



## IEEE Power and Energy Society Motor Sub-Committee



### Minutes of the IEEE PES-EMC-MSM Meeting Held in the Convention Center, Minneapolis, MN on Tuesday, July 27th, 2010, from 8 am to 10 am

The meeting was called to order by Dr. Abul Masur, MSC Chair, at 8am. In attendance were 24 MSC members as listed at the end of these minutes. Introductions were made around the table.

The published agenda was presented. John Ready requested that discussions on the 1415 standard will be added to the agenda, as per the last year meeting. A motion to approve was asked by Nick, moved by Bill Bartley, seconded by Dan Ionel and approved by all.

The minutes of the 2009 meeting were circulated. A motion to approve was asked by Abul, moved by Bill Bartley, seconded by Professor Rahman and approved by all.

The Chair report was read by Abul. The Chair-Elect report was read by Nick. The Vice-Chair report was delivered by Akira.

A request to approve the new Executive Committee, which was proposed in order to ensure continuity, namely:

Past Chair	–	Dr. M. Abul Masur
Chair	–	Dr. Nick Stranges
Chair-Elect	–	Prof. Akira Chiba
Vice-Chair	–	Dr. Dan M. Ionel
Secretary	–	Prof. Behrooz Mirafzal

was made by Abul. A motion to approve was made by Manoj Shah, seconded by Daniel Saban and approved by all.

Haran briefly reported on the Working Group (WG) that he is chairing on Standardization of the Testing of PM Motors. The WG has 10 active members who are working on a draft Guide for Testing PM Machines. The par number is P1812. The WG is gaining more and more involvement from industry and is aiming for 4 years overall time for approval of the guide. The differences to 115 were mentioned. A panel session invitation was received for one paper on the topic for the next year PES Meeting, but the November deadline may be too tight.

Abul reported on the activity of the WG on EMC and Radiation Issues in Electrical Machines as the chair of this group, Mark Stefka, could not attend the meeting. The WG started in Feb of this year. The activities include performing lab experiments and writing a white paper. The correlation with 112 was discussed by Nick and Abul. Prof. Rahman commented on practical aspects of cable length for supply

from VSD. Manoj talked about insulation aspects that were studied as part of EMC.

Abul initiated a discussion regarding other WGs. These should be need based.

Nick pointed out that the WGs have been established based on motor type and they should evolve to be task based. We should not have a working group on DC motors, but rather have, for example, a WG to revise the 113 standard that deals with DC machine testing. There should also be consistency in naming the WGs. We have some working groups named in sequential order and others based on PAR numbers. Moving forward we should name new WGs based on a sequential numbering system.

Bill Bartley explained that the group name should be clear. He also mentioned the procedure for IEEE standards and the fact that IEEE should be involved through a PAR.

Manoj stated that in his experience the WGs can be activated and deactivated on a need basis.

Prof. Rahman talked about the evolution from a WG idea towards standards. If the WG are dormant they can be deactivated and reactivated as needed. We should keep trying to operate the WG on PM motors as this is a very timely topic. The WG on awards is very important. The IEEE Fellowship nomination should also be very active.

Bill pointed out that the Electric Machine Committee (EMC) has a very active awards committee and that the EMC will receive 3 awards this year.

John Ready proposed a motion to remove the inactive WGs. Bill seconded. Motion passed. A new WG was established for matters related to 1415. Another new WG on condition monitoring of electric motors was proposed by Dan Ionel. Yet another WG was proposed by Jim on machines (motors) without NdFeB (rare earth magnets). There were discussions if such a WG would not fit better under EMC.

Prof. Rahman volunteered to chair the WG-1 on Awards and Recognition.

Dan Ionel summarized the list of the active WG, including the newly proposed ones. (Note: the numbering in the following

table follows the previous numbering, which was valid before the Minneapolis meeting). WG-10 will be renamed WG112 for the duration of the working cycle in order to be consistent with the published PAR.

