PC57.163 - WG for the Revision of IEEE Guide for Establishing Power Transformer Capability while under Geomagnetic Disturbances

3:15 PM to 4:30 PM Eastern Time, October 18, 2022 (Charlotte, NC)

Unapproved Meeting Minutes

The WG Chair Dan Blaydon presided over this meeting with both the Vice-Chair, Ramsis Girgis, and Secretary, Scott Digby, in attendance. Meeting attendance numbers as follows:

Total Attendance	83
Members in Attendance	33 (out of 47 members, quorum achieved)
Guests in Attendance	50
Guests Requesting Membership	8

Guests Requesting Membership (attendance at 2 out of 3 meetings required to qualify for membership): As during this meeting the document was approved by the Working Group for sponsor ballot, in accordance with clause 4.1 of the WG P&P manual new membership requests are not able to be accepted.

The requisite patent and IEEE-SA copyright policy slides were reviewed, with no items noted. The agenda was reviewed by the Chair and approved by unanimous consent. The minutes from the Spring-2022 meeting had been circulated along with the proposed agenda prior to the meeting. There were no changes to the Spring-2022 meeting minutes requested and they were approved by unanimous consent.

The Chair reviewed the project milestones and status, noting the PAR expiration date of December-2024 and the published document's expiration date of December-2025. The Chair noted that Drafts of the document had been circulated to the WG participants three (3) times since the Spring-22 WG meeting with comments received reviewed and incorporated as appropriate. With each circulation of the document there were fewer and fewer comments, and largely just editorial comments. There had been a tentative plan for a straw ballot of the document, but the general consensus seemed to be that the document has had adequate review at this point. The latest version, Draft -5B, had been transmitted to the WG participants prior to this meeting. The Chair provided a very high-level review of the comments and changes to the document since the Spring-2022 WG meeting.

There were no old business items to address.

During new business a <u>Motion</u> was made by Sanjib Som and <u>seconded</u> by Gary Hoffman to approve Draft -5B of the document for sponsor ballot. The vote was unanimous in favor of the motion, meeting the 2/3 supermajority thus the motion carried.

The Chair indicated his intent to make a motion at the SC meeting to approve moving the document to sponsor ballot.

The Chair recognized that the WG Secretary, Scott Digby had represented the WG on two occasions since the Spring-2022 WG meeting, first at a panel session at the IEEE PES General Meeting in Denver, CO and again at a NERC/EPRI workshop at the EPRI offices in Charlotte, NC, to provide a brief presentation on the status of the document and work of the WG.

The Chair noted that the document was planned to be the subject of an IEEE PES Trending Tech bulletin in December-2022. The WG Officers will be working with IEEE toward compiling the content for the bulletin.

At this time a <u>Motion</u> was made by Bruce Forsyth and <u>seconded</u> by Joe Watson to form a Comment Resolution Group (CRG) with the authority to incorporate changes during the balloting process for subsequent recirculations thru the normal balloting process on behalf of the WG. This motion carried by unanimous consent.

The Chair made the request for those who would like to join the CRG to send him an email indicating so.

The next planned meeting of the WG will be during the Spring-2022 Transformers Committee meetings, scheduled to be held in Milwaukee, WI. The WG Officers will assess the status of the balloting process and to confirm if this planned meeting is necessary.

The meeting adjourned prior to the 4:30 pm end time of the designated meeting time slot.

