

## *Minutes for Working Group C37.30.1*

*April 19, 2021*

### *"Virtual Charlotte" Videoconference*

- The working group met for two sessions on April 19<sup>th</sup>.
- 37 participants were in attendance. See the attached attendance roster.
- 18 out of 27 working group members were in attendance achieving a quorum.
- WG Chair Carl Reigart informed the WG that the meeting would be recorded to aid in generating the meeting minutes and asked for any objections.
  - No participants objected.
- Attendees introduced themselves with their affiliations.
- WG Chair Carl Reigart addressed the members and guests of the WG to identify any patent conflicts.
  - There were no members or guests that brought up any patent conflicts to the WG.
- WG Chair went through IEEE SA copyright slides and informed the WG the following from the PowerPoint slides:
  - IEEE SA's copyright policy is described in Clause 7 of the IEEE SA Standards Board Bylaws and Clause 6.1 of the IEEE SA Standards Board Operations Manual;
  - Any material submitted during standards development, whether verbal, recorded, or in written form, is a Contribution and shall comply with the IEEE SA Copyright Policy;
  - WG Chair went through Section 5.7 Rated fault making current and subclauses from meeting minutes from previous meeting and current draft.
    - WG Chair had difficulty with the draft and wanted to dig deeper into what to detail out into the subclauses.
    - WG Chair enlisted help from working group to help draft section.
      - Added Subclause 5.7.1 Fault-making current rating for fault initiating switches
        - Fault initiating switches are required to have a prospective fault-making current rating. [...] The preferred fault-making current ratings are given in Table 11.
          - Discussion was held about testing difficulty to hit certain peak value. Hard to time it correctly to hit peak.
          - Discussion was held that the test document would better capture this difficulty and prospective value.
      - Added subclause 5.7.2 Fault-making current rating for interrupter switches
        - Interrupter switches may have a fault-making current rating. The preferred fault-making current ratings are given in Table 11.
      - Went through comment where caution repeated verbiage from section 5.7
      - Danny Hoss proposed to remove 5.7.2 and make subclause 5.7.3 subclause 5.7.2.
      - Pete Kowalik proposed to remove the dependent part from 5.7.

- Caution was revised.
    - Only switches having a closing speed that is independent of operating personnel may have a fault-making current rating.
- WG went through 6.8.2 Fault initiating switches nameplate requirements.
  - Removed m) and Nameplate for fault-initiating switches shall carry all the information required in 6.8.1 except e), f), g), and j). WG moved expected switching endurance at rated making current and bullet m) in 6.8.1. WG added Note to ensure that m) only applies to fault initiating switches.
  - Devki Sharma proposed that we create table similar to Table 1 and have markings for the nameplate requirements.
    - No further discussion.
  - Vote to accept wording from first bullet was taken with 3 nay's and 13 yea's. One abstained or was muted. Wording was accepted due to majority.
- First session adjourned at 11:55 AM.
- The second session convened at 1:30 PM
- WG Chair went through Annex B comments
  - Went through Table 1 IEEE C37.36b-1990.
  - Compared minimum phase clearance to grounded objects from AIEE 1954 report, NEMA SG-6 1974 (revised 1979), (NEMA) C37.32-1990 Table 3, IEEE C37.36b-1990 Table 1, IEEE C37.32-1996 Table 5, 1427-2006 (2020), IEEE C37.30.1-2011 Table 14, IEEE C37.30.1-2011 Table B.1, IEEE PC37.30.1/D4 Table B.1
  - Compared calculated maximum arc reach from IEEE C37.36b-1990 Table 1, IEEE C37.30.1-2011 Table B.1, and IEEE PC37.30.1/D4 Table B.1
  - WG held discussion and consensus was that WG did not want to revise Table 14.
  - WG Chair started recording at 2:02 PM and went through comparison again per Devki Sharma request.
  - Pete Kowalik brought up discussion on where some of the historical values possibly could have come from.
    - WG reviewed C37.36b Minimum phase clearance to grounded objects.
      - Column 3 was mislabeled, and the values were minimum phase to ground clearance plus arc reach.
    - WG Chair suggested that he work on rewording title and reconvene at later date.
      - WG members were all in favor of further review for Annex B.
- WG Chair will review Table B.1 and ask for working group meeting beginning to mid-May.
  - Doodle poll will be sent out for WG availability.
- Second session adjourned 2:27 PM.

## WG Secretary

<b>Name</b>	<b>Affiliation</b>	<b>Member/Guest</b>	<b>Attendance Session 1</b>	<b>Attendance Session 2</b>
Brian Alexander	S&C Electric Canada	G	X	X
Jacob Blake	Hubbell Power Systems	Secretary	X	X
Brett Boles	Southern Company	M	X	X
Steven Brown	Allen & Hoshall	G	X	
Timothy Cook	Pascor Atlantic	M	X	X
Jeramie Cooper	Eaton	M	X	X
Charles Corley	Eaton	G	X	
Frank DeCesaro	DeCesaro Consulting Services	M	X	
Steven Donahue	Royal Switchgear Manufacturing	M	X	
Chris Ekpoudom	Southern States	G	X	X
Richard Frye	Eaton	G	X	
Ilya Glinsky	Southern California Edison	M	X	
Francisco Guzman	Southern California Edison	M		X
John Hall	TVA	M	X	
Danny Hoss	Southern States	M	X	X
James Houston	Southern Company	M	X	X
Bill Hurst	GE	M	X	X
John Kaminski	Siemens	M	X	X
Ian Klein	Hubbell Power Systems	G	X	X
Pete Kowalik	Cleveland Price	M	X	
Scott Lanning	S&C Electric	G	X	
Jeremy Moore	Pascor Atlantic	G	X	X
Christopher Morton	Powertech Labs, INC.	G	X	
Laura Reid	Hubbell Power Systems	M	X	X
Carl Reigart	Hubbell Power Systems	Chair	X	X
David Rhein	Hubbell Power Systems	G	X	X
Brent Richardson	Hubbell Power Systems	G	X	
Caryn Riley	Georgia Tech/NEETRAC	G	X	
Rob Ross	Cleveland Price	G	X	X
Devki Sharma	Entergy	M	X	X
Jon Spencer	Utility Solutions	M	X	
Sushil Shinde	Mitsubishi Electric Power Products	G	X	
Joseph Usner	AEP	M	X	X
Adam Voyles	Ameren	G		X

James Wenzel	Eaton	G	X	
Charles Worthington	Hubbell Power Systems	G	X	X
Xin Zhou	Eaton	G	X	