

**C37.23 Metal-Enclosed Bus Working Group
Meeting Minutes (by Mark Roberson, Secretary)
10/06/20 (Tuesday), 10:15 AM CST
Online via Microsoft Teams**

1. Call to Order

The meeting was called to order by Jared Hines, Chair at 10:15 AM (CDT)

2. Introductions and Attendance

Jared Hines introduced himself as the new Chair and Mark Roberson as the Secretary for this Working Group (WG) and welcomed all members and guests. There were 41 attendees (see end of this document for list) that were logged into the Teams Meeting. Each attendee confirmed their participation via verbal response as well as entering their name and affiliation via the Teams Chat window.

3. IEEE Working Group Policies and Procedures/Copyright Policy/Patent Policy

Jared presented/reviewed the IEEE (SA) approved Working Group Policies and Procedures protocol, which can be found here: [http://www.ewh.ieee.org/soc/pes/switchgear/O-and-P/PES_WG_PP-Switchgear--approved-\(2013-09-19\).pdf](http://www.ewh.ieee.org/soc/pes/switchgear/O-and-P/PES_WG_PP-Switchgear--approved-(2013-09-19).pdf).

In addition, slides were reviewed that cover the IEEE-SA copyright and patent policies.

No issues were voiced by the meeting attendees.

4. Meeting Agenda

Jared Hines presented/reviewed the meeting agenda. Ed Peters moved to approve by consent with Paul Barnhart seconding.

5. Previous Meeting Minutes

Jared Hines presented the meeting minutes from the previous meeting held on May 5, 2020. A clarification was made that the wording of the copyright policy in Item 6 should be "IEEE SA" instead of "Switchgear Assemblies (SA)". Bob Cohn moved to approve by consent with noted change and Russell Boyce seconded.

6. Document Status Report

Jared Hines presented/reviewed the new C37.23 PAR, which was formally approved on September 23, 2020 and expires on December 31, 2024.

7. Old Business

Jared Hines gave an update on participation from the group **IEC SC 17C/719/NP (AC metal enclosed busbar trunking systems (BTS) including solid and air insulated design for rated voltages above 1 kV and up to and including 52 kV)**

- A letter was sent from the IEEE PES Switchgear Committee to IEC SC 17C about participation
- A response was received from the secretary of their committee that they don't have enough candidates to start this working group. Once they restart that group, they will contact us if they wish to participate.

8. New Business

Membership

- Since this is the first working group meeting for this standard, Jared Hines asked attendees to consider being WG members. It was noted that anyone who is interested can be a member. It was requested that anyone who wants to be a member to request this by using the Teams Chat window or sending an email to Jared and Mark.

Other Topics:

- References to C37.100.1 in C37.23
 - Do we need to eliminate all references to this standard similar to what is being done in other SA switchgear standards?
 - Discussion was generally in favor of removal, but it was suggested that we should table discussion until C37.20.2 is finished (going out to ballot early next year)
 - An **action item** was made to review this activity in a future meeting
- 6.2.5 Weather-resistance tests
 - There are references to these tests both in C37.20.1 and 20.2. Should we change to an approach where we align with those standards?
 - A comment was made in instances like these that we should use change wording to “refer to the existing document” (RED) rather than repeating text as documents change
 - An **action item** was made to review this activity in a future meeting
- 6.2.6 Tests for Insulating Materials
 - A comment was made that we should also review C37.20.9 in addition to 20.2 (insulation is “air”)
 - An **action item** was made to include this activity in a future meeting
- 7.11.1 Secondary wiring
 - C37.23-2015 standard states that wiring in bus below 1.058 kV refers to C37.20.1 while above 1.058 kV refers to C37.20.2. Should we review?
 - A comment was made that any IEEE standard date references should be removed
 - Need to look at how this is worded in other standards
 - C37.20.2A (Amendment) is the document that is aligned
 - If there is a reference to a clause or sub clause, you need to review the appropriate documents. There is a large spreadsheet that compares all related standards – we should obtain and use that document as a guide.
 - Need to make sure we address the “amendment” documents such as C27.20.2A (Amendment)
 - An **action item** was made to review this activity in a future meeting
- Partial Discharge
 - Should we include it in updated standard and if so, align with C37.20.2?
 - Review Annex C that’s found in C37.20.2 (information about PD)
 - Should we have an informative annex for PD like in C37.20.2?
 - A comment was made that we need to be careful because bus duct is different than switchgear
 - Also, need to look at Canadian standard
 - As part of future review, need to look at
 - issues with bus materials that are/are not resistant to PD

