

**IEEE ELECTROMAGNETIC COMPATIBILITY SOCIETY
SPECIAL COMMITTEE 1 – SMART GRID MINUTES
Monday, 4 August 2014
Raleigh, NC USA**

SC MEMBERS PRESENT

Don Heirman – Chair
Bill Radasky – Vice-Chair
Benoît Nadeau – Secretary

Attendees

Bob Hofmann	Randy Long
Petre-Marian Nicolae	Dave Wilson
Monrad Monsen	Joog-Sun, Ahn
Abtin Spantman	Jerry Ramie
Galen Koepke	

1.0 Call to Order and Introductions

The Chair, Don Heirman, opened the SC1 meeting at 5:45 PM. There were 12 attendees, including the Chair, Vice-Chair and Secretary.

2.0 Review of the 2013 meeting minutes

The Chair informed the attendees that since the meeting has a full agenda and that time is limited, the review and approval of the 2013 minutes will occur by e-mail.

3.0 Duty to inform

The Chair informed the attendees of the fact that the intent of the Special Committee is not standardization but coordination of the standard activities of the IEEE EMC Society Technical Committees in regard to the specificity of the needed performance of the Smart Grid equipment. So all the Chair of the relevant Technical Committee are, de facto, members of the Special Committee 1:

For the time being the Chairs are:

TC2- Don Heirman
TC3- Fred Heather
TC4- Phil Berger
TC5- Bill Radasky
TC7- Magnus Olofsson
TC9- Sam Connor
Standards Development & Education Committee (SDECom) - Alistair Duffy

It was point out that the SC1 has a space on the IEEE EMC Society website under Committees where all the pertinent information is and will be posted.

4.0 Review of actions Items from 2013 (and 2012)

Since many actions items of the 2013 meeting were reflected from the 2012 meeting, it was decided to review these from the 2012 meeting minutes. The result of this effort is as follows.

[2012-1 Action Item – find a member that lives in a city that has implemented smart meter reading and obtain feedback on operating experience.](#)

The Chair asked the attendees if they live in an area where smart meters are deployed and, if so, if they are aware of interferences problems, or absence of problem, associated with these devices. Many attendees responded that smart meters are actually highly deployed (with a noticeable exception for New-Jersey). Jerry Ramie indicated that as an investigator for the American radio relay league he never encounter any interference problem associated with smart meters using frequency hopping technology in the unlicensed 902 to 928 MHz band. Benoît Nadeau point out that the only case he heard of was interference with wireless speakers in the same band, the solution found was to buy new speakers. The committee was informed that, during the Workshops earlier that day, a Consultant informed Jerry Ramie that a susceptibility problem with a Smart Meter was reported with an electric fence system. The Chair requested Jerry to collect the information from the Consultant so that the Committee could build a list of known problems. Another case of 902 to 928 MHz interference was reported but the case was between a GPS enhancement device with Radio Amateur equipment. Benoît Nadeau reported a problem, still under investigation, with a Collector having problems communicating with nearby smart meters.

Decision: The action Item remains open as a continuous effort to collect evidences.

[ACTION ITEM 2014-1 Members are requested to collect evidences of interference and successful stories and provide them to the Secretary.](#)

[ACTION ITEM 2012-2: Update the list of TC Chairs, CLOSED \(see section 3\).](#)

[ACTION ITEM 2012-3: Harry Hodes write a white paper type on the generic failure data type of test done.](#)

Decision: The Chair does not have any news from Mr. Hodes, It was decided to communicate with him to learn if he still plans to write the paper. Depending on the answer the action item will remain open or be dropped.

[ACTION ITEM 2014-2 The Chair will communicate with Harry Hodes to know what are is plans in regard to writing a white paper. This action will remain open or will be closed depending on the answer.](#)

[ACTION ITEM 2012-4: Benoît Nadeau to submit nuclear data as types of tests and levels.](#)

Benoît Nadeau prepared and presented to the committee a spreadsheet comparing the EMC requirements of standards that could apply to the telecommunication equipment needed for a Smart Grid. The requirements for Telcordia CORE 1089, IEC 61850-3 (based on 2013 FDIS), IEC TS 61000-6-5, CISPR 24, EN 61000-6-1, EN 61000-6-2, ETSI 300 386 along with an Hydro-Québec private standard for protective Relay (SN.62.1008) were all put on the same page. It was point out that the

latest standard has been in use for years in for equipment installed in 745 KV Sub-Stations for years and if the limits were found to be non-efficient they would have been increased.

It was requested that this list be available to members for reference or comment. Benoît Nadeau agreed to circulate the spread sheet for comments.

Link to the presented document:

http://www.ewh.ieee.org/soc/emcs/committees/sc01/documents/Standards_comparative.xls

ACTION ITEM 2014-3: Benoît Nadeau to send copies of the spreadsheet to members for comments and, after revision, post the resulting file on the web site.

ACTION ITEM 2012-5- SC 1 officers will come up with topics. CLOSED

ACTION ITEM 2012-6- SC 1group to provide workshop proposals by December. CLOSED

Both actions are closed by the organisation and presentation of the Monday morning worrshop.

5.0 Inter-relations with other groups and international activities

SC 1 officers are actively participating with NIST SGIP effort and also monitoring international activities (Japan and Italy for instance) in the implementation of the smart grid and the importance of maintaining EMC.

The group discussed about the possibility to organize a special session with invitation of key international speakers during the Symposium in Dresden.

A proposition to SGIP for a presentation about the importance of EMC is believed to have little chances to be accepted. If it is not accepted, the effort will be put to have a paper published in the IEEE EMC transaction magazine.

Another point was raise by Dave Wilson about a technical difficulty in the practical application in a lab of IEC 61000-4-18

ACTION ITEM 2014-4: Dave Wilson to write down the specifics of the applicability so that SC1 could forward the information to the Standard writing Committee.

6.0 Next meetings and venues

There will be a meeting in Santa-Clara in March 2015 and another one in Dresden in August 2015.

A small raised hand survey showed that:

6 members are planning to go in Dresden

7 to 8 members are planning to go to Santa-Clara

4 to 5 at both.

The meeting adjourn at 6:30 PM.