IEEE Power & Energy Society Switchgear Committee C37.20.7 Working Group Report 11-October-2016

The working group met on Tuesday, October 11, 2016 at 8:04 AM.

Agenda:

The agenda was previously distributed. Agenda accepted without objection.

<u>Patents:</u> Those registered at the Switchgear Committee meeting in Hilton Head Island, SC were required to acknowledge the IEEE-SA rules on Patents, and therefore, review in this meeting is not required. Nevertheless, the chair reminded participants that anti-competitive issues are never allowed for discussions.

General:

The PAR for this project was approved by the IEEE-SA Standards Board on November 9, 2011, and is valid until December 31, 2017.

Members introduced themselves, identified their company and their affiliation. Total attendance was 68 persons. Attendance included 20 working group members (of 30, with 8 absent and 2 excused, plus 48 guests. Attendance is as shown below:

Attendance of working group members was recorded by roll call, to establish that a quorum was present. A quorum was present.

Members / Affiliation	Members / Affiliation	Guests / Affiliation	Guests / Affiliation
P. Barnhart (P) - UL	F. Mayle (P) - Technibus	N. Alvarado (P) – IEEE-SA	J. Lagree (P) - Eaton
J. Baskin (A) – Federal Pacific	D. Mazumdar (P) - AZZ		A. Lizardo (P) - ABB
R. Boyce (P) – Eaton	D. Mohla (E) – DCM Electrical	K. Ashtekar (P) – Eaton	D. Mazumdar (P) - AZZ
J. Bowen (A) - Aramco	Consulting	A. Atiq (P) - Siemens	J. McClelland (P) – Technibus
E. Byron (A) - Schneider	A. Morse (P) – Siemens	D. Beseda (P) – S&C	N. McQuin (P) - consultant
D. Edwards (P) - Siemens	D. Moser (P) - ABB	A. Bonner (P) - Eaton	S. Meiners (P) - GE
M. Flack (A) – Southern	T. Olsen (P) - Siemens	R. Calatayud (P) - ABB	C. Morton (P) - Powertech
Nuclear	M Orosz (A) - Schneider	C. Carne (P) – Schneider	O. Parks (P) - ABB
K. Flowers (P) - Siemens	A. Patel (A) - GE	R. Cohn (P) – Powercon	R. Pawar (P) – ABB
D. Gohil (P) – AZZ	C. Schneider (P) - Schneider	D. Dunne (P) - Schneider	A. Peterson (P) – ABB
T. Hawkins (P) - Siemens	J. Smith (P) – retired	A. Dhawan (P) - ComEd	I. Profir (P) - Rockwell
A. Jur (A) – Eaton	P. Sullivan (P) - DuPont	R. Elizondo (P) - Peakdeman	A. Qasem (P) - Bechtel
C. Kennedy (A) - Schneider	C. Tailor (P) - Eaton	D. Elliott (P) – ABB	S. Reddy (P) - Powell
M. Lafond (P) - GE	M. Valdes (E) - GE	S. Flores (P) - Schneider	J. Rizo (P) – Xcel Energy
D. Lemmerman (P) –	M. Wactor (P) – Powell	P. Gingrich (P) – AZZ	T. Rohrer (P) - Exiscan
Exelon/PECO	R. Warren (P) – DNV GL	L. Grahor (P) – Eaton	R. Rohr (P) - Powell
	KEMA	R. Hartzel (P) - Eaton	J. Ruebensam (P) – S&C
	T. Woodyard (P) – Siemens	D. Hrncir (P) – Eaton	K. Sippel (P) - Eaton
		R. Jain (P) – S&C	E. Spiewak (P) – IEEE-SA
		J. Jarque (P) – AZZ	K. Trost (P) – G&W
		T. Johnson (P) – Xcel Energy	B. Venne (P) – Rockewell
		W. Jung (P) – Siemens	N. von Fiedt (P) – Ameren UE
		J. Kaminski (P) – Siemens	M. Whitney (P) – S&C
		J. Kim (P) - Hyosung	M Williford (P) - Schneider
		R. Lau (P) – Pentair Technical	E. Wilkie (P) – Eaton
		Solutions	L. Yu)P) - Ea
		J. Lagree (P) - Eaton	
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The minutes from the Spring 2016 meeting were approved as distributed by absence of requested changes.

