

IEEE Product Safety Engineering Society

Minutes of the IEEE PSES TSTC teleconference held Wednesday, January 28 at 11:00 AM EST, for one hour.

1. Attendance/Introductions

Members present: Don Gies (Alcatel-Lucent), Al Martin (retired), Mick Maytum (MJMaytum), Paul Ng (GE Energy), Joe Randolph (Randolph Telecom), Dan Roman (Colgate Palmolive), Jim Wiese (Adtran).

Members absent: Tim Ardley (Adtran), Philip Havens (Littelfuse), Peter Lim (Alpha Technology), Mick Maytum (MJMaytum), Doug Parker (Adtran), Gary Schrempp (Dell), Tom Smith (TJS Technical Services Inc), Peter Tarver (Enphase Energy), Steve Zugay (Cree).), Anne Venetta-Richard (Alcatel-Lucent),

2. Meeting arrangements

Don Gies supplied the call-in number:
Bridge No. (Toll Free): 1-800-771-8734
International Access: +1-647-723-3953
Access Code: 5825978

3. Previous meeting minutes (attached)

4. New business?

- a) Al: The IEEE has an applications guide for SPDs that is coming up for revision. The Guide goes into great detail about how SPDs are constructed, and how they work.

Question: Would anyone buying this guide care about these details? Or would they say that these are up to the SPD manufacturer, and we just specify the performance (e.g. as in GR-974)? Do I care what's in the box as long as the SPD meets my performance requirements? If I don't, then would it be better for the applications guide to focus on environmental issues [e.g. lightning, power cross, GPR] rather than on the details of how to build SPDs?

General agreement to put construction information into an appendix.

Don: Reasons for using various types of SPDs could be useful.

- b) Telcordia released the following documents in December 2014:
GR-3171-Core Issue 2.

Requirements for cabinets placed inside spaces with active environmental controls: *GR-3031, Issue 1, Generic Requirements for Indoor Electronic Equipment Cabinets*

Examine the interactions between generic requirements documents: *GR-3032, Issue 1, Interactions Between Generic Requirements Documents GR-3108, GR-487, and GR-950*

New information and requirements that apply to battery backup cabinets: *GR-3033, Issue 1, Generic Requirements for Indoor and Outdoor Battery Backup Cabinets*

Criteria for protective closures that house selected wireless transceiver facilities: *GR-3178, Issue 1, Generic Requirements for Wireless Transceiver Facilities*

5. New RFT standard –IEC 62368-3.

- a. Don Gies is a member of the committee adapting IEC 60950-21 concerning RFT circuits, to IEC 62368. The TSTC previously had discussions for proposals. Any inputs?

The information below from Jos Remy concerns the schedule for developing IEC 62368-3 on remote power feeding.

Hi Don,

The project is at an early stage of development, so all estimates are very rough at this point in time. The official IEC target date is to have CCDV at 2015-06-30, see http://www.iec.ch/dyn/www/f?p=103:38:0::::FSP_ORG_ID,FSP_APEX_PAGE,FSP_LANG_ID,FSP_PROJECT:1311,23,25,IEC 62368-3 Ed. 1.0

In practice, we will have a face-to-face WG meeting in May. I expect to have the next draft available in July 2015 (since we have an IEC TC108 editing committee meeting planned in July).

- b. Previously, Jim Wiese had moved to amend UL 60950-21 with US deviations. Jim has sent in supporting information (attached)Don: Any new inputs?

Jim: How much change to IEC documents will be allowed?

Don: Will ask the committee if there is something that could be put into the base document that will correct existing deficiencies. Don will ask telecom people if they have any input.

Don: I need to get educated on the changes that need to be made.

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Jim: No disagreement with the document for local use. The disagreement is with the involvement of service providers. Restrictions on casual users are not implementable for use in networks, and may be incompatible with present practices.

Paul: Need to work within the rules of IEC, given the state of the document, need to put in specific proposals.

Jim: Do we want to say no one has to live by these rules, or do we say the rules are generally OK, but not for service providers.

Don: We need to take the existing document and direct comments to specific clauses. Where are the contradictions with existing practice?

Jim: As a precedent, IEC 60950 has requirements for specific environments.

