

## **C57.13 Instrument Transformers – J. Smith**

### **1. Chair's Remarks & Announcements**

The Instrument Transformer Subcommittee met on Tues, Mar 21 at 1:45 PM. 9 members and 9 guests attended. The meeting was chaired by R. McTaggart. The previous meeting's minutes were approved as written and there were no Patent issues.

### **2. Working Group Reports**

#### **2.1 Working Group on Test Requirements for High Voltage Instruments Transformers Rated 115 kV and above**

The WG met on Mar 21, 2006. Five members and six guests attended the meeting. It was chaired by R. McTaggart.

The agenda was approved as written.

Minutes of the Memphis meeting were also approved as written.

None of the attendees were aware of any relevant patent issues.

The following points were discussed:

- Feedback on C57.13.5 was solicited but none received
- A PAR has been approved, but it is for a full-use Standard, whereas the original plan was to keep it as trial use. Several members of the WG expressed concerns about this. It is expected that balloters will scrutinize it more carefully when it is full use and we can expect negative ballots and many comments.
- Three documents which were revised based on discussions in the Memphis meeting were reviewed:
  - Annex H concerning current transformers used as unbalance current protection of capacitor banks;
  - Clause 4.5 on temperature rise of terminals;
  - Annex I on current transformers having transient performance.

Minor changes were made and these will be part of the next draft of C57.13.5.

#### **2.2 PAR P1601 Optical Current and Voltage Sensing Systems**

There was no report from this WG in the SC meeting but it had met on Mar 20<sup>th</sup> and the following are the minutes of that meeting:

Session chaired by: F. Rahmatian (TC/ITSC)

Attendees: Paul Millward, Ross McTaggart, Larry Davis, Vladimir Khalin, Chris Tenhaagen, Clayton Burns, Vuong Nguyen, Dieter Wagner, Michael Haas, Bill Henning, Rolando Gomez, Les Recksiedler, Peter Zhao, Ljubomir Kojovic, Tom Nelson.

- IEEE disclosure requirements regarding patent issues related to the WG work were presented
  - Mr. Rahmatian asked if anyone is aware of patents relating to the content of PAR 1601 work. There were no responses. It was noted that no patent or IP was disclosed or identified as relevant to P1601 work.
- Minutes of meeting #12 of P1601 at Transformers Committee meeting, Oct 24, 2005, Memphis, were reviewed and approved.
- PAR status and timetable were reviewed
  - Has been extended to 2008
  - Balloting to start in Dec 2007 or sooner (targeting Dec 2006)
- Update on other standards/industry Activities was given:
  - IEC 61850-9-2 and IEEE/UCA Guide (rev 3) for digital interface to instrument transformers
  - CSA series (Canadian Standards) to be release in Q3 2006
  - CIGRE WG A3.15 work on non-conventional instrument transformers
- Text of a preliminary draft was assigned amongst attendees for review and at least editorial feedback to Mr. Rahmatian by March 28, 2006.

pp. 1-3	Farnoosh Rahmatian
pp. 4-6	Paul Millward
pp. 7-9	Ross McTaggart
pp. 10-12	Larry Davis
pp. 13-15	Vladimir Khalin
pp. 16-18	Chris Tenhaagen
pp. 19-21	Clayton Burns
pp. 22-24	Vuong Nguyen
pp. 25-27	Dieter Wagner
pp. 28-30	Michael Haas
pp. 31-33	Bill Henning
pp. 34-36	Tom Nelson

- Several points with regards to the present draft (D04) was raised for addition or comment as follows:
  - Reference Dr. So paper on metrology and traceability
  - Table B1-B4 to be combined and completed for lower voltages (<25 kV) by C. Tenhaagen
  - It will be helpful to include a clause addressing accuracy versus temperature (both outdoor parts and indoor parts). See Clause 10.9 in the draft. Provide temperature ranges and rate of temperature change levels (5 K/hour and 10 K/hour classes).
  - It will be helpful to include some performance requirements under vibration in steady state conditions. E.g., Special Test to measure/quantify if/how vibration of CT head It will be helpful to include translates to signal.
- Next Scheduled Working Group Meetings
  - IEEE/PES General Meeting, June 18-22, 2006, Montréal, Quebec
  - IEEE/PES Transformers Committee Meeting, Oct, 23, 2006, Montreal, Quebec

### **2.3 WG on C57.13 Revision – Tom Nelson**

This WG did not meet but it was decided in the SC to re-circulate the latest draft for comments

### **3. Special Presentations**

Lubo Kojic made presentations on Rogowski Coils and on IEC TC38 which were both well received.

### **4. Old Business**

Under old business, the use of IEEE C57.113 (PD Measurement in Power Transformers and Reactors) for our Standard was discussed. It was decided that we would refer to relevant clauses in C57.13.

### **5. New Business**

Under new business, Vladimir Khalin volunteered to provide requested information to the working group on Transformer Monitoring

### **6. Adjournment**

The meeting was adjourned at 3 PM