

Generator Subcommittee (Synchronous Machinery Subcommittee)

Minutes of Meeting, June 13, 2005 San Francisco, CA

Foreword: As announced by incoming chairman Oleg Wasynczuk during this year's meeting, the minutes of the 2005 (and 2004) meetings and all other information associated with the activities of the Generator Subcommittee are now being posted on a website that is temporarily located at the following address:

<http://shay.ecn.purdue.edu/~wasynczuk/gsc/gsc>

When appropriate, the Generator Subcommittee's website will be linked to the website of the PES Electrical Machinery Committee.

1. WELCOME AND INTRODUCTION

The meeting was called to order at 4:00 PM by the chairman, Lon Montgomery. The 13 members (2 new members included) and 4 guests briefly introduced themselves.

Secretary Bill Bartley had emailed the agenda for 2005, the minutes for 2004, and the current membership roster to the membership on June 1.

Vice-chairman Oleg Wasynczuk distributed copies of the agenda and all pre-submitted WG and liaison reports, and the current membership list for the GSC (SMSC), and he asked those present to provide corrections and/or additions to their existing information on the roster.

2. APPROVAL of 2004 MINUTES

After some brief discussion by EMC Chairman Osama Mohammed about the fact that the name change to "Generator Subcommittee" is not yet final, the members of the subcommittee accepted the minutes of the June 2004 meeting without objection. The minutes of the 2004 meeting are posted on the GSC website.

3. OFFICERS' REPORTS

Chairman Lon Montgomery provided a one-page report in the form of a revised two year plan.

Vice-chairman Oleg Wasynczuk provided a one-page report of highlights of activities of the SC. Those highlights included announcement of a website for the subcommittee, where these minutes and all attachments are to be posted.

Secretary Bill Bartley provided his report to the mailing list of the subcommittee on June 1, 2005. Bill was not able to attend the subcommittee meeting.

All three officers' reports are posted on the GSC website.

4. CHANGE OF OFFICERS

The following new officers of the Subcommittee were installed:

Chairman - Oleg Wasynczuk; Vice Chair - William Bartley; Secretary - John Ready

5. WORKING GROUP (WG) REPORTS

All WG reports are posted on the GSC website. Highlights are included below:

WG-1 Awards and Recognition -

Rik Nilsson submitted a written report of nominations for awards that were submitted to the EMC. In Rik's absence, Oleg Wasynczuk read the report to the meeting attendees. Highlights are that G. Kliman et al have been nominated for a prize paper, and Lon Montgomery has been nominated for an award for service as SMSC chairman.

WG-2 Advisory Group to IEC

Incoming WG-2 Chairman John Amos provided a verbal report to explain that he and John Yagielski of GE intend for WG-2 to function as a panel of experts to represent the US position in IEC standards creation and maintenance, in much the same way that Brian Gott had previously arranged for WG-2 to function.

WG-3 Generator Rewinds

WG-4 Chairman Bill Bartley submitted a written report, which Vice-chairman Jim Michalec presented. The IEEE Standards Association has approved the PAR and has assigned P1662 to the guide. Draft 6 of the guide is now complete and is being further developed by the WG members.

WG-4 IEEE C50.12 &13 Revision

WG-4 Chairman Jim Michalec verbally reported highlights of his previously submitted written report. Standards C50.12 & C50.13 (Draft 10 of both) have been re-balloted with 100% affirmative votes regarding technical content. After making format refinements suggested by the IEEE Standards Coordinating Committees, Jim is submitting the D10 drafts to the IEEE Standards Board for approval at their meeting in September 2005.

WG-7 Revision of IEEE 115 , "Test Procedures for Synchronous Machines"

Innocent Kamwa verbally reported highlights of the written report that WG-7 Chairman Haran Karmaker had previously submitted. The IEEE Standards Board has approved the PAR and has assigned P115 to the revised standard. The WG intends to hold its first meeting on June 16 at the PES 2005 meeting. The focus of the revision to IEEE 115 is to be creating a new section on vibration testing of synchronous machines.

WG-8 Revision of IEEE 67, "Operation and Maintenance of Turbine Generators"

Oleg Wasynczuk presented a written report that had been submitted by WG-8 Chairman Geoff Klempner. Geoff reported that the proposed revision to IEEE 67 had gone to ballot, and that one negative ballot had been registered. Geoff further explained that the reasons described by the one negative balloter revealed that the negative vote should have been "affirmative with comments".

6. LIAISON REPORTS

A. Materials Subcommittee

Oleg Wasynczuk reported that the MSC has provided a written report of the minutes of their meeting at the April 2005 Doble Conference. That report is posted in the liaison reports section of the GSC website.

B. Excitation Systems Subcommittee

GSC guest Murray Coultres verbally summarized the recent work of the Excitation Systems Subcommittee on IEEE 421.1 through 421.5, and he provided a written report, which is posted in the liaison reports section of the GSC website. The ESC is actively pursuing revisions to several of these standards. These revisions are being discussed in two technical sessions being held in the PES 2005 meeting.

