

IEEE Product Safety Engineering Society

IEEE PSES TSTC

Meeting Minutes: September 25, 2013

Members present: Don Gies (Alcatel-Lucent), Joe Randolph (Randolph Telecom) Mick Maytum, Jim Wiese (Adtran), Paul Ng (GE Energy), Anne Venetta-Richard (Alcatel-Lucent),

Members absent: Tim Ardley (Adtran), Doug Parker (Adtran), Dan Roman (Creston Electronics), Tom Smith (TJS Technical Services Inc), Steve Zugay (Cree), Peter Lim (Alpha Technology), , Gary Schrempp (Dell), Peter Tarver (Enphase Energy),. Philip Havens (Littelfuse), Al Martin (TE Connectivity),

1. Attendance/Introductions

Attendees introduced themselves.

2. Previous meeting minutes

The minutes from the last meeting was approved as submitted

3. New business

Jim: Working on ATIS Standard for Ethernet protection, Phil Havens involved. Status: In progress

Joe: Is it Ethernet only? Jim: Yes, purely Ethernet and POE, with references to GR-1089-CORE, ITU K.44, and

Jim: No ATIS number assigned, only a contribution number. Once document published, the TSTC can go to UL with a proposed PAG on network electrical protection. The thought is that there would be more weight behind a PAG if there is an ATIS document to back up the proposal.

4. Members attending IEEE Symposium on Product Compliance Engineering in Austin, TX.

Don will give a paper on surge protection of electrical equipment: Offense and defense. Offense: Things that the power utility has to prevent – switching transients, ferroreanance, lightning suppression. Defense: Assume that equipment will withstand specified amounts of surge. IEC 60664 overvoltage categories: If can't withstand these, then put something there to help equipment withstand the test voltages.

Joe said that he might attend the symposium, as did Paul Ng. (Paul was able to attend).

5. AC Power Cross Considerations for Non-Telecom Signaling Lines (e.g. Ethernet, Alarms) Run in Outside Plant – Jim Wiese

Mick: In ITU, the Japanese standards bodies are very strong in Ethernet protection

Joe: Commenting from Don's IEEE paper, "Transients and Surge Protection of Electrical Equipment – Offense and Defense," Joe was surprised that 6kV was the highest surge voltage used in electrical product safety standards (corresponding to Overvoltage Category IV). Mick believed that it was referenced to single-phase systems, but Don mentioned that it included 3 phase 230/400 V systems.

Mick, Joe: From Ethernet standards, 13kV surge applicable from AC to Ethernet (Mick clarified that it is from AC to signal cable).

IEEE Product Safety Engineering Society

Joe: Had questions about the typical 2200 pF capacitor that bridged primary to secondary circuits of switching power supplies. What is its purpose, because it put a lot of common-mode 60Hz noise on the secondary.

Mick: Had a book on surge suppression, authors last name Knight, that might have the answer.

6. New Business – ATIS NPS – 400 Volt DC Battery Power

Jim told the TSTC that ATIS was working on a new standard for 400 V dc powering. He could be the liaison to the group.

Jim: Some providers looking at 400 V dc, no center tap. Others envision center taps.

Jim: One of the driving forces is reduction in copper vs. -48 V dc systems.

Don, Paul: They attended NEMA conference on Low Voltage DC two years ago.

Anne: Her new position at Alcatel-Lucent involves visiting cell sites, and she observed that people go through great pains to steal copper.

Paul: One of the biggest risks of 400 V dc is arc flash.

7. Additional agenda items

None

8. Old Business

None.

Next meeting

Proposed Wednesday, 23 October 2013.

Respectfully submitted,

Don Gies

Vice Chairman

Participant	Employer	Telephone	E-mail	IEEE Member?	PSES Member?	LinkedIn Subgroup	Other Committee
Tim Ardley	Adtran		tim.ardley@adtran.com				
Don Gies	Alcatel-Lucent	+1-908-582-5978	don.gies@alcatel-lucent.com	X	X	X	8
Phillip Havens	Littelfuse	+1-214-450-9658	phavens@littelfuse.com			X	2
Peter Lim	Alpha Technologies	+1-604-638-8687	peter.lim@alpha.ca				
Al Martin	Tyco Electronics	+1-650-361-5822	amartin@tycoelectronics.com	X		X	3
Mick Maytum	Retired	+44-1234-838589	m.j.maytum@ieee.org				3,5
Paul Ng	General Electric	+1-972-244 9492	paul.s.ng@ge.com				
Doug Parker	Adtran						
Joe Randolph	Randolph Telecom	+1-781-721-2848	jpr@randolph-telecom.com	X	X	X	
Dan Roman	Colgate-Palmolive		dan.roman@ieee.org	X	X	X	
Gary Schrempp	Dell	+1-512-724-3757	gary_schrempp@dell.com	X	X	X	
Tom Smith	TJS Technical Services	+1-403-612-6664	tsmith@tjstechnical.com			X	6
Peter Tarver	Enphase Energy	+1-707-763-4784	ptarver@enphaseenergy.com	X	X	X	
Anne Venetta-Richard	Alcatel-Lucent						
Jim Wiese	Adtran	+1-256-963-8431	jim.wiese@adtran.com			X	2,4
Steve Zugay	Cree	+1-919-850-6219	szugay@bellsouth.net			X	

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
- 6) Canadian National Subcommittee for IEC TC108
- 7) TIA TR 41.7.10 (Smart Grid)
- 8) US TAG to IEC TC 108

Other LinkedIn members:

hifi cha, China (Independent Consumer Electronics Professional)

IEEE Product Safety Engineering Society
Jeff Whitmire (Manager, Regulatory Compliance at Adtran)

Telecommunications Technical Activities Committee Roster