# ASC C63<sup>®</sup> SC5: Immunity Testing and Measurements Minutes for Tuesday, October 4, 2011 Thompson Park, Lincroft, NJ

### **Call to Order and Attendance**

Chair Steve Whitesell called the meeting to order at 3:35 pm and circulated an attendance sheet for sign in. A quorum was present with 12 of 15 members in attendance.

The following SC5 members were present:

Steve Whitesell (Chair)

Ed Hare (Vice Chair)

Phil Keebler (Secretary)

Poul Andersen (via telephone)

Masud Attayi

Stephen Berger

Colin Brench

Don Heirman

Dan Hoolihan

Victor Kuczynski

Jeff Silberberg

Dave Zimmerman

The following SC5 members were not present:

Bob Hofmann Werner Schaefer

David Schaefer

The following observers were also in attendance:

Dennis Camell Jeff Moser Andy Griffin Janet O"Neil

Dheena Moongilan

#### **Opening Business**

The Chair reviewed the draft agenda and asked if there were any additions or changes. Jeff Silberberg raised a question about the use of "in-situ" vs. "on-site" in the title of C63.24 (in agenda item 7). After some discussion, Don Heirman suggested that the definitions of both terms be made up front in the draft standard. However, there were no changes made to the draft agenda as a result of this discussion. The Chair then asked if there was any objection to the agenda being accepted as presented. Hearing none, he declared the agenda approved.

The Chair displayed and reviewed the IEEE Patent related slides and other guidelines for the conduct of meetings. He asked if there was anyone aware of essential patents that should be made known. No one spoke up. He also asked if everyone understood the content of the slides. There were no requests for further explanation.

The Chair then presented the fee schedule for participation in C63<sup>®</sup> standards work and reminded all in attendance of the need to pay their participation fees.

The Chair indicated that draft minutes from the April and October 2010 meetings need to be reviewed and approved in addition to those from the May 2011 meeting. He noted that copies of all minutes had been emailed to SC5 members so that they could review them prior to the meeting.

Dan Hoolihan moved that all three sets of minutes be approved. He noted in particular that the minutes for the May 2011 meeting were a good example for others to follow. The motion was seconded. The Chair asked if there was discussion. There was none. He then asked for a vote on the motion. It passed unanimously.

# **Review of Membership and Leadership**

The Chair noted that Philip Keebler had been recommended to C63<sup>®</sup> and accepted as an SC5 member on an exception basis at the May 2011 meeting subject to formal submission of the application paperwork. That paperwork has now been received.

A new application for SC5 membership was received from Rick Lombardi of Visteon Corp. as a participant under the SAE organizational membership. During discussion of Rick's application, Ed Hare and Don Heirman indicated they would provide the Chair with emails supporting his membership. Ed Hare moved that Rick's application for SC5 membership be forwarded to the main C63 Committee for approval, and Don Heirman seconded. The motion passed unanimously.

Don Heirman suggested that Andy Griffin of Cisco also be recommended to the main committee for acceptance as a member of SC5. Andy provided the necessary application form. During the discussion that followed, Don Heirman suggested that Mark Arthurs could provide a reference in support of Andy. Don then moved for forwarding Andy's application for SC5 membership to the main C63 Committee for approval, and Victor Kuczynski seconded. The motion passed unanimously.

### **Working Group Reports**

The Chair announced he would take the C63.20 and C63.24 Working Group reports first to accommodate a need by their Chair, Stephen Berger.

C63.20 (Immunity of Equipment for Use in Nuclear Power Stations) – Mr. Berger and Mr. Keebler are serving as Chair and Vice Chair of the Working Group for this project. A PINS has been approved. Work has started on this standard and a Draft 0.1 document is available. There are 5 WG members, but additional members are being sought.

C63.24 (In Situ Immunity Evaluation) – Mr. Berger and Mr. Keebler are also serving as Chair and Vice Chair of the Working Group for this project. A PINS has been approved. While the original intent for this project was to base it on the C63.18 standard once that document was complete, the goal has shifted somewhat to make the document as generic as possible. A Draft 1.3 document is available. There are 11 WG members.

