C37.23 Metal Enclosed Bus Working Group Minutes of the Fall 2013 Meeting Hilton Palacio del Rio, San Antonio, TX USA September 18, 2013

1. Introductions

The meeting was called to order by the Chair, Art Jur at 8:00 AM. Art welcomed the members and guests. Attendees introduced themselves identifying their company and affiliation.

The Working Group observed a moment of silence for Michael Cannady, Ward Laubach and Tim Taylor.

2. Attendance

Twenty Working Group members were present, with nine guests also in attendance. Two guests were excused from attendance. We also have one corresponding member.

Name	Affliation	Role	
Paul Barnhart	Underwriters Laboratories	Member	
Russell Boyce	Eaton	Member	
Ted Burse	Powell Industries, Inc	Member	
Jon Campbell	Powell Industries	Guest	
Robert Cohn	Powercon Corp.	Member	
Doug Edwards	Siemens Industries, Inc.	Member	
Michael Flack	Southern Company Generation	Member	
Paul Gingrich	AZZ / Central Electric	Member	
Sahadev Gohil	AZZ/Central Electric Mfg. Co.	Member	
Tom Hawkins	Siemens Industry	Vice-Chair	
Scott Hutchinson	Jacobs Engineering	Corresponding Me	mber
Arthur Jur	Eaton Corporation	Chair	
Frank Mayle	Technibus, Inc.	Member	
Deepak Mazumdar	Central Electric Manufacturing Co.	Member	
John McClelland	Technibus	Guest	*Excused
T Olsen	Siemens Industry, Inc.	Member	
Molson Parvin	CB&I	Guest	
Edward Peters	Powell Elect. Sys Delta/Unibus Div.	Member	
Andrew Peterson	ABB	Guest	
Steve Powell	AZZ/Calvert	Member	
Samala Santosh Reddy	Powell Industries	Member	
Dave Riffe	Westinghouse Electric Company	Guest	
Mark Roberson	AZZ/Calvert	Member	
Richard Rohr	Powell Electrical Systems	Guest	
Amy Rowell	Eaton	Guest	
Daniel Sims	Eaton Corp.	Guest	
Paul Sullivan	DuPont	Member	
Chand Tailor	Eaton Corporation	Member	
Robert Warren	KEMA Powertest	Member	
Oon Yek	Pacific Gas & Electric	Guest	*Excused

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3. Discussion of Draft D2

- We had 6 sub-groups contribute comments/content. The lead person is listed with each sub-group
 - Cable Bus, Ed Peters
 - Forced Cooling, Frank Mayle
 - Short Time Test, Paul Gingrich
 - Handling Guide, Ed Peters
 - o Pressurized Bus, Frank Mayle
 - Cast Resin, Art Jur
- Most comments will be accepted into Draft D3 for comment by the full Working Group
- Several topics required discussion and further actions: (underlined names = action required)
 - The Cable Bus sub-group (Ed Peters) will clean up their wording and submit for inclusion in D3 within 2 weeks.
 - For Short Time Test, <u>Ted Olsen</u> will provide correct wording to replace "average symmetrical current"
 - 6.2.4.1.4.1 a & b, Ted Burse questioned the practicality of the single phase DC connection requirements.
 - It was suggested that the Momentary Test section be formatted similar to the Short Time section. Paul Gingrich volunteered to do this.
 - o Grounding Fuse vs. a wire. The general feeling of the group is that we should follow the connected equipment standards C37.20.1 or C37.20.2
 - Cast Resin: a lot of discussion occurred about what it is and if it can or should be included in this standard. General feeling is that it is not excluded from meeting the requirements of the standard and that no special section needs to be written for it.
 - Air Pressurized: some discussion about dual rating of BIL if Air Pressurization system fails.
 General feeling is that this is not the same as dual rating the continuous current of forced cooled bus. It was suggested that only the lower BIL obtained without Air Pressurization should be on the rating plate.
 - Definitions from C37.100: suggested by T. Olsen to table this until the next meeting. Subcommittees will work on deciding how to handle this topic.
 - Table 8: discussed 15 kV, 15.5 kV, 15.8 kV? <u>Chand Tailor</u> volunteered to research other connected equipment standards and suggest ratings that synchronize.
 - Paint vs. Organic coating: <u>T. Olsen</u> to send latest draft of C37.20.3, latest draft will be added to the standard revision.
 - 1000 V Neutral: <u>Chand Tailor</u> has done some research, but requested more time. T. Olsen suggested that the Neutral is grounded with a disconnect link so there should be no voltage requirement, just isolation. Perhaps there is no need to include anything in standard.
 - UL 857 Busway: do we need some additional distinction stated in the standard? Add Non-Seg line for 1058 V in Table 2 to match C37.20.1

4. New Business

- Ted Burse suggested that the standard imposes MV requirements onto LV products. Instead, we should follow C37.20.1 for the LV requirements.
- Santosh Reddy asked whether the Altitude Correction Factors of Table 12 apply to Withstand Ratings and BIL. <u>Mr. Reddy</u> will suggest rewording the correction factor wording and submit in for comment in the next draft.

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- Table 12: Santosh Reddy indicated Table 12 refers to MV ratings only, and does not include LV ratings. The altitude correction factors will be added to the standard for ratings of 1058V and lower, following C37.20.1.
- Section 9.3: Santosh Reddy suggested that DC withstand should be included in the list of ratings to apply correction factors. Ted Burse pointed out that it is not needed since DC standards call for an AC Withstand test for DC Gear.
- Table 4: It was suggested that manufacturers should have the option to do an AC or DC test.

5. Comment Deadline

All comments and sub group work are requested by January 31, 2014.

6. Adjournment

The meeting adjourned at 11:15 AM.

Report submitted by: Tom Hawkins C37.23 Working Group Vice-Chair Sep 23, 2013