

Chair: John Webb

Secretary: Marcus Young

Meeting Schedule: 8:00am – 9:45pm

Quorum: Quorum reached (47 of 54 voting members present)

Minutes:

- Introductions of members and guests with affiliations including a quorum count. A quorum was present.
- Approval of agenda: Motion made by Jeff Ward. 2<sup>nd</sup> by Carl Schuetz
  - Approved by unanimous consent.
- Approval of minutes from January 2024 virtual meeting: Motion made by Brad Leccia. 2<sup>nd</sup> by Jan Weisker
  - Approved by unanimous consent.
- Review of Patent Slides and call for essential Patent Claims: None
- Review of IEEE Copyright Policy slides: No copyright issues
- 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.
  - Instructed members on how to join the ballot group via invitations through iMeetCentral.
- Chair remarks on PAR items: Chair provided an overview of PAR items. Project plan is for document to go to ballot in Spring of 2024.
  - Ballot comments to be addressed in a virtual meeting following the S’24 WG meeting.
  - C37.04 revision needs to begin in 2025 to meet expiration date of 2028.
- Changes to the document from IEEE MEC
  - Copyright letters needed for updated content.
  - Three paragraphs on content page did not meet format requirements.
  - Edits to table of contents requested by MEC.
- Changes to wording on capacitor switching
  - There is text in 5.8.1 stating that line charging current is mandatory, whereas this WG said it was optional. The sentence stating that rated line charging breaking current is mandatory for all Class S2 CBs was struck.
  - Capacitor switching is an optional rating. There is text in 5.8.2 stating that cable charging current is mandatory, whereas this WG said it was optional. The sentence stating that rated cable charging breaking current is mandatory for all Class S1 CBs was struck.
    - It was noted that “LC” in 5.8.2 should be CC for “Cable Charging”, draft will be corrected prior to ballot..
  - Text added to the document that CBs not tested for capacitive current switching shall indicate “None” on the nameplate.

- Chair received an email inquiry about C37.04 Table 21 and the absence of preferred values for C1 cable switching currents for CBs > 100 kV.
  - Chair noted this topic is outside of the existing PAR and would require a PAR modification to address. Absent a decision from the WG to the contrary, this would need to be addressed in the next revision of C37.04. No WG member moved to modify PAR to change C37.04 Table 21.
- Chair reviewed that the introduction of current draft of the document includes discussion of items from the PAR that the WG determined not to change and raised the question if mention of unchanged items should be included in the introduction? Open discussion was inconclusive regarding maintaining all the text in the introduction that was included in the draft circulated among the WG. Absent a motion to remove it, the full introduction will remain in the draft.
- Motion to proceed to ballot by Neil McCord, 2<sup>nd</sup> by Mike Christian
  - Motion passed with more than 2/3 of voting membership in attendance
  - No abstentions or oppositions
- Suggestion from WG to form a comment resolution group in advance of the ballot.
  - Chair will arrange a virtual meeting to discuss the formation of a comment resolution group If necessary following receipt of comments on the ballot.
- Meeting adjourned at 9:15am

