

## *PCS Task Force on General Requirements C57.12.00*

*Performance Characteristics Subcommittee  
IEEE / PES Transformers Committee*

*April 26, 2021 2:20 PM  
On-Line Meeting; Virtual, CT Time Zone USA*

### ***UNAPPROVED MINUTES***

The PCS Task Force on General Requirements for C57.12.00 met on Monday, April 26, 2021. The Chair Tauhid Ansari called the Group to order at 2:20 PM and reminded purpose and scope of the TF. The copyright statement from IEEE was presented to the Group, as well as the essential patents claim; none of the present was aware of issues related to this TF's activities. According to the on-line system (two polls), **33** Members and **48** guests were present. The quorum to conduct regular business was achieved, as **59** members are registered in the Task Force.

The following (identifiable) **11** guests requested membership:

Amitabh Sarkar	Virginia Transformers
Aniruddha Narawane	PDI
Elise Arnold	SGB-Smit
Javier Arteaga	Hitachi-ABB
Mark Lachman	Doble Engineering
Nitesh Patel	Hyundai Power Transformers USA
Phillip Hopkinson	HVOLT Inc.
Samraghi Dutta	Siemens Energy
Shawn Gosset	Ameren
Sylvain Plante	Hydro-Quebec
Vinay Mehrotra	SPX Transformer Solutions

The Agenda proposed for the TF Chair was approved by the Group (John K.K., E.Garcia), the Columbus (Fall 2019) minutes and the Fall 2020 minutes were next unanimously approved by the Group.

The Chair gave the Group quick update about status of old business items still open.

#### **1. OLD BUSINESS**

##### **A. Inclusion of Core information on Nameplate**

The Chair provided brief report from TF's online meeting held on past March 4th. Purpose of that meeting was to share with the Group new material collected from discussions with specialists and users of transformers. The comments were collected by the WG Chair and summarized in form of new version of proposed additions to Table 6 "Nameplate Information" of C57.12.00. On new rows 25, 26 of the Table it would be specified type of core (shell/ 'core') and number of wound legs, only for "C" type nameplate. No other design information would be requested. The floor was open to discussion.

It was explained (D.Sauer/Eaton) that the WG C57.12.80 had not achieved consensus yet regarding a new definition of shell/core type transformers. Other participants expressed opinions against and in favor of providing core type information on nameplate. It was clarified (R.Girgis) that if the expectation was to draw conclusions about GIC performance just from that core information it would not be possible.

The Chair asked for a motion to include the new proposed extensions to C57.12.00 Table 6. Sanjib Som(/Eduardo Garcia) made the motion "not to include core information on C57.12.00" requirements. The Group went to vote with 6 "in favor", 32 votes "against", and 7 abstentions. The motion did not pass.

Next step was discussion about further interest on including the information, for with an alternate format. Ryan Musgrove (/Chris Slattery) made the motion "to include core information on ("C" class) transformer nameplate". The count gave 27 "in favor", 4 "against" and 10 abstentions; the motion passed.

R.Girgis agreed to develop a new text for extension of Table 6 of C57.12.00, with a description of core type.

Next the TF Chair called for Group's approval for an on-line meeting in approximately one month, to vote on final modifications to Table 6. The request was unanimously approved.

Being at the end of the meeting time slot, the Chair called for a motion to adjourn (Rogerio Verdolin/Eduardo Garcia).

The meeting was adjourned at 15:35 PM.

Respectfully submitted,

Tauhid Ansari  
WG Chair

Enrique Betancourt  
Co-Chair and Acting Secretary

First Name	Last Name	Company
Gregory	Anderson	GW Anderson & Associates, Inc.
Dennis	Marlow	DenMar TDS Transformers
Bruce	Forsyth	Bruce Forsyth and Associates LLC
Marion	Jaroszewski	Delta Star Inc.
William	Boettger	Boettger Transformer Consulting LLC
Joe	Nims	Allen & Hoshall, Inc.
Bill	Griesacker	Duquesne Light Co.
Joseph	Foldi	Foldi & Associates, Inc.
Mark	Perkins	D4EnergySolutions LLC
Javier	Arteaga	Hitachi ABB Power Grids
Javier	Arteaga	Hitachi ABB Power Grids
Eduardo	Garcia Wild	Siemens Energy
Steven	Snyder	Hitachi ABB Power Grids
Raj	Ahuja	Raj Ahuja Consulting
Dinesh	Sankarakurup	Duke Energy
Bertrand	Poulin	Hitachi ABB Power Grids
Ed	teNyenhuis	Hitachi ABB Power Grids
Shelby	Walters	Howard Industries
Donald	Ayers	Ayers Transformer Consulting
Ramsis	Girgis	Hitachi ABB Power Grids
Philip	Hopkinson	HVOLT Inc.
Sheldon	Kennedy	Niagara Transformer
Christopher	Baumgartner	We Energies
Enrique	Betancourt	Prolec GE
Allan	Bartek	Spruce Run Engineering LLC
Sanjay	Patel	Royal Smit Transformers
Marnie	Roussell	Entergy
Craig	Colopy	EATON Corporation
Vinay	Mehrotra	SPX Transformer Solutions, Inc.
Rogério	Verdolin	Verdolin Solutions Inc.
Don	Dorris	Nashville Electric Service
David	Wallach	Duke Energy
James	Graham	Weidmann Electrical Technology
James	Graham	Weidmann Electrical Technology
Dharam	Vir	SPX Transformer Solutions, Inc.
Michael	Craven	Phoenix Engineering Services
John	Herron	Raytech USA
Brian	Penny	American Transmission Co.
Zan	Kiparizoski	Howard Industries
Sanjib	Som	Pennsylvania Transformer

Daniel	Blaydon	Baltimore Gas & Electric
Daniel	Sauer	EATON Corporation
Ajith	Varghese	SPX Transformer Solutions, Inc.
Krishnamurthy	Vijayan	PTI Transformers
Ryan	Musgrove	Oklahoma Gas & Electric
Shankar	Nambi	Bechtel
Shankar	Nambi	Bechtel
Darren	Brown	Howard Industries
Roderick	Sauls	Southern Company Services
Sukhdev	Walia	New Energy Power Co.
Mark	Lachman	Doble Engineering Co.
Myron	Bell	Delta Star Inc.
John	John	Virginia Transformer Corp.
Aniruddha	Narawane	Power Distribution, Inc. (PDI)
Jarrold	Prince	ERMCO
Mats	Bernesjo	Hitachi ABB Power Grids
Marc	Taylor	Cogent Power Inc.
Rainer	Frotscher	Maschinenfabrik Reinhausen
Amitabh	Sarkar	Virginia Transformer Corp.
Markus	Schiessl	SGB
Christopher	Slattery	FirstEnergy Corp.
Toby	Johnson	Pacificorp
Kristopher	Neild	Megger
Jason	Varnell	Doble Engineering Co.
Anthony	Franchitti	PECO Energy Company
William	Elliott	General Electric
Thomas	Dauzat	General Electric
Jeffrey	Gragert	Xcel Energy
Kris	Zibert	Allgeier, Martin and Associates
Anton	Koshel	Delta Star Inc.
Sanket	Bolar	Megger
Feras	Fattal	Manitoba Hydro
Cihangir	Sen	Duke Energy
Daniel	Weyer	Nebraska Public Power District
Nitesh	Patel	Hyundai Power Transformers USA
Everton	De Oliveira	Siemens Ltda
Sylvain	Plante	Hydro-Quebec
Shawn	Gossett	Ameren
Olle	Benzler	Megger
Suresh	Babanna	SPX Transformer Solutions, Inc.