"AUDIBLE SOUND AND VIBRATIONS" SC

Meeting Minutes
Lombard, Il
October 28, 2009
Chairman: Jeewan Puri

ASV Sub Committee met at 9:30 AM on Wednesday with 15 members and 34 guests present. After the introduction of the participants and the Chairman's remarks the following items were discussed:

- **WG Report on The revision of Section 13 of Test codes IEEE C57.12.90 and IEEE C57.12.91 (Ramsis Girgis – Chairman):**

  The working group is presently involved in proposing changes to Section 13 of the test codes for sound level measurement procedures and for including sound intensity measurement procedure in the test code. This review is based on new work that Ramsis and his colleagues have completed toward improving the accuracy of the sound intensity measurement method. All the changes to Section 13 will be coordinated with the corresponding revisions on IEC Sound Level Measurement Standard 60078-10 so that these documents remain harmonized.

  The WG discussed the following three proposals:

  1. The Chairman presented data that showed a consistent / and linear relationship between (P – I) as a parameter and the magnitude of error in the measured values of Noise level using the "Sound Intensity Method". The following proposals were accepted:

  - Allowing a maximum value of (P – I) of 4 dB with no penalty
  - Allowing a maximum value of (P – I) of 6 dB, but applying a penalty of 1 dB when $4 < (P - I) \leq 5$ and 2 dB when $5 < (P - I) \leq 6$

  2. It was proposed that the equation given in the IEC Standard 60076-10 for correcting sound pressure measurements due to sound reflections from the walls should be included in the IEEE test codes except that only two reflection coefficients of 0.2 and 0.35 should be used for calculating measurement corrections for testing in the factory and testing in rooms with sound proofing materials.

  It was also proposed that the allowable correction for this effect should be limited to 3dB instead of 7dB as given in the IEC standard 60076-10.

  WG was in general agreement with this proposal.

  3. It was proposed that the presently prescribed equation in the IEC Standard 60076-10 does not calculate load noise power levels and should not be adopted in the IEEE

test codes for determining if winding noise levels are necessary. It was agreed that these measurements should be made if the customer specifies it.

New Business

Dr. Chris Ploetner brought up the topic of whether measuring transformer noise at 1 ft from the transformer at ONAN is the right approach. This will be discussed in the next meeting of this WG.

Next draft of Sound Abatement Guide C57.136 – Allen Darwin: Allen reported that this guide will be due for revision in 2010. This work will be done only after Section 13 of the test standards have been modified.

There being no new business, the meeting adjourned at 10:45 am.

Jeewan Puri
Chairman - ASVSC