# Meeting Minutes of Working Group C37.017 Bushings for HVCB and GIS May 1, 2019 Burlington, VT

Chair: Devki Sharma

Vice-Chair: Dan Schiffbauer Secretary: Carl Schuetz

### <u>Introduction of members and guests</u>

Attendees: 45 Members: 11 Guests: 34

### Approval of agenda

Motion to approve: Xi Zhu Second: Victor Hermosillo

## Verbal call for patent identification

Result: No patent claim identified

### Report on JTCM at Anaheim on 16 Jan 2019

The Chair met with the Substation Committee working group at the Joint Technical Committee in Anaheim and received comments and suggestuions from the Substation Committee WG portion of the standard.

#### Review of comments received on draft 1 from Substation Committee working group

The Chair reviewed initial revisions to the document.

Received a comment that the Scope should not apply to capacitor bushings. Further clarification needed from the Std Coord to determine if the proposed comment would necessitate a needed change in the PAR. In order to avoid seeking IEC permission for definitions, several new definitions were provided and approved by the Substation Committee.

References to C37.06 were identified and these need to be changed to C37.04.

Attendee comment recommend addition of arcing distance as found in IEC

Table 1 format borrowed from IEC but loading values are defined by IEEE.

Discussion around Special Tests section of the document seismic testing-usually performed w/te apparatus it is mounted on. Concensus is to leave these as an agreement between Purchaser and Manufacturer.

Concern from an attendee regarding terminal loading – circuit breakers have loading in three directions but standard has only one cantilever rating. The chair explained that C37.04 is referenced and it provides ratings in 3 directions. The values of Table 1 do not apply for CB but apply for GIS bushings.

#### Action Items

Circulate the present draft for comments in Swgr and GIS. All comments to be incorporated and circulated by e-mail before the next Swgr mtg

#### **Next Meetings**

GIS working group, June 3-6 San Francisco, CA Switchgear Committee, Oct 6-10, San Diego, CA JTCM, Jan 12-16, Jacksonville, FL

## <u>Attendance</u>

_	Seet Name	Look Nove	Dala	Comment	Attended
	irst Name	Last Name	Role	Company	S19
	Michael	Anderson	Member	Retired	
IV	<i>M</i> auricio	Aristizabal	Member	ABB Meramec Instrument Transformer	
P	Brad	Armstrong	Guest	Co.	Χ
	Arun	Arora	Member	Retired	٨
	Georges	Auguste	Guest	Ameren MO	Χ
	George	Becker	Member	POWER Engineers	٨
	V.J. (Bill)	Bergman	Guest	Bergman& Associates Ltd.	
	Sautami	Bhatt	Guest	Bechtel OGC	Χ
ı		Billings	Member	John S Billings Consulting	Λ
•	Лichael	Boulus	Guest	PSE&G	Χ
	iteven	Brown	Guest	Allen & Hoshall	Λ
	ohn	Brunke	Member	Dr. John H. Brunke, P.E.	
	Arben	Bufi	Member	Hitachi T&D Solutions, Inc.	Χ
	David	Caverly	Guest	Trench Ltd.	X
	/incent	Chiodo	Member	HICO	Λ
	Andrew	Chovanec	Guest	GE Power	
	Лichael	Crawford	Guest	Mitsubishi Electric	Χ
	ason	Cunningham	Guest	Southern States, LLC	X
	Patrick	Di Lillo	Member	Consolidated Edison Co. of NY, Inc.	X
	effrey	Door	Member	The H-J Family of Companies	X
	(irk	Duncan	Guest	Hitachi T&D Solutions	^
	Pete	Dwyer	Guest	Dwyer Enterprises	
	Bernie	Dwyer	Guest	PECO	Χ
	imily	Eftink	Guest	Burns & McDonnell	X
	Arnaud	Ficheux	Member	AREVA T&D	^
	Raymond	Frazier	Member	Ameren	Χ
	David	Galicia	Member	Ameren	^
	eter	Glaesman	Guest	PCORE Electric Company, Inc.	Χ
	ohn	Hall	Guest	Tennessee Valley Authority	X
·	•			Mitsubishi Electric Power Products	
J	eremy	Hensberger	Guest	Inc.	
٧	/ictor	Hermosillo	Member	GE Grid Solutions	Χ
Е	dward	Hester	Guest	Entergy	Χ
J	ingxuan				
(.	Joanne)	Hu	Guest	RBJ Engineering Corporation	Χ
J	ennifer	Hunter	Guest	MEPPI	
Е	Bill	Hurst	Guest	GE	

Roy Hutchins Guest Southern Company Services X Todd Irwin Guest GE Grid Solutions X Christopher Jarnigan Guest Southern Company Services X Cory Johnson Member BPA Jungdae kim Guest hyosung X Thomas Kohler Guest Ameren Ronny Konrad Guest Huntsman Advanced Materials X Carl Kurinko Guest ABB Inc. X Scott Lanning Member S&C Electric CHANG HOON LEE Guest HYOSUNG Heavy industries X Hua Ying Liu Member Southern California Edison Bjorn Lofgren Guest Siemens Energy Leo Lopez Guest WIKA Instrument, LP X Antonio Mannarino Guest PSE&G X Vincent Marshall Guest Southern Company Services X Douglas Mason Guest ComEd X Steven May Guest Southern Company Services X Dawe Mitchell Guest Dominion Energy X Stephanie Montoya Member Southern California Edison Vasin Musa Member AEP Jeffrey Nelson Member Southern Company X Mary Owens Guest Eaton Justin Palmer Guest ELECTRONSYSTEM MD Pathik Patel Member Duke Energy Mark Pattison Guest ABB Nobby Rich Guest Dominion Virginia Power X Alex Salinas Guest Dominion Virginia Power X Stephanion Vice-
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Alex Salinas Guest Director of Operations X Vice-
Vice-
Daniel Schiffbauer Chair Toshiba International Corporation
American Transmission Company
Carl Schuetz Secretary (ATC) X
Devki Sharma Chair Entergy X
Ryan Sherry Guest ITC Holdings Corp. X
Sushil Shinde Member ABB Inc.
Robert Sicker Guest FirstEnergy Corp X
Michael Skidmore Member AEP X
Don Steigerwalt Guest Duke Energy Mitsubishi Electric Power Products,
Ryan Stone Member Inc.
Dragan Tabakovic Member Meramec Hubbell Power Systems
Jeffrey Ward Guest Doble Engineering Company X
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Terrance	Woodyard	Guest	Siemens Industry Inc.	
			Mitsubishi Electric Power Products	
Richard	York	Member	Inc.	
Wei	Zhang	Member	Hitachi T&D Solutions, Inc.	
Jim	Zhong	Guest	American Transmission Company	Χ
Xi	7hu	Member	GF Energy Management	Х