

**Working Group on Semiconductor Power Transformers – C57.18.10**

**Unapproved Meeting Minutes**

**Sheraton Wall Center Hotel, Vancouver, BC  
Grand Ballroom AB  
11:00 am, October 25, 2016**

The Working Group met in the Grand Ballroom AB meeting room

There were 27 people present. 7 old members plus 5 new members and 15 guests present.

The patent call was given. Nobody replied with any patent issues.

The minutes of the April, 2016 meeting in Atlanta were approved as written.

**Old Business**

- Sheldon presented the approved PAR. Bill Whitehead to update draft standard with new scope from PAR.
- Want to harmonize with IEC standards as much as possible.

**New Business**

- Topics for discussion in new standard, Phase Shifted Windings, Electrostatic Shields, Interphase applications, Circuit Breaker Interactions and Snubbers, non-classical harmonics associated with new inverters and drives.
  - Some phase shifted transformers are covered by patents. Standard will only cover general phase shifted windings rather than specific examples.
  - Will mention circuit breaker interactions due to use of these transformers with breakers. However, this will be covered in detail elsewhere.
- Eddy Currents and Stray Losses. Paul Buddingh- Would like guidance on Eddy currents to remain in standard because it is an issue in the field. Eduardo Tolcachir.- Need to keep division between eddy and stray losses to be able to calculate currents for testing. Rick Marek thinks simple percentages are dangerous to use for complicated rectifier transformers. John John- When harmonic information is available when we use information from customer. Not always available. Vijay Tendulkar- dual secondaries with uneven loads can cause effect on heating. % values are ok for two windings but are not good for more complicated windings. Stephan Voss - For multiple winding transformers simple values are not good enough.
- Paul Buddingh- Suggested mentioning high resistance grounding can cause common mode noise problems in drive transformers.
- It was mentioned that the IEEE uses the term “rectifiers” while the IEC uses “converter”. Why not change to match terminology? Sheldon said that title of standard has rectifier listed but scope covers the more general case. Also, need to mention rectifiers could be in source as well as in the load.

## IEEE/PES TRANSFORMERS COMMITTEE

With no further business, the meeting was adjourned at 11:55.

The Working Group will meet again at the Spring 2017 meeting in New Orleans, LA

Chairman: Sheldon Kennedy

Vice Chairman: Bill Whitehead

Secretary: David Walker