FINAL VERSION APPROVED AT THE OCT 10, 2023 WORKING GROUP MEETING

C37.100.2 Working Group - Meeting September 12, 2023, convened via WEBEX at 1:00 PM Eastern Daylight Time

C37.100.2 Revision IEEE Standard for Common Requirements for Testing of AC Capacitive Current Switching Devices over 1000 V

Kirk Smith, Chair

Meeting minutes taken by Peter Glaesman, Secretary

Total Attendees: 8; Including 7 members, and 1 IEEE Staff

Welcome

Presented IEEE Patent Slides and Copyright Slides.

Attendance captured via WEBEX dashboard (list attached as Exhibit 1).

The original list if seven topics from Spring 2023 meeting slides "Items 5.0" were addressed as follows:

a. Open wire line dropping: Volunteer: Jeff Brogdon discussed a white paper that was started years ago and remains as an "early draft" but with established conclusions. He plans to summarize this paper and attempt to make a "data set" available from Georgia Transmission. He expects this data set will need to "go breaker to breaker" to be meaningful and be able to see actual C1 to C0 ratio. Roy Alexander said if contact parting times are not within 60 – 90 degrees of each other it results in >1.2x recovery voltage; more like 1.3x – 1.5x covers 90% of all situations ("C1, C0 stuff"). But, if there is a neutral line, it comes down. Pete Kowalski said the offered data set would be highly valuable. He concludes that "the paper" was assuming a perfect world and offered the following questions:
    a. Why has the 1.2x voltage held up so well for so long?
    b. Is something going on to mitigate the recovery voltage?
    c. Is the higher recovery voltage issue just an academic issue, or is there more to it?
    d. Is a higher multiplier practical?

    One other comment was made (by who?) that this only applies to <75kV; not transmission voltage.
b. Impact of Line to Ground Fault: Still no volunteers. Comment was made that high recovery voltage issues associated with ground faults disturb the neutral (neutral shift). Concern was raised whether acknowledging this could affect OSHA regulation.
c. Controlled Switching: Volunteers from Spring 2023 meeting (Harold Hirz, Jan Weisker) were not in attendance. No additional discussion on this topic.

d. Review of single and three phase test steps at 10 deg and 30 deg: Volunteer from Sprint 2023 meeting (Jan Weisker) was not in attendance. Kirk Smith asked about the "summary provided by J. Weisker". No details of this summary were captured.
e. Consider change to C2 Number of Restrikes allowed for Distribution Cap Switches: Volunteers: Kirk Smith, Harold Hirz. Kirk is planning to reach out to H. Hirz to discuss "2 restrikes out of 1,200 operations", where this seems low to Kirk. R. Alexander said it is low based on statistical reports. Also, too many restrikes can cause surge arrestors to blow. If surge arrestors don't blow it can result in "frying the capacitor bank". Leslie Faulkingham anecdote to R. Alexander described "crumbly contacts". R. Alexander said their discussion led him to implement a "wack test" on switches.
f. Look at C37.012 Application Guide for Capacitors - Lucas Colleta plans to review and prepare a slide for the Fall 2023 meeting to identify any topics that need to be discussed.
g. Look at present C37.100.2 Document - Neil McCord was not in attendance, no discussion held on this topic. N. McCord marked up document is available.\ C37.100.2-2018 released version with Neil McCord Comments.pdf was posted to the C37.100.2 WG iMeet Central website in April 2023.

Meeting adjourned around 2:40 pm, Eastern Daylight Time.

EXHIBIT 1: C37.100.2 Roster and Attendance - September 12, 2023 (WEBEX)

C37.100.2 Attendance - September 12, 2023

Full Name	Affiliation	Member Status	Attend Yes / No
Chris Borck	Eaton	member	Y
Jeff Brogdon	Georgia Transmission	member	Y
Jennifer Santulli	IEEE - SA	staff	Y
Lucas Collette	Duquesne Light	member	Y
Pete Kowalik	Cleveland/Price Inc.	member	Y
Peter Glaesman	PCORE Electric co.	member	Y
Robert Kirkland Smith	Retired	CHAIR	Y
Roy Alexander	RWA Engineering	member	Y
Sergio Flores	Schneider Electric, Inc.	member	Y