

## **“AUDIBLE SOUND AND VIBRATIONS” SC**

**Meeting Minutes  
Minneapolis, MN  
October 16, 2007  
Chairman: Jeewan Puri**

The Sub - Committee met at 8:00 AM with 15 members and 7 guests present.

Because of other work duties, the SC chairman could not be at the Transformer Committee meetings. The WG and SC meetings were chaired by Ramsis Girgis on Jeewan’s behalf.

### **Chairman Remarks:**

- Dates / locations for future Transformers Standards Committee meetings are:
  - Spring 2008: March 16 – 20, 2008, Westin Hotel, Charlotte, NC.
  - Fall 2008: October 5 – 9, 2008, Hotel Porto Palacio, Porto, Portugal
  - Spring 2009, April 19 -23, Southern US location
  - Fall 2009, October 18 – 22, 2009, Location TBD
- IEEE T&D Conference: April 20 – 25, 2008, Chicago, IL
- IEEE PES Meeting: July 20 – 24, 2008, in Pittsburgh, Pa. Submission of papers for this meeting is November 1 – 30, 2007.
- Permission was granted by IEC that will enable the IEEE WG to use text from document IEC 60076-10-1 in the IEEE Guide being developed.
- Those who are active in the SCs and WGs and still not members of the Standards committee are encouraged to request membership

### **Report on activities of WG on “Noise Measurement Guide”**

The WG met at 3:15 PM with 8 members and 8 guests present.

First item on the Agenda was to bring up to the attention of the WG that new items, such as Load noise, Sound Intensity measuring method, and the wall sound reflection factor, which are dealt with in length in the Guide, are not part of the present section – 13 of C57.12.90. The Chairman reported that he confirmed with the Administrative SC that the Guide, including these items, could not be published until the reference Standard itself includes these same items. Work on development of the Guide can still continue in parallel with the effort of revising section – 13 of C57.12.90. The WG agreed.

The next agenda item discussed was the need to add these three items to section – 13 of C57.12.90. The WG agreed. These are already part of the IEC Standards for many years. The attempt now will be to ensure that proper conditions for accurate measurement of noise and appropriate limits for correction factors are clearly stated in the Standard. This is an opportunity for the IEEE Standards group to improve on the more advanced IEC Standards to include knowledge, in the area of noise measuring techniques, acquired in

recent years due to increasingly tougher requirements for low and ultra low noise level transformers by a number of customers in USA and around the world. The SC also agreed upon including these items in the section – 13 of C57.12.90.

Therefore, the plan for the Charlotte meeting is to have Ramsis Girgis present to the WG and ASV SC the background of the development of proposed conditions for accurate noise level measurements using the Sound Intensity method. Chris Ploetner will present the background of the “Environmental Correction factor”. The objective of these presentations is to reach an agreement on the proper conditions for different noise measuring methods as well as appropriate limit on the “Environmental correction”.

It was also reported by Ramsis Girgis that the revised section – 13 of C57.12.90, in its present form, will need a significant amount of improvements both technically and editorially. This is in addition to including agreed – upon conditions for accurate measurements, etc., Ramsis Girgis will prepare Draft – 3 of this section before the Charlotte meeting.

Subsequently, a tutorial on transformer and reactor noise measurements will be conducted in the 2008 fall meeting in Porto, Portugal. This will precede the finalization of revision of section 13 of C57.12.90.

#### **50 – 60 Hz Conversion of noise level measurement**

~~—The document of the 50 – 60 Hz Frequency Conversion of Transformer Performance Parameters, to be added as an Appendix to C57.12.90, has been completed; including agreed upon text in past three SC meetings. will have sections added onThe wording is being prepared by the “Audible Noise and Vibrations” SC. Once this is complete, the wording of this conversion will be submitted for inclusion in the new revision of C57.12.00 & C57.12.90.~~

—  
The part of the document on noise level conversion will be sent for Survey at the ASV SC level. Based on the feedback from this Survey, the document will be finalized and sent for the upcoming balloting of C57.12.90. This is to occur before the end of 2007.

Meeting was adjourned at 9:10 AM.

Submitted by: Ramsis Girgis