

**IEEE Product Safety Engineering Society
Telecommunications Technical Activities Committee Roster**

IEEE PSES TSTC

Meeting Minutes: May 25, 2011

Members present: Don Gies (Alcatel-Lucent), Al Martin (TE Connectivity), Mick Maytum, Dan Roman (Dialogic), Tom Smith (TJS Technical Services Inc), Joe Randolph (Randolph Telecom).

Members absent: Philip Havens (Littelfuse), Peter Lim (Alpha Technology), Paul Ng (GE Energy), Gary Schrempp (Dell), Peter Tarver, Jim Wiese (Adtran), Steve Zugay (Alcatel-Lucent)

Discussion topics

1. Attendance/Introductions

The minutes from the last meeting were approved as submitted

Meeting attendance was recorded. Introductions weren't needed, as there were no new members

2. New business

Some international standards (e.g. UL50E, CSA C22.2 No. 94.2) exempt certain metals from testing (e.g. Aluminum, stainless steel, copper...) Question about corrosion in the -22 standard. Why doesn't IEC take the same stance as the others on exemptions? Discussion suggested that the IEC standard drew on many other standards when it was created, and ended up with fewer exemptions. Don suggested that the TSTC put together a proposal that the IEC accept the North American exemptions.

Don to write up a short summary of what should be changed.

3. Outdoor equipment with lead-acid batteries - revisions to 60950-22 standards

At last meeting, the TSTC voted to send proposal to TC108 via CSA, and this has been done. Don reported that the proposal is gaining traction. We will monitor its progress. The mechanism for getting this to the IEC is that the national committee representative will propose it to the IEC. It may help to contact other national committees to get their support.

4. Low-Voltage DC Powering (380 V dc)

Don Gies and Paul Ng attended the National Low Voltage Direct Current Workshop [sponsored by NEMA] on April 8, 2011 just outside Washington, DC. There is interest in standardizing on a 380 V DC powering system. A lot of electrical power goes to electronics, which run on DC. Also local power generation (PV, windpower) is DC. It would make sense to switch residential power from AC to DC, although transmission systems would still be AC. Considering all applications, 380 V DC is the "sweet spot". Existing 3-phase AC wiring is suitable for 380 V DC. The telecom industry would probably be the first to implement a 380 V DC system. Also there has been a proposal to run 24 V DC in the house. Don and Paul looked at existing standards to see if equipment powered with 380 V DC could be certified to these standards, and concluded that yes, they

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could. Issue – no standard for DC plugs. ITU-T is looking at 380 V for data centers. There is an ITU-T proposal to ground the neutral through a 20 k resistor. ITU-T is trying to link up with the IEC.

5. Wiring simulators used in power cross testing

Nothing to report. Drop as an agenda item.

6. RFT circuits - revisions to 60950-21 standards

Jim Wiese's issue – table until the next meeting.

7. SmartGrid issues

For qualification, evaluate the telecom interfaces of equipment. Initially the power companies thought that Smart Grid communications would be wireless, either via existing networks or via networks to be built. But with the advent of telecom operating companies offering cloud-based communications, it may make more sense to use their existing wired connections.

8. Additional agenda items

At the last meeting Jim sent out a RUS document that recommends putting primary protectors on internal customer ports. Jim noted that, “it is interesting they are suggesting using UL 497 primary protectors on the ONT internal customer ports. The reason is based on large numbers of ONT failures in lightning storms”.

In the RUS document, the tracer wire running in a fiber cable was originally required to be grounded at the ONT, but now can be optionally disconnected. Installers would like to have the option of locating the ONT anywhere on the building, and not have to drive a ground rod. NEC Article 840 says that grounding shall be as required by the listing. Otherwise article NEC 770 indicates that the grounding of fiber optic tracer wires is similar to that for coax.

The issue is whether to ground the tracer wire. There is no definitive guidance at this point. If the wire is grounded at the house, then a lightning surge can be injected into the house ground, which could cause problems. If the wire is left floating there may be a flash-over problem. We need input from committee members who are involved with optical systems.

AI to ask Ernie Gallo what Telcordia's position is on grounding the tracer wire.

Next meeting – Wednesday, 22 June 2011.

Respectfully submitted,

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Al Martin
Secretary

Participant	Employer	Telephone	E-mail	IEEE Member?	PSES Member?	Linkedin Subgroup	Other Committee
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Guest: Jack Burns, Dell, IEEE PSES, VP Technical Activities

Chair: Peter Tarver
Vice Chair: Don Gies
Secretary: Al Martin

- 1) UL Standards Technical Panel for Subjects 60950-1, -21, -22, -23
- 2) TIA TR 41.7, TR41.7.1
- 3) IEEE Surge Protective Devices Committee
- 4) ATIS Protection Engineers Group
- 5) ITU-T, SG5, WP1

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- 6) Canadian National Subcommittee for IEC TC108
- 7) TIA TR 41.7.10 (Smart Grid)

Other LinkedIn members:

hifi cha, China (Independent Consumer Electronics Professional)