

Chair: John Webb

Secretary: Marcus Young

Meeting Schedule: 8:00am – 9:45pm

Quorum: Quorum reached (52 of 60 voting members present)

Minutes:

- Introductions of members and guests with affiliations including a quorum count. A quorum was present.
- Review of Patent Slides and call for essential Patent Claims: None
- Review of IEEE Copyright Policy slides: No copyright issues
- Review of meeting guidelines.
- Chair reviewed requirements to gain and maintain voting membership.
- Chair reminded attendees that the WG uses iMeetCentral as document repository. Attendees must request access from the Chair or Secretary.
 - Members: Go to “My Project” -> “My Interests” to join group to get recognition for participation in the WG.
- Approval of agenda: Motion made by Jan Weisker. 2nd by Anthony Ricciuti
 - Approved by unanimous consent.
- Review minutes from S’24 meeting.
 - Approval of minutes: Motion made by Carl Schuetz. 2nd by Chris Jarnigan
 - Approved by unanimous consent.
- Review minutes from WG Ballot Resolution TEAMS meeting.
 - Approval of minutes: Motion made by Chris Jarnigan. 2nd by Gary Meekins
 - Approved by unanimous consent.
- Chair remarks on PAR items: Initial ballot closed on July 20th. 86% return rate (minimum is 75%) and 90% approval.
 - 101 comments to address (77 are editorial)
 - Comments to be discussed in this meeting
- Reviewed Changes to Capacitive Switching Requirements (5.8) from comment resolution meeting
 - Comments were resolved as follows in the Ballot Resolution meeting on August 9, 2024.
 - Capacitive Switching for Cable or Line will remain as mandatory requirement (even if rating is C0) but must be determined by test.
- Changes to clause 9 related to current transformers
 - Comments were resolved as follows in the Ballot Resolution meeting on August 9, 2024:
 - All Bushing CT requirements, with the exception of making the CT ratings as specified, will remain in Clause 9. The CT ratings shall now be specified as ‘minimum’ ratings.
- Changed to Mandatory Electrical Closing

- Discussed in Ballot Resolution TEAMS meeting on August 9, 2024. A conclusions was not reached and the discussion remained open for Fall WG meeting.
- Question from WG on whether the electrical opening by-passes the low-pressure sensor.
 - Chair indicated that C37.11 addresses this point and has requirements for low-level alarms and interlocking. C37.11 is referenced in the normative text.
 - Chair offered that in his view there is no language proposed in the amendment which by-passes any interlocks.
- The proposed change suggested in the ballot comment was to remove explicit requirements for both electrical closing and electrical opening and add the language to the following effect: “Some form of tripping the opening release of the circuit breaker in case of a fault current shall be present.”
- Chair requested motion from WG to accept or reject the proposed change regarding whether electrical open/close be required or optional.
 - Motion made to reject the proposed language and keep electrical open/close mandatory: by Brad Leccia. 2nd by Robert Hannah.
 - Approved by unanimous consent.
- Comments on Creepage Table C.2
 - Proposed change in ballot comment to add an additional column for L-L voltage and alter the values in the table to match that in IEEE C37.010-2016. The proposed changes were included in the ballot comment and were shown to the WG on a slide.
 - WG member noted similar tables between C37.010 and C37.04 should be reconfigured such they are consistent/synonymous in terms of format, values, and terminology.
 - Discussion centered about format of table in current version of C37.04, the working draft of the same table in C37.100.1, and in IEC 62271-1 as compared to C37.010-2016.
 - Motion to make table C.2 USCD values consistent but leave the format as single column of voltage across the insulator: made by Jeremy Hensberger. 2nd by Chris Jarnigan.
 - Approved by unanimous consent.
- Comments on Electrical Endurance clause 5.6
 - Discussion about Annex F being referred to in 5.6.2.6. for Class E2 and is a test procedure. Should WG propose to move to C37.09 amendment 1 so late in the amendment process or should WG wait for revision?
 - WG preference: Test procedure for E2 test will remain in C37.04 for now and may be moved to C37.09 during its revision.
 - Comment to add text to the end of 5.6.2.6: “Class E1 electrical endurance capability is demonstrated by the service capability of 5.6.2.5.”
- Chair reviewed the comment resolution group that was established in the ballot resolution TEAMS call back in August 2024.
 - The following volunteered for the comment resolution group in the virtual teams:
 - Terry Woodyard
 - Di Michele Frederico
 - Henning Milnikel
 - Anthony Ricciuti

