

## Minutes for Task Force on PD Testing of Class 1 Power Transformers

Chair: Don Ayers

Vice Chair: Javier Arteaga

Secretary: Israel Barrientos

Meeting Date: Monday 26<sup>th</sup> April 2021

Time: 10:45

### Attendance:

Members: 23

Guests: 75

Total attendance: 98

The meeting was called to order at 10:45 AM and attendance was recorded via a Poll. Membership requirements were explained.

The Patent and Copyright Slides were presented, no comments were made.

Current TF Membership is 35.

Quorum is 18, or more TF Members.

As the Member attendance reached 23, Quorum was attained.

The Chair then presented the Meeting Agenda, and was shown in the screen Ajith Varghese moved to approve the Agenda as shown. James Cross seconded. After no further discussion, the Agenda was approved as submitted.

The Nov 2020 Meeting Minutes as published were presented. James Cross moved for them to be approved. Peter Kleine seconded the motion. After no further discussion, the Meeting Minutes were approved as submitted.

The Chair presented the Scope of the TF, and a list of Subjects to Consider.

After some initial discussion, a motion was made by John Foschia:

“Classify PD Tests for Class I Power Transformers as Other Tests”.

Pougazhenthil Selvaraj seconded.

After a brief discussion and some explanation by Don Ayers and Bertrand Poulin, John Foschia withdrew his motion.

Some additional discussion ensued on the Need for Notes for Bushings or other items. No motion was made.

Discussion moved to the topic of how to further define the PD acceptance values in C57.12.90-2015, as Don Ayers indicated that the newest C57.12.90-2021 Draft 4, included different (reduced) values to those agreed by TF.

Phil Hopkinson made a motion to:

“Establish a section on C57.12.00 to express the agreed acceptance levels for PD for Class I Power Transformers as those contained in C57.12.90”

As Phil Hopkinson was not a member of the TF at this time, Ajith Varghese made an identical motion and after some discussion, he agreed to a friendly amendment as follows:

“Establish a section on C57.12.00 to express the agreed acceptance levels for PD for Class I Power Transformers as those contained in C57.12.90-2015 (500 pC for Max Acceptable, and 150 pC for Max Increase)”.

Sergio Hernandez seconded the motion.

After some discussion, a call for opposition was made, hearing none, the motion passed.

At 11:59 Peter Kleine moved to adjourn the meeting.

Onome Avonoma seconded.

A request for those against was made, hearing non, the motion carried unanimously.

The meeting was adjourned at 12:00.

Respectfully submitted  
Israel Barrientos  
TF Secretary.

Role	First Name	Last Name	Company
Guest	Tauhid Haque	Ansari	Hitachi ABB Power Grids
Vice-Chair	Javier	Arteaga	Hitachi ABB Power Grids
Member	Onome	Avanoma	MJ Consulting
Chair	Donald	Ayers	Ayers Transformer Consulting
Guest	Suresh	Babanna	SPX Transformer Solutions, Inc.
Secretary	Israel	Barrientos	Prolec GE
Guest	Allan	Bartek	Spruce Run Engineering LLC
Guest	Wallace	Binder	WBBinder Consultant
Guest	Ryan	Bishop	Minnesota Power
Guest	Piotr	Blaszczyk	Specialty Transformer Components LLC
Guest	Daniel	Blaydon	Baltimore Gas & Electric
Guest	William	Boettger	Boettger Transformer Consulting LLC
Guest	Joshua	Bohrn	PacifiCorp
Guest	Sanket	Bolar	Megger
Guest	Alain	Bolliger	HV TECHNOLOGIES, Inc.
Guest	Jeffrey	Britton	Phenix Technologies, Inc.
Member	David	Calitz	Siemens Energy
Guest	Jaroslav	Chorzepa	ABB Inc.
Member	James	Cross	Kinectrics
Member	Jorge	Cruz	PTI Transformers
Guest	Larry	Dix	Quality Switch, Inc.
Guest	Eric	Doak	D4EnergySolutions LLC
Guest	Evgenii	Ermakov	Hitachi ABB Power Grids
Guest	Marco	Espindola	Hitachi ABB Power Grids
Guest	Feras	Fattal	Manitoba Hydro
Guest	Reto	Fausch	RF Solutions
Guest	Paul Gabriel	Florida	Howard Industries, Inc.
Member	John	Foschia	SPX Transformer Solutions, Inc.
Member	Jose	Gamboa	H-J Family of Companies
Member	Carlos	Gaytan	Prolec GE
Member	Zoran	Goncin	PTI Transformers
Guest	Shawn	Gossett	Ameren
Guest	Jeffrey	Gragert	Xcel Energy
Member	Detlev	Gross	Power Diagnostix
Guest	Attila	Gyore	M&I Materials Ltd
Guest	Kyle	Heiden	EATON Corporation
Member	Sergio	Hernandez Cano	Hammond Power Solutions
Guest	John	Herron	Raytech USA
Guest	Steve	Holsomback	Southern Company Services
Guest	Philip	Hopkinson	HVOLT Inc.
Guest	Akash	Joshi	Black & Veatch
Guest	Sheldon	Kennedy	Niagara Transformer
Guest	Gary	King	Howard Industries
Member	Peter	Kleine	US Army Corps of Engineers
Guest	Mark	Lachman	Doble Engineering Co.

