



IEEE Power and Energy Society Motor Sub-Committee



Minutes of the IEEE PES-EMC-MSC Meeting Held During the PES GM in Vancouver, Canada on Tuesday, July 23rd, 2013

The meeting was called to order by Akira Chiba, MSC Chair, at 1:00pm. The members of the MSC Executive Committee (EC) were introduced. In the beginning of the meeting, in attendance were 12 MSC members. The total number of participants raised during the meeting to 24 as listed at the end of these minutes.

The published agenda was presented. This year the committee meeting was a combo session having both committee meetings and technical presentations. The advantage of having a combo session as explained by Akira Chiba was that a projector is provided. A motion to approve was asked by Akira Chiba, moved by Dan Ionel, seconded by Thomas Wu and approved by all.

The minutes of the 2012 meeting were circulated and read through by Yao Duan. A motion to approve was asked by Akira Chiba, moved by John Ready, seconded by Dan Ionel and approved by all.

The Chair report was delivered by Akira Chiba and circulated around the room. In the report, it was mentioned that initially two papers were proposed by the authors to present at the combo session and then the proposals were turned down by the committee. Akira Chiba explained that the paper was decided by executive members to not have wide interest and then not suitable for presentation at the subcommittee meeting.

The Chair-Elect/Vice-Chair report was given by Dan Ionel. Dan Ionel mentioned that he introduced the panel session on condition monitoring for 2013 GM. Dan Ionel also mentioned a similar panel session was held in 2012, a good attendance last year despite the fact that was on the last day. Dan Ionel also mentioned the IEMDC for 2017 will be hosted by IEEE PES and he has submitted a proposal to hold it in Milwaukee. Dan Ionel invited proposals from MSC for IEMDC 2017. The decision for the host of the 2017 IEMDC will be made in Sept. 2013 during the ECCE.

John Ready reported the progress on IEEE 1415, a guide for induction machinery maintenance testing and failure analysis. A revision was issued in 2006,

including on topics on measuring phase angle, phase balance, and testing of motors supplied by VSD. After the standard was issued, IEEE received questions on the three revisions. The question was passed down and a working group was formed to look at the revision. IEEE 1415 was started in 2012 with face-to-face meetings and conference calls. Difficulties include: although the three revisions was written as general requirements, the test to meet those requirements were somewhat specialized, product-based measurement. Some WG members were interested, but there was a split within the WG about the validities of those three revisions. After PES GM 2012, issues was raised to IEEE such as frequent cancelation of WG meetings, and the necessities of expanding the WG. IEEE then asked to expand the WG. John Ready then expanded the WG and there were over 150 people interested. A new WG was then started and had a meeting in Vancouver. The meeting was held on Monday with 15 participants. Achievements from the meeting:

- 1) John Ready announced resignation. Dave Mckinnon was elected as the new chair. John Roach was elected as the vice chair. A secretary is needed
- 2) Redefined scope. A possibility was opened up to revise the whole standards. It was then decided during the meeting that it was too much. Rather than issue a revision, it was decided to add an amendment on the three revisions. The implication that another WG will be needed to revise the whole standard.
- 3) The first two revisions were voted to be deleted from the guide, which is not due to proprietary but it was thought that it makes no sense to do a maintenance test on the MV motor with turn-to-turn fault. The third revision will need some more work. The WG will have new conference calls.

Chiba read the email regard IEEE 11.2006 and asked if there is an interest for revise the WG 10. John Ready said it was good. Thomas Wu said we need to continue since we are an existing contributor on the standard. Akira Chiba agreed. IAS also has an interest on WG 10, as said by Prof Iqbal Hussain. Dan Ionel said it would be good to establish the contact. Haran Karmaker said he was involved in single-phase induction machines for vehicles in IAS, but not for PM machines. Dan Ionel

suggested to check the standard committee. Haran Karmaker suggested to contact Innocent Kamwa. Dan Ionel said he will ask Innocent Kamwa about who owns this standard.

Haran Karmaker reported WG 9 on test of PM machines. Haran said a first ballot, 90 % approval, but a lot of comments to be resolved. Hara said maybe an extension will be needed. A presentation is scheduled the next day by Haran.

John Ready addressed the progress on the WG for IEEE 112 standard. The WG has been active for 2-3 years, recently has resolved all the ballot comments and has created a final draft to IEEE for review. Very close for review. The main revision is to add superimposition to allow test with reduced voltage and current.

Yao Duan reported the progress of WG for Condition Monitoring and Fault Diagnosis of Permanent Magnet Machines. The paper has been completed. First it was submitted to IEEE Transactions of Energy Conversion and then got rejected immediately because the Editor-in-Chief said IEEE Transactions of Energy Conversion no longer accepts review papers. The paper was then submitted to IEEE Transactions on Industry Applications and was also rejected because it was presented at IAS meetings. Finally, the paper was submitted to IEEE Transactions on Industrial Electronics and was currently under review.

Proposal for next year's panel session. Yao Duan proposed an panel session on electrical machines for harsh environments and the idea was accepted. Thomas Wu proposed electrical machines for transportation, such as airplane, trucks, ships with Iqbal Hussain as a co-organizer. The presenters will be first asked to prepare 10-page slides for review. A decision will be Oct. 30th on the panel presentations by the subcommittee. The presentation could submit papers as well along with the presentation.

Dan Ionel suggested to keep the Advance topics in electrical machines. Thomas Wu suggested Akira Chiba to continue. Akira Chiba agreed.

Jennifer Ammentorp asked if the panel session chair has any access to the list of submitted papers to the PES GM and select the papers that might be interest to the panel. Chiba said the panel session organizers has no access to generally submitted papers. For panel sessions, personal contacts are important. A general distribution will also be carried out.

Akira Chiba had the idea to have an transaction session by MSC. There are enough papers and we could contact

the paper authors and encourage the presentation. An negotiation was needed with Machine Committee.

Proposal for the presentations after the MSC meeting. Manoj Shar suggested in adding transaction paper presentations after the MSC meeting. Akira Chiba said he will contact Machine committee. Akira Chiba also had the idea of inviting Tesla awardee to give a presentation. Akira Chiba also mentioned a presentation on IEEE standard is also good. Haran Karmaker agreed this is a good idea and will present the standard next year. David Mckinnon also agreed to present IEEE 1415. Akira Chiba agreed to coordinate the combo session.

Behrooz Mirafzal stepped down. A new vice chair was needed as well as a new secretary for next year. Professor Wu volunteered to serve and join next year as a secretary. Dan suggested to expand the invitation to MSC members. Masahide Ooshima volunteered to serve as vice chair. Haran moved and John second.

Haran proposed to adjourn. Wu seconded.

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

Akira Chiba, Chair,
Dan Ionel, Vice-Chair
Yao Duan, Secretary

Jennifer Ammentorp
Junichi Asama
Randall Groves
Gabriel Haynes
Karen Hedlund
Iqbal Husain
Haran Karmaker
Abdesh Khan
Satish Kurapati
James Michalec
David Mckinnon
Masahide Ooshima
Weiming Pang
John Ready
M.P. Reddy
Manoj Shah
John Yagielski
Luke Wanis
Thomas Wu

*Minutes prepared by Yao Duan, Secretary of IEEE PES-EMC-
MSC and reviewed by the Executive Committee of IEEE-PES-
EMC-MSC. Issued xx.*