

## IEEE Product Safety Engineering Society

Minutes of the IEEE PSES TSTC teleconference held Wednesday, April 27, 2016 at 11:00 AM EST, for one hour.

### 1. Attendance/Introductions

Members present: Don Gies (Nokia), Al Martin (retired), Joe Randolph (Randolph Telecom), Dan Roman (Colgate Palmolive), Svetlana Ulemek (Burndy), Anne Venetta-Richard (Nokia)

Members absent: Peter Lim (Alpha Technology), Maytum (MJMaytum), Philip Havens (Littelfuse), Paul Ng (GE Energy), Gary Schrempp (Dell), Tom Smith (TJS Technical Services Inc), Steve Zugay (Cree), Jim Wiese (Adtran)

Interested parties (not present)

Tim Ardley (Adtran), Doug Parker (Adtran), Peter Tarver (Enphase Energy)

### 2. Meeting arrangements

**Note that the bridge number has changed.**

**New Bridge No.:**

**(Toll Free-USA): +1 866 606 3804**

**(Toll Free -UK): 0800 026 0282**

**(Direct Dial USA) +1 404 891 5272**

**(Direct Dial - London) +44 20 7660 2135**

**Participant Passcode: 589 138 2663**

### Join Skype Meeting

<https://meet.lync.com/alugroup-alcotel-lucent/don.gies/7SW4SYLB>

Had trouble with this

### 3. Previous meeting minutes (attached)

The minutes of the February meeting were reviewed and approved.

### 4. New business

#### a. GR-487-CORE, Issue 5 Released

Don: GR487 issue 5 has been released – it has a CR for fresh air filtering.

Joe: Australian SOO9 discusses hydrogen buildup.

#### b. ISPCE 2016 Papers

Don and Dan going to the symposium.

Don is putting in a paper on RF body impedance. Does the body have inductance and skin effects? Get reflections and waveguide effects. The body acts like a mismatched antenna.

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Second paper: Explores the use of corona. We took a transformer and put a high voltage on it. Hooked up an audio mike and an antenna. In some cases got audio indication of corona before breakdown. RF showed white noise. Could be a useful tool for locating a weakness without going to a breakdown potential.

Dan: Do phones get messed up?

Don: Didn't observe any – probably not a high enough RF signal.

### c. TSTC Minutes Archive

Don: Historical minutes will be posted on the TSTC website. Don is converting the previous minutes to pdf format.

Dan: If include attachments, be careful of copyrights.

### d. News

Don running for board of directors

Dan: Ballot will come from IEEE, not PSES

### e. Static discharge

Joe: Static discharge on Ethernet cable blows Ethernet port.

Al: Annex D in IEEE Standard C62.36 covers this subject.

### f. PEG conference

Al, Joe, Mick, Jim and Svetlana attended.

Joe: The link to 2013 – 2016 past presentations is not password protected. Joe sent a link for others to try. Earlier presentations are on a disk.

### g. Cable issues

Joe: Some people say if an ICT lines short enough you don't need a primary protector. How long is "short enough"?

Joe: No one wants to commit to defining a length, and end up being wrong.

Joe: Ethernet cable that goes outside a structure is now classified as a communications cable.

Don: Running cable in a conduit is not the same as using coax. NEC article 800 makes you use a primary protector on a cable even if you run the entire length of the cable in conduit.

Don: Power equipment using a pendant, but no definition of pendant. Also no definition of lightning exposure – probably will be a local determination.

## **5. Power Supply Standards Affecting Telecom - Paul Ng**

Paul Ng: We have spent quality time with the nuances of how telecom products were configured when we many of us were employees of AT&T in some forms.

I have a pitch from TC22, the committee that is developing the current generation power technology use in AT&T, Verizon, Google, and Amazon server farms. I can spend a few minutes sharing these developments through this pitch.

I don't claim to be an expert on all topics; however, would the team like me to share some insights from my work at the ANSI/US TAG for TC22, SC22E, and SC22H?

Paul can't make this meeting

Don: Not much change to the telecom ports, but a lot of change coming to power ports. Paul's presentation focused on power. We'll try again at the next meeting.

## **6. IEC 62368/TC108 updates**

Don attending.

US TAG met. During the meeting Jim sent Don an e-mail with proposals for IEC 62386. Some documents were accepted by the US committee. Jim's comments showed up too late for discussion. Don recommended lobbying the British committee. Don got a US deviation into 62368-1 for RFT-V powering so that 62368-1 agrees with the NEC.

Don: We want to avoid a situation that requires making two products: One to meet IEC and the other to meet ATIS and GR standards.

Don: There is a type BH cable in the NEC.

## **7. Old Business**

### **8. Protection of DC feeds to radio equipment at the top of towers**

- 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?

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AI: Can take this off the list. The IEEE PES SPDC WG3.6.7 has a standard PC62.55 in preparation addressing this.

**9. Additional agenda items**

None

**Next meeting**

Proposed Wednesday, 25 May 2016.

Respectfully submitted  
AI Martin, Secretary