- whether it can be used in factory/field testing
 - An **action item** was made to review this activity in a future meeting
- Cable Bus
 - Removal from current 2015 C37.23 standard?
 - Was added as a normative reference in the 2015 standard
 - Other concerns or recommendations for the working group
 - The following AdHoc committee was formed to review:
 - Paul Sullivan - chair
 - Ed Peters
 - Ted Burse
 - Bruce Hack
 - Eldridge Byron
 - Paul Barnhart
 - Bob Cohn
 - Steve Powell
 - Michael Flack
 - Mark Roberson
 - Jared Hines
- Arc Resistance
 - C37.20.7 covers this for switchgear assemblies
 - This topic is not contained currently in C37.23-2015
 - Does ME Bus Duct connected to Arc Resistant switchgear need to be “arc-resistant” as well?
 - If so, does C37.20.7 need to be modified to include this information relative to ME Bus Duct or should it be added to C37.23?
 - Other concerns or recommendations for the ME bus annex in C37.20.7
 - The following AdHoc committee was formed to review:
 - Jared Hines - chair
 - Matthew Claxton
 - Michael Wactor
 - Paul Barnhart
 - Mark Roberson

9. Next Meeting

The next meeting will be tentatively be held on April 20, 2021. Further details of this planned meeting will be forthcoming before that date via email notification.

10. Adjournment

The meeting ended at 12:08 PM CST.

**C37.23 Metal-Enclosed Bus Working Group Meeting
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Attendee List**

Attendees:	Name		Affiliation (if known)
	First	Last	
1	Jared	Hines	(Chair) Eaton
2	Mark	Roberson	(Vice Chair/Secretary) AZZ Bus Systems
3	Benedict	Lavrinnoff	Kinectrics Inc
4	Bob	Cohn	Powercon Corp.
5	Chand	Tailor	Eaton
6	Dave	Gohil	AZZ Switchgear Systems
7	Ed	Peters	Powell Elect. Sys. - Delta/Unibus Div.
8	Eldridge	Byron	Schneider Electric
9	Jeff	Door	The H-J Family of Companies
10	Justin	Coletta	Powell Industries
11	Louis	Doucet	Stace
12	Matthew	Claxton	Powell Industries
13	Michael	Wactor	Powell Industries
14	Monique	Boisvert-La Terreur	STACE
15	Paul	Barnhart	Underwriters Laboratories
16	Paul	Sullivan	DuPont
17	Randy	Creach	AZZ Switchgear Systems
18	Russell	Boyce	Eaton
19	Paul	Gingrich	AZZ Switchgear Systems
20	Steve	Powell	Electrical Builders, Inc. (EBI)
21	Brian	O'Neil	RMS Energy
22	Chris	French	Eaton
23	David	Riffe	Westinghouse Electric Company
24	Garett	Sims	Eaton
25	Al	Pruitt	The Durham Company
26	Francis	Beauchemin	Hydro-Quebec
27	Ted	Burse	Powell Industries, Inc
28	Dave	Johnson	
29	Chris	Ambrose	Federal Pacific
30	Michael	Flack	Southern Company Services, Inc.
31	Sergio	Flores	Schneider Electric US
32	Donnie	Swing	Powell Industries
33	Richard	Rohr	Powell Electrical Systems
34	Roy	Ayers	Nashville Electric Service
35	Santosh	Reddy	Powell Industries
36	Wallace	Binder	

37	Steven	Brown	
38	Jay	Patel	Crown Electric Eng. & Mfg.
39	Bruce	Hack	Crown Electric Eng. & Mfg.
40	Dave	Dewitt	Crown Electric Eng. & Mfg.
41	Dave	Thompson	Crown Electric Eng. & Mfg.