Reported by Marcus Young, Secretary

Attachment: WG Meeting Attendance and Affiliations

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
Chair	John Webb	ABB	Pawleys Island	South Carolina	X	X	X	X	X	X	X
Secretary	Marcus Young	Mitsubishi Electric	Knoxville	Tennessee	X	X	X	X	X	X	X
VM	Mauricio Aristizabal	Hitachi Energy	Pittsburgh	Pennsylvania			X	X	X	X	
VM	Ganesh Balasubramanian	Eaton					X	X	X		
VM	Alexander Bartels	Powell Industries						X	X	X	X
VM	George Becker	Power Engineers Inc.	Clover	South Carolina			X	X	X		X
VM	Dan Benedict	PPL							X	X	X
VM	Adam Brooks	Duke Energy	Cincinnati	Ohio				X	X	X	
VM	Craig Bryant	Duke Energy	Greensboro	North Carolina			X	X		X	X
VM	Arben Bufi	Meiden America Switchgear, Inc.	Peachtree	Georgia	X	X	X	X	X	X	X
VM	Stephen Cary	2 Phase Power	Ligonier	Pennsylvania	X	X		X	X		
VM	Steven Chen	Eaton Corporation	Moon Township	Pennsylvania	X	X	X	X	X	X	X
VM	Andrew Chovanec	Power Grid Components	Chicago	Illinois	X	X	X	X	X	X	X
VM	Michael Christian	ABB	Elon	North Carolina	X	X	X	X	X	X	X
VM	Lucas Collette	Duquesne Light Co.	Beaver Falls	Pennsylvania	X	X	X	X	X	X	X
VM	Sergio Flores	Schneider Electric US, Inc.	Smyrna	Tennessee	X	X	X	X	X	X	X
VM	Robert Hanna	JST Power Equipment	Enterprise	Florida	X	X	X	X	X	X	X
VM	Jeremy Hensberger	Mitsubishi Electric	Gibsonia	Pennsylvania	X	X	X	X	X	X	X
VM	Victor Hermsillo	General Eletric					X	X			X
VM	Todd Irwin	GE Grid Solutions	Smithville	Missouri	X	X	X	X	X		X
VM	Christopher Jarnigan	Southern Company Services	Moody	Alabama	X	X	X	X	X	X	X
VM	Thomas Keels	kEElectric Engineering, PLLC	Mesa	Arizona	X		X	X	X	X	X
VM	Carl Kurinko	Hitachi Energy	North	Pennsylvania	X	X	X	X	X	X	X
VM	Brad Leccia	Eaton	Bethel Park	Pennsylvania			X	X	X	X	X
VM	Chang Hoon Lee	HYOSUNG	Changwon-Si	Seoul	X	X	X	X	X		X
VM	Yong Woo Lee	KERI						X	X		X
VM	Adrian Lopez	Powell Industries	Houston	Texas			X			X	X
VM	Chunming Ma	Burns and McConnell							X	X	X
VM	Vincent Marshall	Southern Company	Forest Park	Georgia	X		X	X	X	X	X
VM	Steven May	Southern Company	Forest Park	GA			X	X	X	X	X
VM	Neil McCord	KEC Precision LLC	Athens	Georgia	X		X	X	X	X	X
VM	Fernando Ordein	Dominion Energy	Glen Allen	Virginia				X	X	X	X
VM	Sumitabha Pal	Schneider Electric	Smyrna	Tennessee	X	X	X	X	X	X	X
VM	Lalit Patil	Eaton						X	X		X
VM	Craig Polchinski	Mitsubishi Electric Power	Pittsburgh	Pennsylvania	X	X			X	X	X
VM	Anthony Ponders	Meiden America Switchgear, Inc.						X	X	X	X
VM	Aaron Rexroad	Meiden America Switchgear, Inc.	Mauldin	South Carolina				X	X	X	X
VM	Anthony Ricciuti	EATON	Bethel Park	Pennsylvania	X		X	X	X	X	X
VM	Leonel Santos	Schneider Electric	Murfreesboro	Tennessee	X	X		X	X	X	X
VM	Victor Savulyak	KEMA	Chalfont	Pennsylvania	X		X			X	
VM	Daniel Schiffbauer	Toshiba International Corporation	Houston	Texas	X	X	X	X	X		X
VM	Carl Schuetz	ATC	Waukesha	Wisconsin	X	X	X	X	X	X	X
VM	Jeffrey Scott	Ameren	Bonne Terre	Missouri	X		X	X	X		X
VM	Michael Skidmore	AEP	Pickerington	Ohio	X	X	X	X			X
VM	Donald Steigerwalt	Duke Energy	Harrisburg	North Carolina	X		X	X	X	X	
VM	Vernon Toups	Siemens Energy Inc	Brandon	Mississippi	X	X	X	X	X		X
VM	Jeff Ward	Doble Engineering Company	Billerica	Massachusetts	X	X	X	X	X	X	X
VM	Casey Weeks	Siemens Energy, Inc.	Richland	Mississippi	X		X	X	X		X
VM	Jan Weisker	Siemens Energy	Berlin	Berlin	X		X	X	X	X	X
VM	Matt Westerdale	Bureau of Reclamation						X	X	P	
VM	Terry Woodyard	Siemens Industry, Inc.	Wendell	North Carolina	X	X	X	X	X	X	X
VM	Richard York	Mitsubishi Electric	Pittsburgh	Pennsylvania	X		X	X	X		X
VM	Mina Youssef	Eaton					X	X			X
VM	Samuel Zaharko	Mitsubishi Electric	Warrendale	Pennsylvania	X	X	X	X			X
NVM	Anatoly Akhunov	HICO America						X	X		X
NVM	Samuel Andris	KEMA Labs	Doylestown	Pennsylvania			X	X			
NVM	Jesus-Manuel Avila	ABB								X	
NVM	Harm Bannink	G&W Electric	Zelhem	Gelderland	X	X	X	X		X	