C. Power System Relaying Committee

Rik Nilsson submitted a written report, which is posted in the liaison reports section of the GSC website. In his absence, Oleg Wasynczuk summarized Rik's report.

D. Machine Theory Subcommittee - No report.

E. Hydro Power Subcommittee - No report.

F. Induction Machine Subcommittee – No report.

G. IEEE 62 Testing and Inspection Guide

William Bartley submitted a written report that is posted in the liaison reports section of the GSC website. In Bill's absence, Oleg Wasynczuk presented highlights of Bill's report. This standard has been successfully re-ballotted and approved by the IEEE Standards Board, and it is now being updated to 2005 style format by the IEEE editorial staff.

7. STANDARDS REVIEW AND STATUS

Oleg Wasynczuk presented highlights of a written report that Nirmal Ghai had previously submitted. Nirmal's report is posted in the liaison reports section of the GSC website. This report notes that the following standards are assigned to the GSC:

67, 115, 492, 1129, 1255, C50 (now C50.12 & C50.13)

Additionally, in his report Nirmal reminds all EMC subcommittees that the IEEE Standards Board requires that no work to create new IEEE standards or revise old IEEE standards may start without a PAR.

8. OLD BUSINESS

Manuscript Central Enrollment as a requirement for membership in GSC

Lon Montgomery led a discussion of whether enrollment in Manuscript Central should be a requirement for membership in GSC or in other EMC subcommittees or in EMC itself. In response to a campaign that all GSC members be enrolled in

MC, approximately half of the present GSC members are now enrolled in MC, and all recently joining GSC members are enrolled. Jim Michalec observed that said MS enrollment is apparently desired but not required by the PES. Izzy Kerszenbaum volunteered to discuss the matter with Technical Council.

GSC Vice-chair responsibilities:

Oleg Wasynczuk reported his experiences with the new responsibilities of the Vice Chair:

- coordinating all efforts of the Working Groups within the SMSC
- convening technical sessions at the PES annual meetings

At Oleg's recommendation, GSC's consensus was to continue with this arrangement.

Close any existing WG's?

Oleg observed that all existing working groups are active, and that none should be closed.

GSC Liaisons

To clarify the fuzzy situations on liaisons to GSC, Oleg Wasynczuk explained his plan to establish links to websites of the target organizations in the "Liaisons" section of the GSC website.

IEEE Power Systems Conference (Sept 2004)

Nobody attending the PES 2005 meeting of GSC had attended the PSC.

IEMDC 2005 (May 2005)

Nobody attending the PES 2005 meeting of GSC had attended IEMDC 2005. It was reported that over 400 participants attended IEMDC 2005. Oleg Wasynczuk reported that several people who he had approached to contribute papers to a PES 2005 panel session informed him that they had agreed to publish their work in IEMDC 2005 and that they could not also prepare anything for PES 2005.

9. NEW BUSINESS

Extend any existing WG's?

Oleg observed that all existing working groups are active, and that all should be continued.

Create any new WG's?

Oleg Wasynczuk observed that the following two new WG's need to be established

- WG-5 – Revision of IEEE 492
- WG-6 – Creation of a new Application Guide for Superconducting Machines

Oleg volunteered to ask Vice-chair (thus WG coordinator) Bill Bartley to find a chair for WG-5.

Swarn Kalsi agreed to chair WG-6.

GSC website update

Highlights of Oleg Wasynczuk's report on the status of GSC's website are recorded in the foreword to these minutes. During the New Business discussion of this point, all GSC members were asked to provide public domain images of generators to Oleg for use in adding some sparkle to the website.

Recruiting new members

Oleg Wasynczuk outlined his desire to establish increase GSC membership among university professors, especially young professors seeking tenure, by providing venues for publishing and technical interaction at conferences. As one possible means to that end, Oleg volunteered to approach Jim Kirtley to discuss the possibility of a special edition of the IEEE Transactions on Energy Conversion on the topic of wind generators. (Also see the remarks below on preferred topics for PES 2006.)

Possible new topics of interest

Grid Codes

Ed Owen volunteered to investigate what is going on with grid codes and to investigate the possibility of convening some GSC-sponsored activity on the influence of grid codes upon generator design and application. Jim Michalec mentioned recent activity on this topic at CIGRE 2004.

Tidal Generation

Izzy Kerszenbaum volunteered to approach Prof Allen Wallace to discuss a GSC-sponsored activity on generator applications to tidal power generation.

EMC Operations Manual

Izzy Kerszenbaum volunteered to provide Oleg Wasynczuk with the most recent update to the EMC Operations Manual.

Next GSC meeting

The next meeting of the GSC is planned for 4PM on the Monday of the next PES General Meeting in Montreal in June, 2006.

Izzy Kerszenbaum reported that the EMC has take initiatives to arrange for PES 2006 to include focus sessions on wind generators and superconducting machines, and also on EPRI's initiatives to achieve torsion monitoring by the use of flux probes.

There was no other new business.

10. ADJOURN

The meeting was adjourned at 6:10 PM.