

## **REVISION OF IEEE C57.21; SURVEY OF PERFORMANCE CHARACTERISTICS S.C.**

### **To Performance Characteristics SC Members;**

The consensus of the W.G. tasked with the revision of IEEE C57.21 IEEE Standard Requirements, Terminology and Test Code for Shunt Reactors Rated Over 500 kVA is that the revision process is now essentially complete; technical issues/content are complete but some editorial work to be completed (including a final update of References and Bibliography). The highlights of the revision process include the following.

- (i) A normative annex has been added to cover the specific requirements for dry-type air-core thyristor controlled shunt reactors which are an important component of Static VAR Control (SVC) Systems. Specific sections, clauses, tables etc. in the main body of IEEE C57.21 are referenced re specification and test code. Other aspects of specification and test code are covered in the annex.
  
- (ii) An informative annex has been added to cover dielectric stresses imposed on shunt reactors during switching. The objective of this annex is to provide guidance re the application of shunt reactors; especially in consideration of the significant switching duty. Formal input re the content of this annex was requested of the IEEE Switchgear Committee (SWC) and was provided. Bill Long, Chairman of the HVCB S.C. asked for volunteers to review Annex B and Anne Bosma subsequently reviewed the annex and provided input/approval. Anne is also the Chairman of IEC TC 17 Switchgear Committee. Input was also received from members of IEC MT32 on Inductive Load Switching via Dave Peelo.
  
- (iii) Table 5A and 5B in the currently published version of IEEE C57.21 have been combined into one table; Table 5 Insulation Levels of Shunt Reactors. Separate tables for dry-type and oil-immersed shunt reactors were not deemed necessary as test levels are network dependent and are independent of shunt reactor

technology. Maximum system voltage is introduced to be consistent with terminology in the IEC reactor standard.

Input is requested from Performance Characteristics S.C. members. No informal ballot is being conducted but it is assumed that all interested S.C. members will provide input even if it is only to “ok” the revision work carried out. I am asking for input/participation of all interested S.C. members at this time to avoid negative ballots during the formal IEEE balloting process to be undertaken in the near future. In other words the main objective of this survey is to be proactive and deal with any issues that may result in negative ballots during the formal IEEE balloting process now. I will assume that those S.C. members who do not participate in this request for input are not interested in this document and will not be part of the formal ballot pool. That being said I hope that the level of participation of S.C. members will be high as I value their expertise. Thank you very much in advance for your input and assistance. I value your time and efforts. All responses should be sent to Richard Dudley by e-mail at [richardd@ca.trenchgroup.com](mailto:richardd@ca.trenchgroup.com) . If necessary, telephone contact is at 416-298-8108. Please note that I would like to have all responses no later than March 31,2006.

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Chairman W.G. for the Revision  
of IEEE C57.21

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