

**Capacitor Subcommittee  
of the  
Transmission and Distribution Committee  
2015 IEEE PES Joint Technical Committee Meetings  
Anaheim, CA  
Meeting Minutes**

**Wednesday, January 14, 2015**

**I. Introduction**

The meeting was called to order by the Subcommittee Chairman Richard Sévigny. Richard gave an overview of the activities this week.

Attendees introduced themselves. The following 12 people were in attendance:

<u>Name</u>	<u>Company</u>	<u>Member/ Guest</u>
Richard Sévigny	Hydro Quebec	Chairman
Mike Hulse	Bonneville Power	Vice Chairman
Paul Marken	GE Energy Management	Secretary
Roy Alexander	RWA Engineering LLC	Member
Bill Chai	GE - CPQP	Member
Halim Malaj	ConEd	Member
Mark McVey	Dominion Virginia Power	Member
Joe Meisner	AEP	Member
Jeff Nelson	TVA	Member
Vittal Rebbapragada	Consultant	Member
Suresh Chandran	EPCOS	Member *
Peter Goldstrass	EPCOS	Member *

\* New Member – Welcome!

**II. Previous Meeting Minutes**

The minutes from the July 30, 2014 General Meeting in MD were reviewed. Minutes were unanimously approved as submitted, by a motion from Roy Alexander that was seconded by Joe Meisner.

**III. Membership Review**

Membership roster was sent around for review / correction. There are currently 35 active members in the subcommittee. This subcommittee is open to new members and guests.

(Membership roster can be found at: <http://grouper.ieee.org/groups/td/cap/>)

## **IV. Chairman's Report**

Richard has been attending T&D committee meetings. He brought up IEC's request to use 1036 as a base for their new document. There were some guidelines given but this does not appear to be an easy thing to do. IEC would like to absorb 1036 but this is not acceptable to IEEE. There doesn't seem to be another way to have a common document. This was a nice idea but it appears a common document may not work out.

Revisions of Standards are now on a 10 year cycle. Consideration is being given to reducing ballot time to a maximum of 65 days. Numbering using a dash 1, dash 2 is also being considered.

Richard invited Jeff Nelson to share information from the Tech Council.

Jeff reported on the Tech Council meeting of November 2014. Tech Council consists of all the chairs of all of the technical committees. Committee structure and coordination was examined in this last meeting. There are 3 initial proposals for T&D committee.

1. Move General Systems Subcommittee under PSACE Committee
2. Move Integration of Renewable Energy subcommittee under Energy Development and Power Generation Committee
3. Move HVDC / FACTS subcommittee under Substations Committee

There is also consideration of PSIM becoming part of T&D.

These are just proposed and not finalized but are being considered.

The technical report that Roy completed seems to have gone very smoothly. It is now available to PES members for free download at the resource center. If anyone wants the link, please email Richard.

## **V. Liaison Reports**

### **A. NEMA – Bill Chai**

Not much going on at NEMA. Tried to schedule a meeting but never found an agreeable time. April 1<sup>st</sup> is the planned date for the next meeting. Previous program manager changed positions. A new one was being appointed but then retired. John Caskey of NEMA agreed to act as interim program manager for the capacitor CP1 sector.

### **B. IEC, CIGRE**

#### **IEC – Bill Chai**

The WG on IEC60143 standard was held in November in Kista, Sweden. This meeting was well attended. There were three representatives from North America. Comments were received and discussed and amicable agreements were reached. The final IEC60143-1 and IEC60143-3 documents should be released this year. The revised IEC60871-2 is expected to be published in 2015.

The IEC/TC33 chairman was also discussed. She was not able to attend the last plenary meeting and as a result, additional TC33 working group meetings are not scheduled.

Presently there is not a lot happening because the chairman has been unsupported.

#### **CIGRE – Bill Chai**

Bill attended WG A3.33 on SC equipment experience in power systems. Participation seems to be lacking from major users and equipment providers for this to be of any significant value. WG report is to be issued in 2015.

CIGRE meeting was in August in Paris. There is a new working group being formed called “C4/B5.41 Challenges with series compensation application in power systems when overcompensating lines” The working group is presently seeking members.

Maintenance 19 is thinking of having a meeting this fall.

## **VI. Working Group Reports**

### **A. W.G. on Capacitor Technical Papers – Richard Sévigny**

One paper was submitted in the past year. It was rejected.

### **B. W.G. on Capacitor Bibliography – Richard Sévigny**

The Capacitor Switching Application Technical Report will be added to the bibliography.

### **C. Shunt Capacitor W.G. (Std. 18) – Jeff Nelson**

Jeff would like to step down and let someone else chair this working group. It will soon be time to start working on a revision to Standard 18.

### **D. Shunt Capacitor Technical Report W.G. – Jeff Nelson**

A summary paper is being created to discuss background and why things are the way they are in 18 and also in 1036. Jeff apologized that some of his other responsibilities has caused slow progress to take place on this effort. Jeff has reported that he is willing to step down and allow someone else to take over the working group

### **E. Series Capacitor W.G. – Mark McVey**

Mark is preparing to request a PAR to work on 824. He has gathered documents and records showing other suggested changes.

Mark has been working with K13 who is working on C37.116. They have been considering our proposed changes and accepting most of them.

#### **F. W.G. on the Application Guide for Shunt Power Capacitors (Std. 1036) – Joe Meisner**

Met Tuesday afternoon at there were 9 people there. A few submissions were reviewed including terminal to case calculations. Some other things may be added as an annex, including some of the things Bruce submitted, some things from Roy's document, and some things from the GMD task force.

#### **G. T.F. on Capacitor GMD Mitigation – Mark McVey**

The GMD task force met. Voltage THD needs to be added yet. The group would like to see more specific information on how this affects the three technologies of fuseless, internally fused, or externally fused capacitors. Mark also put a short presentation on for the NEMA group and was well received. Mark also did a presentation for PSRC this week and was also well received.

The hope is that this paper may be a helpful guide on what to study and what some of the issues are that need to be considered. There may be two papers. One on ratings and one on the blocking devices that could be built. Another idea is to write a technical report and then write a paper that points to the technical report.

#### **H. W.G. on Reactor Applications for Capacitor Switching Technologies – Roy Alexander**

This group has completed its work. The technical report was posted. It is not easy to find.

[From the PES home page click on the Briefcase icon (Resource center) then type TR16 in the search field]

### **VII. Old Business**

Nothing.

The subcommittee website can be found at:

<http://grouper.ieee.org/groups/td/cap/>

### **VIII. New Business**

- A task force will be led by Roy Alexander to look at Capacitor Discharge. This task force will plan to meet at the General Meeting in Denver.
- A new task force to study low voltage capacitors will be formed. This will be chaired by Peter Goldstrass. This task force will plan to meet at the General Meeting in Denver.
- 1531 will need to be revised by 2018. A chair might be needed for this as well as for 18. Joe will consider doing this and let us know by the next meeting.

### **IX. Future Meetings**

- The 2015 PES General Meeting will be in Denver, CO.
- The 2016 winter meeting has possibilities of being back in New Orleans.
- The 2016 PES General Meeting will be in Boston, MA. This will be the 3<sup>rd</sup> week instead of the fourth week in July like normal.
- The 2017 PES General Meeting will be in Chicago, IL