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
NVM	Paul Barnhart	UL, LLC	Walkertown	North Carolina	X	X				X	
NVM	Andrew Beckel	XCEL Energy						X		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
NVM	Sanket Bolar	Oncor						X		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
NVM	Jason Cunningham	Southern States, LLC	Atlanta	Georgia	X		X	X	X		X
NVM	John Deng	BC Hydro					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	
NVM	Boubacar Diallo	Southern States LLC	Fayetteville	Georgia			X			X	
NVM	Maxwell Eastman	Black and Veatch	Olathe	Kansas				X			X
NVM	Kaylor Garcia	Utility Solutions, Inc.	Lincolnton	North Carolina				X			
NVM	Mauricio Gonzalez	Avangrid							X	X	
NVM	Sean Guidry	OMICRON Electronics							X		
NVM	Nadia Hasnaoui	General Electric					X				
NVM	Stephanie Hayden	Meiden								X	
NVM	Christian Heinrich	Siemens AG	Berlin				X				
NVM	Jennifer Hunter	Mitsubishi Electric	Harmony	Pennsylvania			X	X	X		X
NVM	Roy Hutchins	Georgia Power Company	Forest Park	Georgia	X	X	X				
NVM	Bharatwaj Jagadeesan	Southern States LLC	Atlanta	Georgia	X	X					
NVM	Darin Jensen	Southern States , LLC					X		X		
NVM	David Johnson	HVCB Consulting	Temecula	California				X			
NVM	Hyoung Jin Joo	Hyundai Electric					X				
NVM	Jeffrey Jordan	Southern States, LLC							X		
NVM	John Kelly	USBR	Denver	Colorado	X	X					
NVM	KyungKyu Kim	HICO America	Pittsburgh	Pennsylvania				X			
NVM	Sangtae Kim	HICO America					X		X		
NVM	Yun Seong Kim	KERI						X			X
NVM	Vladmir Kirienko	Tavrida Electric						X			
NVM	Leo Lopez	WIKA Instrument Corporation	Lawrenceville	Georgia	X		X	X	X		X
NVM	Rafael Lopez	ABB								X	
NVM	Josh Lustig	Black and Veatch						X			
NVM	Peter Marzec	S&C Electric	Chicago	Illinois	X	X					
NVM	Paul Masterson	Meiden America Switchgear	Peachtree	Georgia	X		X	X	X	X	X
NVM	Aaron McReson	Meiden					X				
NVM	Gary Meekins	Southern States, LLC							X	X	X
NVM	David Mitchell	Mitch & Associates	Elizabeth	Colorado	X		X	X	X	X	X
NVM	Anthony Natale	HICO America	Pittsburgh	Pennsylvania	X			X	X		X
NVM	Raj Nayar	Siemens	Plano	Texas	X		X				
NVM	Miklos Orosz	Circuit Breaker Technology &	Murfreesboro	Tennessee			X		X		X
NVM	Conrad Pecile	Myers Power Products							X		
NVM	Damian Perrin	Entergy Services, LLC.	New Orleans	Louisiana			X	X			
NVM	Mark Peterson	XCEL Energy	Minneapolis	Minnesota				X			X
NVM	Laxminarayan Raja	University of Texas	Austin	Texas				X		P	
NVM	Rakesh Ranjan	Esgee Technologies Inc.	Austin	Texas	X		X				
NVM	Frank Richter	50Hertz Transmission							X		
NVM	Brian Roberts	Southern States	Hampton	Georgia				X	X		X
NVM	Jon Rogers	Siemens Energy						X			
NVM	Oscar Salas	Duke Energy	Sanford	Florida				X			
NVM	Alex Salinas	Doble/Vanguard	Ontario	California				X		X	X
NVM	Ben Sax	Nashville Electric Service	Nashville	Tennessee				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		
NVM	Devki Sharma	Retired	Halifax	Nova Scotia	X			X		X	X

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
NVM	Devki Sharma	Retired	Halifax	Nova Scotia	X			X		X	X
NVM	Hall Sigmon	Siemens Industry, Inc.						X			
NVM	Kirk Smith	Retired					X				
NVM	Lokesh Solanki	ABB					X				X
NVM	John Tarleton	Southern States, LLC							X	P	X
NVM	Tim Tillery	HOWARD INDUSTRIES	Laurel	Mississippi	X			X			
NVM	Joseph Usner	AEP	Columbus	Ohio	X	X	X	X			X
NVM	Jacob Walgenbach	Siemens	Wendell	North Carolina			X	X			X
NVM	Daniel Wolfe	Mitsubishi Electric	Warrendale	Pennsylvania			X	X	X		X
NVM	Xin Zhou	Eaton					X				