An attendee asked that membership be opened for additional members. The chair indicated that since the working group activity is basically complete (we are near the end of the balloting process), we are reluctant to expand membership as we are at the end of the process.

C37.20.7 WG minutes Pittsburgh, PA

11-October-2016 Page 1 Chair Comments and review of ballot results:

The first ballot for Draft 13 opened March 3, 2016 and closed on April 2, 2016. The invitation to join the ballot group had been sent out to 670 persons, and 113 persons joined the ballot group. Ballot results summary is as follows:

Ballot Open Date:		03-Mar-2016		
Ballot Close Date:				
		02-Apr-2016		
Type:		Revision		
Draft #:		D13		
Comments:		685		
Must Be Satisfied Comments:		425		
RESPONSE RATE	E			
This ballot has me	This ballot has met the 75% returned ballot requirement.			
	total negative votes with comments			
••••••	negative votes with new comments			
	8			
	negative votes without comments			
	abstention votes: (Lack of expertise: 1, Lack of time: 1, Other: 2)			
• • • • • • •	votes received = 83% returned			
4% abs	stention			
APPROVAL RATE	APPROVAL RATE			
The 75% affirmation	The 75% affirmation requirement is not being met.			
59 affi	affirmative votes			
31 neg	gative votes with com	nments		
90 votes = 65% af	90 votes = 65% affirmative			

A request to modify the scope of the PAR to match the draft content was submitted and approved by the IEEE-SA Standards Board on 22-September-2016. The PAR has also been extended and is valid through December, 2017.

Draft 2.c of the ballot comment resolution spreadsheet was previously distributed and final discussions are the subject of this meeting. The comment resolution committee reviewed the comments in draft 2.c, following which the draft was submitted to the working group for further comment. No further comments were received prior to this meeting. We first reviewed the items on which there was significant input, and then opened up the discussion for any items not otherwise discussed.

Discussion items:

- 1. Row 80, comment i-201: Applied insulation. Change to revised, and add to proposed change "and any field-applied spray-on insulation or conformal coatings".
- Row 108, comment i-347: Are "fans on" or "fans off" worst case? Significant discussion on lines 618-623. Consensus – Change to "revised" and change detail to change lines 618-621 so that only one test is conducted, with fans on. This also changes other dispositions as listed in the strawman spreadsheet, including lines 109-111.
- 3. Row 311, comment i-34: Discussion of suffix B1. Accept the proposed change. This also addresses rows 313, 314, 330, 411, 413.
- 4. Row 417, comment i-602: Use revised disposition in column X.
- 5. Row 455, comment i-244: Switchboard task force input consensus is that a test on the load side of the SCPD is not useful. However, if the line side is separately compartmented, a test on the load side is probably needed. The MCC must always be tested on the line side of the SCPD, and if line side is separately compartmented, a separate test must also be conducted on the load side of the SCPD. So, change line 2138 to read "or #10 AWG wire on the line side of the Short-Circuit Protective Device (SCPD). In addition, if the line side of the SCPD is separately compartmented from the load side, an additional test shall be conducted with the arc initiated on the load side of the SCPD using a #10 AWG wire. If the #10 AWG wire does not melt, perform an additional test with a #14 AWG wire to initiate the arc. If the #14 AWG wire does not melt, no further test is required." This also applies to rows 456 and 458.

- 6. Row 486, comment i-487: see resolution to row 455.
- 7. Row 543, comment i-176: see resolution to row 455.
- 8. Row 577, comment i-182: Delete clause J.4.1.6 and add words from row 455 as item c) of both clauses J.4.1.3 and J.4.1.4. covers rows 575-595.
- 9. Row 599, comment i-47: Reject change proposed. Both indoor and outdoor ME bus are covered.

The discussion was opened to review any other ballot comments or concerns, and no issues were raised.

Motion by P. Barnhart with second by T. Hawkins: Editorially revamp dispositions in line with these minutes, revise the draft to agree, and launch second ballot. Motion passed with no negative votes.

It is our objective to initiate the second ballot following this meeting.

The meeting adjourned at 11:12 AM.

Report submitted by:

M. Wactor, WG Chair