## **Unapproved Minutes**

IEEE/PES Transformers Committee Standards Subcommittee Meeting October 27, 2004 Las Vegas, CA

1. Meeting Attendance

- a. The Standards Subcommittee met on Wednesday, October 27, 2004 at 4:30 PM. There were approximately 15 members and 10 guests present. (Due to oversight by the subcommittee Chair, a roster was not circulated. This number is an estimate based on memory recollection of those present during the meeting)
- 2. Approval of previous meeting minutes
  - a. The meeting minutes from the Spring, 2004 meeting in San Diego was approved as written.
- 3. Working Group Report
  - a. Continuous Revision of C57.12.00 & C57.12.90 Subhash Tuli, WG Chair
    - i. Draft 3 of the documents are being developed to addressed the many comments and negatives on metrification received from the D2 ballot in 2002.
    - ii. There are considerable editorial challenges in working with the D2 document provided by the IEEE. The word documents we have are converted from the FrameMaker document used by IEEE for the D2 Ballot.
    - iii. Subhash made a commitment to complete the required work on both PC57.12.00 and PC57.12.90 for recirculation ballot submittal prior to the end of 2004.
  - b. PC 57.144 Guide for Metrification of Transformer Standards Tim Olson, WG Chair
    - i. The document was approved by RevCom in June of 2004.
  - c. C57.12.80 Terminology for Power & Distribution Transformers WG Chair Tim Raymond
    - i. Work is currently underway to pursue the revision of the C57.12.80-2002. Definitions such as *thermally-upgraded paper* are bring considered.
    - ii. The working group is still actively seeking representative participation from each of the subcommittees.
  - d. IEEE 62 IEEE Guide for Diagnostic Field Testing of Power Apparatus Part 1: Oil Filled Power Transformers, Regulators, and Reactor. Wally Binder, WG Chair
    - The document has gone through reaffirmation ballot (in 2003) with negatives. Subsequently, there was a recirculation with 99% approval. Currently working on packaging the necessary documentation for RevCom approval. Anticipate submission before year end.

## 4. Old Business

- a. IEEE/IEC Dual Logo
  - i. IEEE C57.135 / IEC 62032 Guide for Application, Testing, Installation and Operation of Phase Shifting Transformers Currently under balloting process of IEC TC 14.
- b. NEMA Standards Status update on obtaining electronic copies of the NEMA documents
  - i. Initial contact has been made with the NEMA staff member regarding the availability of the relevant NEMA document in word format. No further progress to report at this point.
- c. Cross Reference of IEEE/IEC Standards IEC TC10, TC14, TC36 and TC98 and the IEEE C57 series

- i. The current available references are:
  - 1. Excel Spreadsheet from IEEE
  - 2. PDF file from Jin Sim comparison of requirements
- ii. These documents are not up-to-date. After a brief discussion it was decided the work of updating these reference documents be best handled by a newly formed task force under the Standards Subcommittee.
- iii. Stephen Beckman has volunteered to take on the responsibility of chairing the new TF on IEC/IEEE Cross Reference. The primary scope of this new TF is to provide an easy cross reference of the current IEC and IEEE transformer standards. The details of the TF scope and the deliverables will be developed prior to the start of the first TF meeting.
  - Task Force Chair contact info: Stephen Beckman beckmansa@ieee.org
- d. C57.12.00 Section reference Assignment of responsible subcommittee
  - i. Don Platts has volunteered to review of the current C57.12.00-2000 version and submit for further discussion at our next meeting

## 5. New Business

- a. Future IEC/IEEE Dual Logo candidates.
- b. A selected list of IEEE Standards was review briefly during the meeting to solicit comments.
- c. David Aho voiced concerns that C57.15 is currently not being consider as good candidate for dual logo. David provide clarification that currently there is no C57.15 counter part in the IEC standards. In fact countries that rely on the IEC standards use IEEE C57.15 when specifying voltage regulators. Based on this discussion, C57.15 was added back in to the list. The current list of the candidates are listed below. This list will be reviewed by the committee officers and IEEE staff for prioritization of dual logo consideration.
  - IEEE Std 32-1972 IEEE Standard Requirements, Terminology, and Test Procedures for Neutral Grounding Devices.
    (This standard is being revised under PC57.32)
  - ii. IEEE Std 62-1995 IEEE Guide for Diagnostic Field Testing of Electric Power Apparatus - Part 1: Oil Filled Power Transformers, Regulators, and Reactors (currently under reaffirmation)
  - iii. PC57.12.60 IEEE Standard Test Procedure for Thermal Evaluation of Insulation Systems for Ventilated Dry-Type Power and Distribution Transformers (This is a revision of IEEE Std C57.12.56-1986 and IEEE Std C57.12.60-1998. Coordination is taking place with TC98)
  - iv. PC57.13 IEEE Standard Requirements for Instrument Transformers
  - v. PC57.15 IEEE Standard Requirements, Terminology, and Test Code for Step-Voltage Regulators
  - vi. IEEE Std C57.93-1995 IEEE Guide for Installation of Liquid-Immersed Power Transformers (currently undergoing revision)
  - vii. IEEE Std C57.94-1982 IEEE Recommended Practice for Installation, Application, Operation, and Maintenance of Dry-Type General Purpose Distribution and Power Transformers

- viii. IEEE Std C57.110-1998 IEEE Recommended Practice for Establishing Transformer Capability When Supplying Nonsinusoidal Load Currents
- ix. IEEE Std C57.116-1989 IEEE Guide for Transformers Directly Connected to Generators
- x. IEEE Std C57.119-2001 IEEE Recommended Practice for Performing Temperature Rise Tests on Oil Immersed Power Transformers at Loads Beyond Nameplate Ratings
- xi. IEEE Std C57.123-2002 IEEE Guide for Transformer Loss Measurement
- xii. IEEE Std C57.136-2000 IEEE Guide for Sound Level Abatement and Determination for Liquid-Immersed Power Transformers and Shunt Reactors Rated Over 500 kVA
- xiii. PC57.140 Guide for Evaluation and Reconditioning of Liquid Immersed Power Transformers
- xiv. PC57.142 A Guide To Describe The Occurrence And Mitigation Of Switching Transients Induced By Transformer-Breaker Interaction
- xv. PC57.143 Guide for Application for Monitoring Equipment to Liquid-Immersed Transformers and Components
- xvi. PC57.147 Natural Based Esther Fluids

## **6.** Adjournment

a. The meeting adjourned around 5:30PM.