

**Working Group for
Standard Requirements for Phase Shifting Transformers
WG IEEE/IEC 60076-57-1202**

**Meeting Minutes – April 14, 2015
San Antonio, Texas USA**

Raj Ahuja, Chair; Paul Jarman, Vice-Chair; Stephen Antosz, Secretary

The WG met from 11:00 AM to 12:15 PM.

Welcome announcements were made. Introductions of all in attendance were done. The Washington DC minutes of the previous meeting were approved. The Agenda was presented and approved. The attendance roster was circulated.

Agenda:

- Introduction of members & guests
- Roll call for quorum
- Approval of Spring 2014 minutes
- Status on response from IEEE Comment Resolution
- Updates on CDV
- Input from WG members
- Future Schedule
- Adjourn

There were a total of 48 in attendance. 15 members and 33 guests. A few guests requested membership but we are not taking any new members at this point, since the work is so far along already. There were 15 of 27 members in attendance, so we had a quorum.

The Chair gave a report on a summary of the WG activities done so far and planned activities for future schedule.

Ballot Response from IEEE Members on Draft

- Ballot initiated on 8/18/14, and closed on 9/18/14
- Response received from 89%: approval rate 92%, abstain 2%.
- No. of Comments received: 67: 26 Technical, 32 Editorial, 9 General
- Comments were discussed at Washington DC and Tokyo, and document revised in Feb. 2014

Next Steps for IEEE

- Update Comment Resolution
- Update CDV
- Initiate Ballot

Ballot Response from IEC Member Countries on Committee Draft

- Ballot initiated on 5/16/14, closed on 9/5/14
- Response on draft received from 3 countries – France, Germany and Italy
- No. of Comments received: 43: 28 Technical, 14 Editorial, 1 General
- Comments discussed at Washington DC & Tokyo; document revised in Feb 2015
- CDV will be sent to all IEC Member countries on 4/17/15

IEC and IEEE Target Dates

- IEC
 - Ø CD March 31st 2014 - Actual May 2014
 - Ø CDV October 2014 -- Actual April 2015
 - Ø FDIS If required October 2015
 - Ø IS/TS March 31st 2015 – 1 Year Extension will be required – Plan to complete by March 2016
- IEEE
 - Ø PAR Expires 12/31/2016 – Plan to publish Standard by March 2016

Reviewed all the IEEE ballot comments. Most were easily resolved and agreed to. There were a few open issues, as follows:

1. Tom Lunquist's ballot comment about 1G continuous acceleration during transport (in section 6.14), and that this is not adequate for rail transportation in the US. After much discussion, Don Chu will send a suggested wording change for consideration.
2. Paul Morakinyo suggested that a contact life curve be established for the advance/retard switch (ARS); because it is a special tap changer with special requirements for change over. This is not in the document and should be added. After much discussion about establishing a minimum number of operations (such as 100,000) as a benchmark, Axel Kraemer from Reinhausen was tasked with investigating and will send some comments to try to address this.
3. Discussion about 80% level for lightning impulse test (LIMT) as a routine, and 100% as a type test. (Section 13.12.5). No decision made. This will be studied further.

Michael Thompson, representing the IEEE Power System Relaying Committee attended as a guest and will send some comments on the document.

The meeting adjourned.

Respectfully submitted,
Stephen Antosz, IEEE WG Secretary