C37.23 Metal-Enclosed Bus Working Group Meeting Minutes (by Mark Roberson, Secretary) 10/17/22 (Monday), 3:45 PM EST Hilton Burlington, Burlington, VT

1. Call to Order

The meeting was called to order by Jared Hines, Chair at 3:45 PM (EST)

2. Introductions and Attendance

Jared Hines introduced himself as the Chair and Mark Roberson as the Secretary for this Working Group (WG) and welcomed all members and guests. There were 20 total attendees (see end of this document for list) that were present. Each attendee confirmed their participation via verbal response/affiliation as well as entering their name and affiliation via the attendance sheet.

- 20 total people were in attendance
- 13 of 23 (56.5.8%) WG members participated, thus quorum was met
- 7 guests participated

3. Previous Meetings (Spring 2021 and Spring 2022) Minutes

Mark Roberson noted that the Spring 2022 meeting did not have a quorum of members that attended, and so presented for approval the meeting minutes from the Spring 2021 meeting held on April 20, 2021. Bob Cohn moved to approve those minutes by consent and Russell Boyce seconded.

The minutes for the Spring 2022 meeting held on April 11 were also presented for approval. Ted Burse moved to approve those minutes by consent and Russell Boyce seconded.

4. Meeting Agenda

Jared Hines presented/reviewed the meeting agenda. Ted Burse moved to approve it by consent with Russell Boyce seconding.

5. IEEE Working Group Rules and Guidelines/SA Copyright Policy/Patent Policy

Jared presented/reviewed the IEEE rules and guidelines for conducting working group meetings.

In addition, slides were reviewed that cover the IEEE-SA copyright and patent policies. Jared asked if there were any patent claims. *No issues were voiced by the meeting attendees.*

6. Document Status Report

Jared mentioned that the new C37.23 PAR, which was formally approved by NESCOM on September 23, 2020, expires on December 31, 2024.

7. Old Business

Jared presented Draft Pc37.23_d2 and noted that changes were made to align with recent finalized updates to C37.20.1, C37.20.2, and C37.20. Changes made to C37.20.9 (currently in progress) will be made as they occur.

Jared also stated that he would post this draft and the Excel "comments" file in the C37.23 "iMeet Central" workspace. The WG was asked to review the standard, enter comments into the blank file, and submit to him/Mark for discussion/review at the next WG meeting.

8. New Business

C30.20.7, Annex K

- Jared reviewed a proposal to add Annex K, which involves Metal-Enclosed Bus, to the C37.20.7 (Guide for Testing Switchgear Rated Up to 52 kV for Internal Arcing Faults) standard. Jared stated that he would send out this proposed Annex to the WG for review/commenting.
- After this review, this Annex would be submitted for balloting within C37.20.7.

C37.23, Table 1 – Isolated-phase bus-preferred voltage ratings and insulation levels

- Jared noted that since the PAR includes adding voltage ratings up to 52 kV (includes 48.3 and 52 kV), what should be the values (and where should they come from) that should be added to this table for those ratings?
- Overall, the added values for this table and all other affected tables involving these new ratings in the standard will need to be documented and resolved via the "comments" file.

C37.23, Table 2 – Nonsegregated-phase bus-preferred voltage ratings and insulation levels

- Due to traction equipment applications involving maximum rated voltages of 1500 V, a proposal was made to add a new 2.4 kV rating between the current 1.058 kV and 4.76 kV ratings to better match those applications.
- As a starting point, the following are the proposed new values (derived via linear regression) for this rating in this Table:

•	Rated Maximum Voltage (kV rms):	2.4
•	Power frequency withstand (kV rms):	
	 Dry (1 min): 	8
	 Dew (10 sec): 	5
•	Lightning impulse withstand (kV peak):	20

• Overall, this proposed change will be added to the "comments" file for WG review

C37.23, 5.3 Rated power frequency

- A question was asked whether the WG should change the wording "50 Hz to 60 Hz" to "60 Hz" due to differences in continuous current test results at these two different frequencies?
- Overall, this proposed change will be added to the "comments" file for WG review

Copying from/between IEEE standards

• Due to the desire to copy and use wording from other IEEE standards (Ex: C37.20.2) to the C37.23 standard and the potential for copyright violations, Jared will contact IEEE and obtain approval before proceeding any further.

C37.23, Annex A, Cable Bus

- Should ratings up to 52 kV be listed?
- Overall, this question will be added to the "comments" file for WG review

C37.23, 7.11.5, Nameplate marking

- Should ambient temperature rating be listed?
- Overall, this question will be added to the "comments" file for WG review

"Informative" vs. "Guide"

- Should C37.23 Annexes C and D, be changed from "Informative" to "Guide", which is the case for C27.20.2?
- Overall, this question will be added to the "comments" file for WG review

C37.23, Annex E, Bibliography

- A comment was made to add the IEEE C37.20.9 standard to this section.
- Overall, this comment will be added to the "comments" file for WG review

9. Next Meeting

The next meeting is currently planned to be held during the next Switchgear Committee meetings from April 16-20, 2023. Further details of this planned meeting will be forthcoming before that date via email notification.

10. Adjournment

The meeting ended at 5:14 PM EST.

C37.23 Metal-Enclosed Bus Working Group Meeting 10/17/22 (Monday), 3:45 PM EST, Hilton Burlington, Burlington, VT Attendee List

	Name			
Attendees:	First	Last	Affiliation (if known)	Role
1	Jared	Hines	(Chair) Eaton	Member
2	Mark	Roberson	(Vice Chair/Secretary) Avail Bus Systems	Member
3	Paul	Barnhart	Underwriters Laboratories	Member
4	Francis	Beauchemin	Hydro-Quebec	Member
5	Russell	Воусе	Eaton	Member
6	Ted	Burse	Powell Industries	Member
7	Sudarshan	Byreddy	Burns & McDonnell	Guest
8	Bob	Cohn	Powercon	Member
9	Fiori	Coziuc	S&C	Guest
10	Randall	Creach	AZZ Switchgear Systems	Member
11	Sergio	Flores	Schneider Electric	Member
12	Dave	Gohil	AZZ Switchgear Systems	Member
13	Ron	Hartzel	Eaton	Guest
14	Adrian	Lopez	Powell Industries	Member
15	Monique	La Terreur	STACE	Member
16	Kevin	McGlown	JST Power	Guest
17	Chirag	Patel	Powell Industries	Member
18	Jeffrey	Ricker	Schneider Electric	Guest
19	Carl	Schneider	Schneider Electric	Guest
20	Jacob	Walgenbach	Siemens	Guest