

## IEEE Product Safety Engineering Society

Minutes of the IEEE PSES TSTC teleconference held Wednesday, June 23, 2016 at 11:00 AM EST, for one hour.

### 1. Attendance/Introductions

Members present: Don Gies (Nokia), Al Martin (retired), Mick Maytum (MJMaytum), Joe Randolph (Randolph Telecom), Anne Venetta-Richard (Nokia), Jim Wiese (Adtran)

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

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. System enabled a conference call between parties, but further investigation is required to find out why the presenters screen could not be displayed.

### 3. Previous meeting minutes

The minutes of the April meeting were reviewed and approved.

### 4. New business

#### a. ISPCE 2016

Don: Presented 2 papers that were well received. Paper #1: Product safety testing using corona discharge. Got good feedback. Proposal was to raise voltage until get corona discharge. Corona discharge occurs about 1/6 way to insulation breakdown. Use spectrum analyzer to detect wideband noise signal.

Paper #2: Human body impedance model at RF. Tried to demonstrate what would happen at RF. Nokia asked if had taken measurements in mm wave region. How much does signal get attenuated?

Tried to have technical committee meetings, but not enough people available. Tried to get a virtual chapter together. This PC is the model for the virtual chapter. We're one of the few that has consistent attendance. We also had two best papers.

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At the end of the conference had a feedback session. I complained about having only 12 papers out of 60 presentations. No incentive to present papers.

The rule is that if you have a paper you must give presentation, but not vice-versa.

Some presentations have gotten generic. Looking for new ideas.

Joe: Giving papers is a ton of work, so presenting a paper shouldn't be a requirement for a presentation. Waiving the conference fee for giving a paper could be an incentive.

Al: Having papers reviewed and published as a conference proceedings could be an incentive to write papers.

Don: I'm a candidate for board of directors. I could help change the policy.

### 5. TC 108 Meeting

#### a. IEC 62368-1 Changes

Don had joined some ad-hoc committees. One was arranged by Intel: The concern was the new standard regarding fire enclosures, because the requirements changed. There shouldn't be a sudden change such that older products no longer conform.

Second ad hoc started by Sweden: Working on the accessible limits for outdoor equipment. Wanted to ensure that voltage requirement isn't cut in half just because it's for outside installation. The only voltage that might need to be changed is ES1 (formerly SELV), if exposed (e.g. 48 volts would need be cut to 24 V if exposed).

Don: Outdoor equipment requirements are being moved to the body of IEC 62368-1, Ed. 2.0.

Don: With regard to battery ventilation requirements from IEC 60950-22, only the boost-charging requirements and ventilation openings checks made it. The physical construction of ventilation safeguard requirements did not get moved over. Don was asked to write proposal on ventilation requirements for the base standard.

#### b. IEC 62368-2 Changes

Don: In US, Canada, Mexico an outdoor enclosure needs to be tested for corrosion, except if it's aluminum, types of bronze, or stainless steel. IEC never had a relaxation of the requirement. In North America, nearly all equipment enclosures are aluminum. Don proposed that the the North American requirements be added to IEC 62368-1, but TC108 recommended that it be added to the rationale document instead.

#### c. IEC 62368-3 Changes – Mick Maytum, Don Gies

Don: There was some interest in RFT-V voltages. However the concern was mostly about things like USB power - not really much concern with RFT-V. Mick recommended changes to

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the capacitance tables. The UK representative wasn't a telecom guy, and couldn't comment on Mick's changes. Don asked to review changes – will work with Mick.

Concerning RFT-V:

Jim: RFT-V is on the service provider's side of the demarcation point. Can't sell RFT-V to a non-service provider.

Don: RFT-V requirements are in the NEC article 830

Jim: No it's not covered by article 830

Oh well.....

Jim: -3 needs to die a timely death.

Don: To kill it you need to make a technical argument that convinces the rest of the world.

Don: US TAG accepted a lot of Jim's suggested.

Jim: Service providers are worried about the -3 requirements.

Don: service provider's haven't joined the US TAG

Jim: I'm trying to get on the US TAG

## **6. 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 was not able to make the call. He was going to discuss power that goes with telecommunications (bulk power area). Probably a telecom safety group should take up this topic.

## **7. Old Business**

Protection of DC feeds to radio equipment at the top of towers

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- 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?

This topic is obsolete, and should be deleted.

### **8. Additional agenda items**

None

### **Next meeting**

Proposed Wednesday, 27 July 2016.

Respectfully submitted  
Al Martin, Secretary

Reviewed and edited by Don Gies, Chairman