Jim: As an example of a problem requirement, in -21 you need to perform an end-to-end cap measurement. No service providers will do that. But in an individual environment you may want to do that.

Jim: Do we say no one has to do this, or do we say in this environment you do this, in that environment you do that? Or do you set up an appendix that modifies the body of the document?

Paul: Is this an issue that is unique to US, or would other countries have an issue with it. If it is unique to the US, it can be made a national deviation.

Jim: In ATIS no one thought that the IEC would listen to us. So decided to go with a national set of requirements for RFT-V.

Paul: I would recommend putting in a proposal for 6.3.4.

Jim: Need to look at probabilities of success. If we ask to throw out the entire requirement, it probably won't happen

Jim: There are some 20 clauses to address. Do you put in a requirement for each clause?

Don: Let's state what the issue is, and list the paragraphs where the problem is. Technical rationale is needed.

Joe: The difficulty is the application of new requirements to a service we have had in place for a long time.

Jim: In the late 90s Jim Brunson went to the group that did K.50 and got them to develop RFT-V, based on GR1089 (essentially documenting existing practices). What

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Jim was not aware of that the voltages and current he specified would be declared hazardous. The result was Telcordia requirements plus a bunch of additional requirements

Joe: When the first attempt was made to put telecom requirements into IEC60950, the IEC guys said that all the telecom requirements were hazardous.

Paul: The current IEC members have a different focus than the ones who put in the original requirements

Don: Very little telecom input to IEC. I'm seeing little resistance to accommodating telecom requirements. For IEC 62368 there is a chance to make proposals.

Jim: Again we need to look at probabilities of success. Do we want to address RFT-C issues? ATIS is producing a standard for span-powering, but it is for North American use only. Would we have more success just addressing North American issues?

Mick: Work with the committee. I've sent a copy of the IEC comments form, which should be filled out. An additional possibility is a national deviation (e.g. in US we do this). National committee can ask for their comment to be inserted into the document.

Jim: I have heard that National Deviations can only strengthen the document, not weaken it.

Mick: You could try for a general deviation if the committee won't accept a National Deviation that weakens the document. Again I would recommend filling out the comments form.

Don: For North American application an ANSI standard can supersede an ATIS requirement.

Jim: The requirements we have a problem with don't exist in GR-1089, which is the governing document for US telecom. STEP-NEP-2011-031 lists the issues

Don: I'm not in a position yet to make a proposal. I can't just send the ATIS document to the committee.

Jim: The STEP-NEP-2011-030 explains how to do the modification. STEP-NEP-2011-031 is the list by clause and issue. There are 20 issues that are raised, and each one needs to be addressed.

Mick: It explains the issues, but doesn't make proposals.

Jim: The document was meant only to list the problems, not to suggest solutions. The STEP-NEP-2011-31 document has proposals for fixes. The idea was to put

modifications into an annex, because the probability was low of getting the modifications into the body of the standards.

Paul: Nothing happens without a proposal. Do this before a CD is issued, otherwise change becomes much more difficult.

Al: Sounds like what you want to do is put the comments in STEP-NEP-2011-31 into the comments from Mick has sent.

Don: Yes. As homework, select comments from STEP-NEP-2011-31 that are an issue for you, and fill out the IEC comments form for them.

6. Telcordia GR-3171-CORE, Issue 2 TTF – Wireless equipment – Don Gies

- a. GR-3171-CORE family of standards issued
- b. GR-3178-CORE – new standard is GR-950-CORE (Optical Network Unit Closures) adopted for wireless transceiver facilities (WiTF).

7. Protection of DC feeds to radio equipment at the top of towers – Al Martin

This is an issue that has a lot of interest with outdoor wireless installations.

- a. What protection is typically installed on equipment that will be located at the top of towers, and is any consideration given to the height of the tower?
- b. What lightning waveshape is considered when designing protection for equipment to be located at tower tops?
- c. Is there any information about the failure of installed protection to protect equipment located at tower tops?

8. Additional agenda items

9. Old Business

- a. UL Subject 1801 vs. IEC61204-7 2nd Ed committee draft – Paul Ng

Next meeting – Proposed **Wednesday, 25 February 2015**.

Respectfully submitted

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Al martin, Secretary