- Hua Ying Liu
- Chris Jarnigan
- Steven May
- Rich York
- Andreas Bartels
- Ben Sax
- Doug Edwards
- Aaron Rexroad
- Jeff Nelson
- Chair asked WG if additional volunteers wish to join the comment resolution group. The news:
 - Eduardo Ramirez-Bettoni
 - Jesus-Manuel Avila
 - Mike Christian
- Motion to empower the comment resolution group made by Jeff Ward, with 2nd by Jan Weisker as follows:
 - Resolve remaining comments for next ballot
 - Recirculate Ballot
 - Filter Recirculation 1 Comments if Technical / General require WG review and approval.
 - Recirculate or Present to WG as needed.
- Approved by unanimous consent
- Chair indicated there will be a meeting of the comment resolution group in approximately one month.
- Meeting adjourned at 10:25 am

Reported by Marcus Young, Secretary

Attachment: WG Meeting Attendance and Affiliations

WG C37.04a Membership & Attendance F'24.xlsx

Role	Full Name	Company Name	City	State	4/12/2022	8/24/2022	10/18/2022	4/18/2023	10/10/2023	1/30/2024	4/2/2024	8/9/2024	10/15/2024
VM	Richard York	Mitsubishi Electric	Pittsburgh	Pennsylvania	X	X	X	X	X	X	X	X	X
VM	Mina Youssef	Eaton				X		X		X	X	X	X
VM	Samuel Zaharko	Mitsubishi Electric	Warrendale	Pennsylvania	X	X	X	X			X		X
NVM	Anatoly Akhunov	HICO America						X	X			X	X
NVM	Brian Alexander	S&C Electric										X	
NVM	Michelle Antantis	Duguesne Light	Pittsburgh	Pennsylvania							X		
NVM	Koustubh Ashtekar	JST POWER EQUIPMENT	Lake Mary	Florida			X	X	X				X
NVM	Jesus-Manuel Avila	ABB								X		X	X
NVM	Harm Bannink	G&W Electric	Zelhem	Gelderland	X	X	X	X	X				
NVM	Paul Barnhart	UL, LLC	Walkertown	North Carolina	X	X				X		X	
NVM	Andrew Beckel	XCEL Energy						X		X	X		
NVM	Zachary Beecher	Southern States									X		X
NVM	Robert Behl	JST Power Equipment						X	X		X		
NVM	Jonathan Benge	Oklahoma Gas & Electric							X				
NVM	Brian Berner	PowerGrid Components							X	X	X		X
NVM	Sanket Bolar	Oncor						X		X	X		X
NVM	Albane Bornuat	GE Grid Solutions									X	X	X
NVM	Jeff Brogdon	Georgia Transmission Corporation	Tucker	GA							X		
NVM	Arjon Bronsveld	Hitachi Energy Sweden									X		X
NVM	Sudarshan Byreddy	Burns and McConnell									X	X	
NVM	Dave Collette	Mitsubishi Electric	Warrendale	Pennsylvania				X	X	X	X		
NVM	Ivan Contreras	ABB							X				
NVM	Michael Crawford	Mitsubishi Electric	Cranberry Twp	Pennsylvania	X		X	X	X	X	X	X	X
NVM	Katherine Cummings	G&W Electric	Bolingbrook	Illinois						X			
NVM	Jason Cunningham	Southern States, LLC	Atlanta	Georgia	X		X	X	X		X	X	X
NVM	Matthew Cuppett	Hitachi Energy									X		X
NVM	David Dart	Noja Power										X	
NVM	Patrick Di Lillo	Consolidated Edison Co. of New	New York	New York	X	X	X	X	X	P			
NVM	Federico Di Michele	CESI SPA	Milano	Milano			X	X		X	X	X	X
NVM	Boubacar Diallo	Southern States LLC	Fayetteville	Georgia			X			X		X	
NVM	Lissy Diaz	Florida Power and Light	Jupiter	Florida							X		X
NVM	Jeffrey Door	The H-J Family of Companies	High Ridge	Missouri							X		X
NVM	Maxwell Eastman	Black and Veatch	Olathe	Kansas				X			X		
NVM	Douglas J Edwards	Siemens	Knightdale	North Carolina								X	
NVM	Ilya Glinsky	SCE										X	X
NVM	Mauricio Gonzalez	Avangrid							X	X			
NVM	Sean Guidry	OMICRON Electronics							X				
NVM	Bruce Hack	National Breaker										X	
NVM	Stephanie Hayden	Meiden									X		
NVM	Jennifer Hunter	Mitsubishi Electric	Harmony	Pennsylvania			X	X	X		X	X	X
NVM	Richard Jackson	DTE	Troy	Michigan							X		
NVM	Sudesh Jaggernauth	FPL	Jupiter	Florida							X		X
NVM	Darin Jensen	Southern States , LLC					X		X				
NVM	Jeffrey Jordan	Southern States, LLC							X				
NVM	Blair Kerr	B&W Electric									X		
NVM	Umer Khan	ABB									X	X	
NVM	Sangtae Kim	HICO America					X		X				
NVM	Yun Seong Kim	KERI						X			X		
NVM	Dwight Krause	Blach and Veatch									X		X
NVM	Hua Liu	Southern California Edison											X
NVM	Albert Livshitz	Qualus Services	Fairfield	Ohio							X		
NVM	Rafael Lopez	ABB								X		X	
NVM	Juan-Manuel Martinez	ABB									X	X	
NVM	Paul Masterson	Meiden America Switchgear	Peachtree	Georgia	X		X	X	X	X	X		
NVM	David Mitchell	Mitch & Associates	Elizabeth	Colorado	X		X	X	X	X	X	X	
NVM	Stephanie Montoya	MKI							X				
NVM	Anthony Natale	HICO America	Pittsburgh	Pennsylvania	X			X	X		X		X
NVM	Jeffery Nelson	Tennessee Valley Authority	Chattanooga	Tennessee									X
NVM	Andreas Nening	OMICRON electronics	Klaus	Vorarlberg							X		
NVM	Miklos Orosz	Circuit Breaker Technology &	Murfreesboro	Tennessee			X		X		X		X

