## Minutes Working Group C57.123 Loss Measurement Guide Pittsburgh, PA – Mar 26, 2018

The Working Group met at 15:15 in the Allegheny Room on March 26, 2018. This was the second meeting since receiving the PAR for revision of the guide. This guide was first published in 2002, revised in 2010 and there is now a PAR for revision that expires in 2021.

- The Chair, Ed teNyenhuis, led the meeting. The secretary, Anthony Franchitti, took the minutes.
- The following persons were present:

Jason Attard - Guest

William Dietrich - Guest

Reto Fausch - Guest

Anthony Franchitti – Member (Secretary)

David Garcia - Guest

Ramsis Girgis - Member

Ted Johnstone - Guest

Ricardo Lopes - Guest

**Dhiru Patel - Guest** 

Jarrod Prince - Guest

Adnan Rashid - Guest

Eduardo Robles - Guest

Adam Rosenstein - Guest

Mahesh Sampat - Guest

H. Jin Sim - Guest

Erin Spiewak - Guest

Andrew Steineman - Member

Tanya Steinhauser - Guest

Craig Stiegemeier - Member

Craig Swinderman - Guest

Dragan Tabakovic - Guest

Marc Taylor - Guest

Ed teNyenhuis – Member (Chair)

Lin Tong - Guest

Kiran Vedante - Guest

Juntao Zhong - Guest

- Four of the six members were present. Therefore, a quorum was reached.
- A motion to approve the meeting minutes was made by Ramsis Girgis and seconded by Andy Steineman. There were no comments and the minutes were approved unanimously.
- The Agenda was presented and a motion to approve the agenda was made by Ramsis Girgis and seconded by Andy Steineman. There were no comments and the agenda was approved unanimously.
- Discussion regarding the Scope of C57.123 ensued as to whether this guide should include Shunt Reactors. It was agreed that another guide (C57.41) covers Shunt Reactors and should not be part of C57.123 Scope.

## **OLD BUSINESS**

- Agenda Items were covered as follows.
- Results of the PCS Survey on Phase Angle Correction (Sect. 4.4.1) and Bridge Method (Sect. 4.5.4) was presented by the Chair. It was determined from the comments and discussion that both methods should be retained in the guide but that section 4.4.1 should be revised to clarify when phase angle correction may be applied. Ramsis Girgis agreed to re-write this section.
- Comments from Mark Perkins on 3.5.3, 4.4.4.2 & 4.5.4 were presented and discussed. The Chair will incorporate Mark's comments into the draft guide and check with the C57.12.90 WG regarding adding discussion on the use of capacitors to correct phase angle and smooth voltage waveform during no-load loss measurements with a high impedance source. The Chair suggested that the use of capacitors during NLL measurements should be added as a cautionary note in section 3.5.3.
- Updates on Assigned tasks from the Fall 2017 were presented by the Chair:
  - Sections 3.1 to 3.5.2 were reviewed by Ramsis Girgis and draft updates were presented and discussed. A new paragraph to section 3.2.10 describing temperature effects to no-load loss measurements of lower quality core steels was added by Ramsis. General agreement was obtained from the WG to keep the paragraph as drafted.
  - Section 3.5.3 was reviewed by Bertrand Poulin. Mark Perkins also provided comments for this section which were reviewed at the meeting as mentioned above. The Chair will incorporate Mark's comments into the draft of C57.123.
  - Section 4.5.3 Test of Three-Phase Transformer with a Single-Phase Voltage: Due to the practicality difficulties in this method, it was discussed whether this section should be deleted in its entirety. The Chair will discuss the possibility of eliminating this section with Bertrand Poulin.
  - Sections 4.5.4 & 5 were to be reviewed by Eddy So. Due to time constraints, he could not able to complete his review. The Chair will ask for Eddy's review to be completed.
  - Section 6 was to be reviewed by Ramsis Girgis. Ramsis will review this section.
  - Section 7 was assigned to Reto Fauseh for review.
  - Section 8 was reviewed by Andy Steineman. Andy had no comments for this section.
  - The bibliography will be reviewed by Eddy So and Bertrand Poulin.
- It was agreed by the WG to have the above sections reviewed and comments provided within two months of this meeting. The Chair will then draft the revision to C57.123 and send out for comments before the next meeting.

## **NEW BUSINESS**

■ There was no new business to discuss.

The meeting was adjourned at 16:10 with a motion by Ramsis Girgis and seconded by Andy Steineman.