Working Group	Name	Chair
WG-1	Awards & Recognition	Prof. Rahman
WG-7	EMC and Radiation Issues in Electrical Machines	Mark Stefka
WG-9	Standardization for the Testing of PM Motors	Haran Karmaker
WG-10 (WG112)	Revision of Standard IEEE 112	Nick Stranges
WG-11	Condition Monitoring of Electric Motors	Dan M. Ionel - provisional
WG-12	Discussions/revision of 1415	John Ready
WG-13 TBD how to correlate with EMC	NdFeB (rare earth) free electric machines (motors)	Jim Hendershot

Nick opened the discussion on the panel sessions to be organized for the next PES Annual Meeting in Detroit. Akira and Jim will organize a session on “Nd free machines” and another one on motors for HEV and EV. Haran will organize a session on PM machine testing including losses. Alfio will organize a session on energy efficient motor and drive systems with special emphasis on control aspects. Nick will check with PES regarding the suitability of so many panel sessions and if paper sessions are also required. Professor Rahman noted that paper sessions are more popular nowadays.

Professor Consoli noted that some of the WG are inactive and that we should try and attract new participants. Publication into Transactions could be a strong incentive.

Professor Rahman briefly introduced the IEMDC'11 Conference to be held next year on May 15<sup>th</sup> - 18<sup>th</sup> in Niagara Falls, Canada. A proposal was made to hold an additional meeting of the MSC during IEMDC. Move to approve was made by Jim and seconded by Manoj.

John Ready opened the discussion regarding standards. We should make a list of standards for which we are directly responsible.

The second topic addressed by John regarded attendance to the MSC meetings. We have a very large roster but many people have not attended in a long time. The roster should consist of members that attend the meetings regularly and the other names should be moved to a contact or mailing list for interested parties. Nick has formally requested Dan to check the roster and ask the listed people if they would like to

continue as regular members. Bill Bartley stated that we should adhere to the bylaws; should we have regular and associated members for the Committees? The new EMC regulations are yet to be discussed at tomorrow's meeting. It is important to keep the roster current to avoid issues related to Quorum at meetings.

*(Explanatory note - the new EMC regulations regarding membership were not announced or discussed during the EMC meeting and they are yet to be publicized).*

Yuri pointed out that one way of attracting more people would be by linking publication into the Transactions of PES to Conference paper presentations. Professor Rahman offered to talk to the EMC editorial board regarding this topic. Alfio mentioned that Industry Electronics Society (IES) is very aggressive in their publication plans and nowadays include quite a few of machines papers. Professor Rahman mentioned that this topic could be discussed next day at the EMC Editorial Board meeting.

In the end of the meeting, Professor Rahman thanked on behalf of EC and MSC to Abul for his contributions over the last years.

A Motion to adjourn was forwarded by Haran, seconded by Bill and approved by all. The meeting ended according to plan at approx. 10 am.

**The list of IEEE PES EMC MSC members who attended the meeting:**

- M. Azizur Rahman, Past Chair, IEEE – PES – EMC – MSC
- M. Abul Masrur, Chair, IEEE – PES – EMC – MSC
- Nick Stranges, Chair-Elect, IEEE – PES – EMC – MSC
- Akira Chiba, Vice-Chair, IEEE – PES – EMC – MSC
- Dan Ionel, Secretary, IEEE – PES – EMC – MSC

- Behrooz Mirafzal
- Yuchi Takano
- Lester Chong
- Chuck Wilson
- Daisuke Hiramatsu
- Masahide Oashima
- Sujit Purushothaman
- John Roach
- William (Bill) Bartley
- John Ready
- James Hendershot
- Alfio Consoli
- Juri Jatskevich
- Gabriel Haynes
- Soo Kim
- Manoj R. Shah
- Haran Karmaker
- Michael Sedlak
- Dan Saban

Minutes prepared by Dan M. Ionel, Secretary of IEEE PES-EMC-MS and reviewed by the Executive Committee of IEEE PES-EMC-MS.

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