride	JMX Services, Inc.	Vice-Chair
Thomas	Pellerito	DTE Energy	Guest
Craig	Polchinski	MEPPI	Guest
Carl	Schuetz	American Transmission Company (ATC)	Secretary
Nenad	Uzelac	G&W Electric	Guest
Jim	van de Ligt	Spark Power Corp.	Member
Karthik Reddy	Venna	Siemens AG	Corresponding Member