

**TO:** Members and Guests - Audible Sound and Vibrations Subcommittee

**FROM:** Jeewan Puri (Chairman.)

**DATE** August 21, 2005

**SUBJECT:** Attachments and Agenda for our next meeting in October , 2005 in Memphis, Tennessee.

Dear SC Participants;

Attached are the minutes of our last meeting in Jackson, Mississippi for your review.

Attached also is a Proposed Sound Level table for power transformers for your comments. Please send me your alternate proposals before October 15<sup>th</sup> so that we may discuss them in our next meeting. Note that this table has been constructed using Mr. McNut's formulas that are the basis of the present sound level tables.

The agenda for our next Subcommittee meeting in Memphis will be as follows:

1. Introduction of Guests and Members.
2. SC Chairman's report and comments.
3. Review of the Comments on the attached Standard Sound Levels for Power Transformers.
4. WG Report on the comments on Draft 4 of Sound Level Measurement Guide
5. New business
6. Adjourn.

Looking forward to our next meeting in Memphis

*Jeewan Puri*

## **AUDIBLE NOISE AND VIBRATION SUBCOMMITTEE**

### **Meeting Minutes Jackson, Mississippi March 16, 2005 Chairman: Jeewan Puri**

Audible Sound and Vibrations subcommittee met at 8:00 AM on March 16, 2005 with sixteen members and five guests present.

Chairman's Report. – Jeewan Puri reported on the pending item dealing with the revision NEMA TR1 Table 2 for standard sound levels for Power Transformers. In the San Diego meeting it was decided that this table should be extended to include additional transformer rating. The present sound levels specified in this table should not be changed.

It was agreed that Jeewan Puri will circulate the extended sound level table among the subcommittee members and obtain comments for discussions in the next meeting. It was agreed that this table will be finally included in the Sound Level Measurement Guide.

WG Report – Jeewan Puri chaired the meeting of the WG for writing Sound Level Measurement Guide. The WG reviewed comments on Draft 3 of the Guide. A total of ten comments were discussed resolved. These comments were mostly editorial. The technical comments added information on Dry Type reactors.

All the comments will be incorporated in Draft 4 of the Guide for circulation among the members of the WG.

#### **New Business**

- Allen Darwin pointed out that the Sound Level Mitigation Guide will be up for reaffirmation or revision next year. This document could either be reaffirmed or modified to transfer part of this information to the sound level measurement guide. Subcommittee members will be surveyed to obtain input on these issues.
- Ramsis Girgis made a brief presentation on the load noise measurement on large power transformers. He pointed out that in low noise level units winding noise could be a significant contributor to the over all noise level of the transformers.

Transformer users must specify total noise level for their transformers and understand that load noise decreases with load on the transformer.

It was agreed that a tutorial on the “Critical issues related to the development of sound level measurement guide” should be presented. This should address the following topics:

- Sound Level Measurement Techniques.

- Sources of Noise in transformers – Load and No Load noise.
- Transmission and Radiation of noise.
- Noise in reactors.
- Any other topics?

Participants of this meeting are requested to provide input regarding the topics that should be included in this tutorial and indicate if they would like to be a presenter in this tutorial.

The meeting adjourned at 9:15 AM

Jeewan Puri