Don Heirman suggested looking at the definitions in C63.15 as possibly being applicable to C63.20 and C63.24.

Working Group Chair Stephen Berger presented draft set of rules for membership in the C63.24 Working Group, which would also be applied to the C63.20 Working Group. Participants in the first two meetings of the working group may apply for membership immediately. After the first two meetings, an individual may apply for membership after attending two out of three consecutive face-to-face meetings. Applicants must have relevant technical experience. Failure to vote on two out of three WG ballots or to attend at least one out of three consecutive meetings will result in loss of WG membership and voting privileges. There was general approval of these proposed membership rules in the discussion that followed. Don Heirman moved and Ed Hare seconded approval of the rules by SC5. The motion passed unanimously. SC5 Chair Steve Whitesell was also asked to forward the proposal to the Steering Committee for consideration as a model for other working groups to follow.

C63.9 (Immunity of Audio Office Equipment) – This Standard was published in 2008. There is no currently no active work, but the document will come up for its five-year review in 2013. Mr. Berger is the WG Chair.

Jeff Silberberg questioned why we have so many different documents addressing immunity. It was pointed out that C63.9 is specific to Audio Office Equipment and C63.20 is specific to Nuclear Power Plants. C63.24 is intended to be more generic and could be applied to other types of power plants among other things.

Phil Keebler mentioned that IEC SC77A WG6 is considering requirements in the 2 kHz to 150 kHz frequency range that may be relevant to the C63.20 and C63.24 documents.

C63.15 (Immunity of Electrical and Electronic Equipment) – This Recommended Practice was inherited from SC1 after being published in 2010. There is currently no active work nor an assigned WG Chair.

C63.16 (ESD Testing Guide) – The original version of this Guide was published in 1993, but it was administratively withdrawn around 2003 because it had passed the ten-year window. Mr. Worley and Mr. Staggs have agreed to serve as Chair and Vice Chair, respectively, of a Working Group to revise the Guide.

A draft PINS was presented for C63.16. Valuable information in the original C63.16 document that is not available elsewhere will be retained and will be supplemented with additional unique material. The items to be retained include unique ESD test instrumentation, furniture ESD simulation, statistical determination of the number of ESD discharges per test point, confidence levels in terms of Mean Time Between Undesired Responses (MTBUR), and alternative test methods and waveforms. The additional guidance to be added includes evaluation of ESD faults due to docking or undocking a device from a charging base, evaluation of ESD faults produced by the insertion of charged media (tapes, disk, etc.), and evaluation of potential for ESD events induced by charges on cables such as those for making Ethernet connections. Don Heirman moved to recommend the draft PINS to the main C63 Committee for approval. Ed Hare seconded. The motion passed unanimously.

## **Old Business**

Don Heirman requested that a list of C63 standards relative to Smart Grid applications be forwarded to the Steering Committee.

Jeff Silberberg gave a status report on the C63.18 standard as it relates to C63.24. The document is currently in ballot.

# **New Business**

There was no new business.

# **Action Item Review**

#### **Old Items**

All existing action items from previous meetings have been completed.

### **New Items**

- 1. The Chair is to notify Rick Lombardi that he has been approved as an SC5 member and also added to the C63.16 Working Group (assuming approval by the main C63 committee).
- 2. The Chair is to make sure all paperwork for Andy Griffin's membership in SC5 is completed and check with Mark Arthurs to verify his recommendation.
- 3. The Working Group membership rules as approved for the C63.20 and C63.24 WGs are to be forwarded to the Steering Committee for recommendation as a model to be used by other WGs.
- 4. A list of EMC standards that apply to the Smart Grid is to be forwarded to the Steering Committee.

#### **Next Meeting and Adjournment**

The next meeting will be at IEEE Headquarters in Parsippany, NJ the week of April 16-19, 2012.

The meeting was adjourned at 4:28 pm.