Respectfully Submitted, Scott Digby, WG Secretary

Role	First Name	Last Name	Affiliation
Chair	Daniel	Blaydon	Baltimore Gas & Electric
Vice-Chair	Ramsis	Girgis	Hitachi Energy
Secretary	Scott	Digby	Duke Energy
Member	Mats	Bernesjo	Hitachi Energy
Member	William	Boettger	Boettger Transformer Consulting LLC
Member	Hakim	Dulac	Advanced Power Technologies
Member	Bruce	Forsyth	Bruce Forsyth and Associates PLLC
Member	Anthony	Franchitti	PECO Energy Company
Member	Bill	Griesacker	Duquesne Light Co.
Member	Gary	Hoffman	Advanced Power Technologies
Member	Kurt	Kaineder	Siemens Energy
Member	Dmitriy	Klempner	Southern California Edison
Member	Balakrishnan	Mani	Virginia Transformer Corp.
Member	Kumar	Mani	Duke Energy
Member	Rogelio	Martinez	Georgia Transformer
Member	Martin	Munoz Molina	Orto de Mexico
Member	Anastasia	O'Malley	Consolidated Edison Co. of NY
Member	Sanjay	Patel	Smit Transformer
Member	Ion	Radu	Hitachi Energy
Member	Afshin	Rezaei-Zare	York University
Member	Markus	Schiessl	SGB
Member	Eric	Schleismann	Southern Company Services
Member	Sanjib	Som	Pennsylvania Transformer
Member	Marc	Taylor	JFE Shoji Power Canada Inc.
Member	Mark	Tostrud	Dynamic Ratings, Inc.
Member	Jason	Varnell	Doble Engineering Co.
Member	Kiran	Vedante	Ritz Instrument Transformers
Member	Rogerio	Verdolin	Verdolin Solutions Inc.
Member	David	Wallach	Duke Energy
Member	Alan	Washburn	Burns & McDonnell
Member	Joe	Watson	JD Watson and Associates Inc.
Member	Trenton	Williams	Advanced Power Technologies
Member	Waldemar	Ziomek	PTI Transformers
Guest	Kayland	Adams	SPX Transformer Solutions, Inc.
Guest	Thomas	Aikens	Virginia Transformer
Guest	Harry	Andrews	Bicron USA
Guest	Kush	Arora	Reinhausen
Guest	Gilles	Bargone	FISO Technologies Inc.
Guest	Enrique	Betancourt	Prolec GE
Guest	Piotr	Blaszczyk	Specialty Transformer Components
Guest	Juan Alf	Carrizabi	Prolec GE
Guest	Douglas	Craig	Richards Mfg
Guest	Samson (Sami)	Debass	EPRI EPRI
Guest	Joseph	Foldi	Foldi & Associates, Inc.
Guest	Raymond	Frazier	Ameren
Guest	Hector	Garza	Orto deMexico
Guest	JOSE ANTONIO	GONZALEZ	Georgia Transformers
Guest	Jeffrey	Gragert	Xcel Energy
Guest	JAVIER	HERNANDEZ	ORTO DE MEXICO
Guest	Akash	Joshi	Black & Veatch
Guest	Anton	Koshel	Delta Star Inc.
Guest	Andrew	Lawless	POTENCIA PARTNERS
Guest	Gustavo	Leal	Dominion Energy
Guest	JOSE LUIS	MACHAIN	PROLEC GE
Guest	Alberto	Martinez Mares	WEG Transformers USA
Guest	Lee	Matthews	Howard Industries
Guest	Robert	Mayer	Siemens Energy
Guest	Mama	Mbouombouo	Hitachi Energy
		Mendez Zamora	Prolec GE
Guest	Omar Kent	Miller	T&R Electric Supply Co
Guest	Yaw		Hyosung HICO
Guest		Nyanteh	
Guest	Tomas	Olsson	Hitachi Energy

Guest	Verena	Pellon	FPL
Guest	Oscar	Pinon	OTC Services
Guest	Ulf	Radbrandt	Hitachi Energy
Guest	William (Tommy)	Salmon	GE Grid Solutions
Guest	Amitabh	Sarkar	Virginia Transformer
Guest	Anil	Sawant	VIRGINIA TRANSFORMER
Guest	Hyeong	Sim	Jin Sim & Associates, PC
Guest	Andre	Simons	JFE Shoji
Guest	Kushal	Singh	ComEd
Guest	Mike	Spurlock	Spurlock Engineering Services
Guest	Fabian	Stacy	Hitachi Energy
Guest	Brad	Staley	Leeward Renewable Energy
Guest	Markus	Stank	Maschinenfabrik Reinhausen GmbH
Guest	Andy	Steineman	Delta Star Inc.
Guest	Cole	Van Dreel	American Transmission Company
Guest	Krishnamurthy	Vijayan	PTI Transformers LP
Guest	Dharam	Vir	Prolec GE Waukesha Inc
Guest	Jeffrey	Wright	Duquesne Light Co.
Guest	Baitun	Yang	R.E. Uptegraff
Guest	Kwasi	Yeboah	GE Grid Solution
Guest	Fang	Zhu	R.E. UPTEGRAFF MFG. CO