Capacitor Subcommittee of the

Transmission and Distribution Committee 2013 IEEE PES General Meeting Minutes Vancouver, BC Canada

Wednesday, July 24, 2013

I. Introduction

The meeting was called to order by the Subcommittee Chairman Tom Grebe.

Attendee introductions were completed. The following people were in attendance:

<u>Name</u>	Company	Member/ Guest
Tom Grebe	Electrotek Concepts	Chairman
Richard Sévigny	Hydro Quebec	Vice Chairman
Roy Alexander	RWA Engineering LLC	Member
Bill Chai	GE - CPQP	Member
D. Joe Meisner	AEP	Member
Clay Feller	Eaton	Member
Roberto Gonzales-Ramos	PG&E	Guest
Ron Sharp	PG&E	Guest
Steve Miller	Commonwealth Associates	Guest
Jan Paramalingani	MEPPI	Guest
Bruce English	GE - Energy	Member
Biswajit Singh	ABB Capacitor	Member

II. Previous Meeting Minutes

The minutes from the January 2013 Memphis (JTCM) meeting were approved as submitted by a motion from Roy Alexander that was seconded by Mark McVey.

III. Membership Review

There are currently 39 members in the subcommittee,

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

This subcommittee is open to new members and guests. The following people were added to the Capacitor Subcommittee Membership Roster as Observers:

- Roberto Gonzales-Ramos and Ron Sharp from PG&E
- Steve Miller from Commonwealth Associates
- Jan Paramalingani from MEPPI

IV. Chairman's Report

This is the last report from Tom Grebe as Chairman. He did not have anything formal to report.

Please submit any items you would like posted to the subcommittee website: http://grouper.ieee.org/groups/td/cap/

V. Liaison Reports

A. NEMA - B. Chai

- The participants had a meeting in May 2013.
- The decision to disband NEMA CP1 has been approved and should be finalized by the end of the year.
- NEMA is undertaking an initiative to promote capacitor usage in the future. As an example, they are trying to promote capacitor usage in the Smart Grid field.

B. IEC, CIGRE - B. Chai

IEC -

- Resulting from the last IEC TC 33 meeting in Bangalore in November 2012, the standard IEC 60871-1 and -2 have been modified and sent as CDV documents. For more details regarding these issues, see the Memphis meeting minutes.
- There will be a meeting for series capacitors involving the standard IEC 60143-1 -2 to be held in Rio the Janeiro, Brazil on September 11-12, 2013.

CIGRE -

- No meeting is planned regarding any capacitor subjects.
- A new group is about to be formed in regards to UHV (Ultra High voltage) and they are requesting participants. B. Chai strongly suggests that an IEEE member should participate.

VI. Working Group Reports

A. W.G. on Capacitor Technical Papers – Tom Grebe

A number of capacitor placement papers were reviewed. No PES Letters were reviewed.

- Three transactions papers reviewed:
 - o 1 Revise / Resubmit
 - o 2 Accepted

Anyone that would like to review papers, please submit your name and email address to Tom Grebe so he can add you to the reviewers list. This is open to anyone.

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

R. Sévigny submitted revised bibliographies that were added to the Subcommittee Website:

- Four transactions papers regarding shunt capacitor applications
- One transactions paper regarding series capacitor applications

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

No Activity

D. Shunt Capacitor Technical Report W.G. - Jeff Nelson

Mark McVey reported for Jeff Nelson. Three additional comments have been added to the draft. The document will be revised and resubmitted to the working group.

E. W.G. on the Series Capacitor Guide (P1726) - Mark McVey

Four negative votes have been reviewed by the members and these should be changed to positive. They are considered to be editorial; however one could be seen as technical. M. McVey will take resolve this issue. The actual PAR is ending this year and should not been extended.

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

The meeting was not official because there a PAR has not been submitted yet. The PAR request will be completed before the end of the year. It should be effective for the next meeting in New Orleans. The group has been reviewing the actual document and sufficient material has been identified to launch the revision process. A first draft will be sent to member this fall for review. A draft working group P&P Manual is also being developed.

G. W.G. on Reactor Applications for Capacitor Switching Technologies - Roy Alexander

Thirteen people attended this working group meeting. Different issues have been discussed such as outrush/inrush currents, possible voltage escalation, current versus energy, and oil circuit breakers under high frequency current shock wave. The document should be reviewed again this fall before the final version which is expected for December 2013.

H. T.F. on Capacitor GMD Mitigation – Mark McVey

Mark McVey reported that the group had a good meeting with a lively discussion. Mark presented background information regarding the effect of GMD on capacitors and other equipment. The group will be considering various topics regarding GMD mitigation devices that include can include capacitors. The goal is to have a draft report ready for review before the next meeting.

VII. Old Business

None.

VIII. New Business

The new officer rotation will be in effect for the next meeting (New Orleans) in January 2014:

- Richard Sévigny (Hydro Quebec) will take charge of the chairman position
- Mike Hulse (Bonneville Power Administration) will take charge of the vice-chairman position

At this time, nobody has been identified for the secretary position. We are expecting members to show their interest in the position before the next meeting. Tom Grebe summarized the different responsibilities for each of these positions for the members.

Tom Grebe requested information from each working group for the next website update.

IX. Future Meetings

- January 12-16, 2014 JTCM in New Orleans, LA, USA
- July 27-31, 2014 PES General Meeting in National Harbor, MD (DC metro area) USA

Minutes submitted by Richard Sévigny and Tom Grebe