

**Capacitor Subcommittee  
of the  
IEEE PES Transmission and Distribution Committee  
2013 Joint Technical Committee Meeting Minutes  
Memphis, Tennessee**

**Wednesday, January 16, 2013**

**1. General meeting introductions and acknowledgments**

14 Member in attendance

Introductions

Tom Grebe- Chair-Website

Richard Sevigny- Vice Chairman- Membership Roster

Paul Marken- Meeting Minutes

Agenda was reviewed and approved by unanimous consent.

**2. Approval of minutes of previous meeting**

Minutes were reviewed

Motion by Jeff Nelson, second by Mark McVey to approve minutes as submitted.

Minutes approved by unanimous consent.

**3. Membership review**

A member info sheet was circulated where corrections/additions could be marked.

Tom gave an overview of the roster update efforts as well as the leadership plans for the future of the subcommittee.

**4. Chairman's report**

Tom didn't have a formal report and will leave individual working group reports to the individual chairs.

Jeff Nelson shared some feedback received (from Technical Council) on the changes being instituted to the General Meeting paper requirements and some of the thoughts behind it. Mainly this was done to distinguish between conference papers and transaction papers. This also forces papers to be at least 60% different when a conference paper is re-written and resubmitted as the length forces enough new material.

Jeff also discussed future Paper Forum format and some of the other changes being implemented to improve the sessions. There was discussion on the old written discussion format that used to be more common. Jeff reports that this is still possible but has a limited window for submission of written discussion.

**5. Liaison reports:**

- NEMA – Bill Chai
  - A meeting took place via conference call in August. And a sit down meeting took place in November. The NEMA strategic plan for capacitors was discussed, including GMD and promotion of capacitors as part of the smart grid. Standard 18 was also discussed, performance tests, and no changes were recommended.

- Bill will remain as the chair and Vincent Deslauriers will be vice chair.
- Another conference call may take place in the spring. A location of a sit-down meeting has not yet been chosen. Some of the details may depend on the IEC meeting.
- IEC, CIGRE – Bill Chai
  - Two meetings took place last year. The first one was in March in Munich. Bill is interested in discussion harmonizing the IEEE and IEC standards on performance tests. IEC 60871-1 does not include performance tests. Bill proposed adding the performance test wording to the IEC -1 standard and this generated much discussion. The major concern of the group was duplication. The thinking is to make this similar to the IEC overvoltage tests. Perhaps the -2 standard could have the overvoltage test removed. There was a proposal circulating for discussion. The number days and shots per day in the tests were being considered.
  - In November in Bangalore, India the second meeting took place. The performance test name was changed to overvoltage test. This draft is circulating for comment. Expectation is for partial closure in 2013. The -2 aging test is still being discussed with a goal of more parity between the requirements for meeting design standards.
  - Temperature requirements were another point of disagreement as some warm countries do not have need for -40 degree C standards. Instead of a standard, a menu of temperatures has been developed.
  - IEC has a Series Capacitor standard working group that will begin meeting again. This group will meet in Rio de Janeiro in May.
  - The keynote speaker at the CIGRE meeting was the head of State Grid in China. Bill commented that he gave an excellent address with a vision of a global power system where energy can move to/from anywhere in the world.
  - Mark McVey shared his comments from his participation in the extreme weather substation group. An example given was that the weather patterns are changing and flood designs may need to be at the 500-year flood level as the old 100-year flood level looks more like the 5-year flood level now.
- IEEE Std. C37-116 – Core Agendum Mark McVey
  - Liaison report. Document is up for revision. Chair is not presently identified.

## 6. Working group reports:

- W.G. on Capacitor Technical Papers – Tom Grebe
  - For 2012 – 5 papers review/approvals took place. 3 papers were accepted, 1 was rejected, 1 was revised and resubmitted. There seems to be some problems with the system with submittals being stuck.
- W.G. on Capacitor Bibliography – Richard Sevigny
  - Nothing to report. Richard is ready to accept any new information if anyone has something.
- W.G. on Shunt Capacitor Banks (Std 18) – Jeff Nelson
  - Revision was approved at the standards board meeting. Final copy from editorial review is expected soon. This will be reviewed and should be published electronically by mid-February. A technical report will be generated summarizing the standard. Target date is mid-summer.
  - A new chair and secretary may be needed for this group. Tom gave his formal thanks for Jeff's help.
- W.G. on Standard for Series Capacitors – Mark McVey
  - Mark reported 10 people in attendance. Covered recirculation that is ending now. There were only 4 comments and these are being addressed. The revcom submission can be loaded as the negatives have all been satisfied. This will make sure this makes the next agenda. A meeting in

Vancouver will be held to re-cap any new negatives and then discuss the next steps for this working group. Mark plans to step down as chair but not before a successor can be named.

- W.G. on the Application Guide for Shunt Power Capacitors (STD 1036) – Joe Meisner
  - This group did not meet. Tom will talk with Joe who was not able to attend, to discuss the status of the PAR.
- T.F. on Capacitor GMD Mitigation – Mark McVey
  - There were 20 people in this meeting. There was a skeleton outline displayed with the intent of soliciting who can be contributors to this paper.
- W.G. on Reactor Applications for Capacitor Switching Technologies – Roy Alexander
  - 17 attendees in this session. A presentation was given on the impact of capacitor discharge on switchgear. The test reported on was 100kA, 25kHz through a breaker 2400 times (Once every 2 minutes). A technical report will ultimately be generated and circulated to the group for comment. A transaction paper may be a future possibility.
  - If it can be summarized in 5 pages, Jeff suggested a conference paper may be another possibility. One thought is that conference papers may be more practicable, while transaction papers tend to be more academic.

## 7. Old business:

IEC TC33 chairman will be stepping down a year from now.

## 8. New business:

Capacitor Subcommittee Website Maintenance – Tom Grebe

- Tom has been working on this. The T&D website work has been turned over to Dan Sabin. Tom's plan is planning on continuing to maintain the website. He has been passionately maintaining this and keeping the information current. Members should continue to share information with Tom so that he can keep the website as current as possible.
- At the end of 2013, Tom will rotate out as chair and Richard will become chair. The number of subcommittee officers, their position, and tenure was discussed. The group suggested three officers with two-year terms in each position for a 6 year cycle.
- 18 may need a new chair also.

Richard reported he is chairing the group examining the Canadian standard for power factor correction in industry applications. This is part of the Canadian Electrical Code.

Low voltage capacitor questions have come up and need for a standards document was suggested. ABB offered that they have a standard and that they would be interested in supporting such an effort.

## 9. Future meetings:

- July 21-25, 2013 (General Meeting) in Vancouver, British Columbia
- 2014 JTCM – TBD
  - The above future meetings were reviewed. Location of next year's JTCM is not yet known. This seems to be working well as the location for the second meeting so the intent is to continue meeting at JTCM.