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NVM	Sharan Parikm	Duke Energy	Orlando	Florida							X		
NVM	Mark Pattison	The H-J Family of Companies	Waterdown	Ontario							X		X
NVM	Conrad Pecile	Myers Power Products							X			X	X
NVM	Mark Peterson	XCEL Energy	Minneapolis	Minnesota				X			X		X
NVM	Justin Rebovich	GE Grid Solutions									X	X	X
NVM	Samala Reddy												X
NVM	Frank Richter	50Hertz Transmission							X				
NVM	Brian Roberts	Southern States	Hampton	Georgia				X	X		X		x
NVM	Sergey Rogozhkin	Tavrida Electric GmbH									X		X
NVM	Ryan Rowe	TCI Sales									X		X
NVM	Victor Savulyak	KEMA	Chalfont	Pennsylvania	X	X				X		X	X
NVM	Jun Seo	HD Hyundai Electric							X				
NVM	Oleksandr Sergeyenko	Tavrida Electric North America Inc	Surrey	British Columbia				X		X			
NVM	John Sestito	Hyundai Electric							X		X		
NVM	Jamal Shah	Avangrid							X				X
NVM	Devki Sharma	Retired	Halifax	Nova Scotia	X		X			X	X		
NVM	Aniket Shirode	ABB									X		X
NVM	Jerry Sneath	Electranix									X		
NVM	Lokesh Solanki	ABB					X				X	X	X
NVM	Jon Spencer	Utility Solutions	Catawba	North Carolina									X
NVM	Dragan Tabakovic	Hubbell Power Systems	Clearwater	Florida							X	X	X
NVM	Timothy Terry	Meiden America Switchgear, Inc.									X	X	X
NVM	Joseph Usner	AEP	Columbus	Ohio	X	X	X	X			X		
NVM	Jerry Wen	BC Hydro									X		
NVM	Michael Wong	Entergy	New Orleans	Louisiana							X		