Role	First Name	Last Name	Company
Member	David	Larochelle	NDB Technologies
Guest	Fernando	Leal	Prolec GE
Guest	Moonhee	Lee	Hammond Power Solutions
Guest	Aleksandr	Levin	Weidmann Electrical Technology
Guest	Tiffany	Lucas	SPX Transformer Solutions, Inc.
Guest	Dennis	Marlow	DenMar TDS Transformers
Guest	Lee	Matthews	Howard Industries
Member	Matthew	McFadden	Oncor Electric Delivery
Guest	James	Mciver	Siemens Energy
Guest	Thomas	Melle	HIGHVOLT
Guest	Zachary	Millard	Great River Energy
Guest	Martin	Munoz Molina	Orto de Mexico
Member	Ali	Naderian	Metsco
Guest	Kristopher	Neild	Megger
Guest	Rodrigo	Ocon	Industrias IEM
Guest	Rudolf	Ogajanov	ABB Inc.
Member	Parminder	Panesar	Virginia Transformer Corp.
Guest	Harry	Pepe	Phenix Technologies, Inc.
Guest	Mark	Perkins	D4EnergySolutions LLC
Guest	Chris	Pitts	Howard Industries
Guest	Alvaro	Portillo	Ing. Alvaro Portillo
Guest	Bertrand	Poulin	Hitachi ABB Power Grids
Guest	Jeffrey	Ray	JLR Consulting, Inc.
Member	Leopoldo	Rodriguez	Transformer Testing Services LLC
Guest	Daniel	Sauer	EATON Corporation
Member	Pugal	Selvaraj	Virginia Transformer Corp.
Guest	Adam	Sewell	Quality Switch, Inc.
Guest	Peter	Sheridan	SGB USA, Inc.
Guest	Hemchandra	Shertukde	University of Hartford
Guest	Christopher	Slattery	FirstEnergy Corp.
Guest	Steven	Snyder	Hitachi ABB Power Grids
Guest	Markus	Soeller	Power Diagnostix
Guest	Brian	Sonnenberg	Instrument Transformers, LLC
Guest	Hampton	Steele	TVA
Member	Charles	Sweetser	OMICRON electronics Corp USA
Member	Janusz	Szczechowski	Maschinenfabrik Reinhausen
Guest	Dervis	Tekin	Meramec Instrument Transformer Co.
Guest	Risto	Trifunoski	Trench Limited
Member	Ajith	Varghese	SPX Transformer Solutions, Inc.
Guest	Dharam	Vir	SPX Transformer Solutions, Inc.
Member	Pragnesh	Vyas	Sunbelt-Solomon Solutions
Guest	Loren	Wagenaar	WagenTrans Consulting
Guest	Nicholas	Walder	EATON Corporation
Guest	Hugh	Waldrop	Memphis Light, Gas & Water
Guest	Evanne	Wang	DuPont

Role	First Name	Last Name	Company
Guest	Daniel	Weyer	Nebraska Public Power District
Guest	Dr. Alexander	Winter	HIGHVOLT Pruftechnik Dresden
Guest	Jeffrey	Wright	Duquesne Light Co.
Guest	Baitun	Yang	R.E. Uptegraff
Guest	Mana	Yazdani	Trench Limited
Guest	Joshua	Yun	Virginia Transformer Corporation
Guest	Anand	Zanwar	Siemens Energy
Guest	Michael	Zarnowski	Carte International