

Minutes of the IEEE PSES TSTC teleconference held Wednesday, December 10, 2016 at 11:00 AM EST, for two hours.

## 1. Attendance/Introductions

Members present: Don Gies (Nokia Bell Labs), Ernie Gallo (Ericsson – Telcordia), Philip Havens (Littelfuse), Al Martin (retired), Mick Maytum (MJMaytum), Paul Ng (GE Energy), Joe Randolph (Randolph Telecom), Svetlana Ulemek (Burndy), Anne Venetta-Richard (Nokia). Jim Wiese (Adtran).

Members absent: Peter Lim (Alpha Technology), Gary Schrempp (Dell), Tom Smith (TJS Technical Services Inc), Dan Roman (Colgate-Palmolive).

Interested parties (not present)

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

## 2. Meeting arrangements

NOTE: WebEx will now be used for the teleconference bridge and desktop sharing.

Join WebEx meeting

<https://nokiameetings.webex.com/join/don.gies>

Meeting number: 953 999 550

Join by phone

8200300 Internal

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## 3. Previous meeting minutes

The minutes of the November 2, 2016 meeting were reviewed and approved.

Mick: Last meeting minutes: POE should be PoE – has become an abbreviation, not an acronym.

Joe: Accept minutes as amended.

## 4. New business

Don: Discuss IEC62368-3 at January meeting

Mick: There is a compilation of comments on 62368-3 DC powering.

Paul: The CDV is out. It incorporates the comments.

Don: I was asked to look at capacitance values for RTF.

Jim: Still not a draft available, due to translation issues.

Mick: It's only the FDIS that needs translation. The CDV shouldn't need it. The CDV is not on the dashboard for TC108

Paul: I have a copy of the CDV which I'll send a copy to Don.

Don: TC108 meeting is in February in China.

Jim: I got an e-mail saying we need to start over.

Don: Any more new business? I'm working on updates to IEC62368-3, mainly battery ventilation. We're using inputs from Telcordia. For NiCd batteries, test the cabinet, then test the batteries, and put the two together.

Ernie: We have been working on updates to GR487.

Don: Limit is 2% if have separated cabinet. In North America, the requirement is to meet 1%. Telcordia requirements have now gone global.

Paul: Centralized DC power – a new IEC61204-7 includes new distribution requirements. Also a new UL62477, which will replace part of UL60950.

Don: Will UL1804 go away?

Paul: It will probably go into the new standard.

Jim: NVP changed the temperature test procedure, which now conflicts with Telcordia. Now the requirement is to normalize temp to the operating temp of the equipment.

Don: It's still not clear how to apply IEC62368. It will probably take a lot of time to straighten things out.

Jim: Got two NO votes. We put in comments. There is a conflict with Telcordia requirements.

Don: Are you doing anything different from what we were doing?

Jim: We couldn't go with 62368-1.

Don: It's in UL62398-1.

Don: Considering a RRH, the highest ambient recorded is 56 °C in Death Valley. Power density is getting higher. If the requirement is to normalize, then look at what service personnel can actually bump into. We're only concerned with the unit generating heat, not the ambient.

Jim: If it's safe for a housewife to touch, it should be safe enough for service personnel.

Paul: When you work in hot environment, do a risk assessment.

Don: IEC 62368 has its own section on touch temp. Don't spend any more money working on this.

Jim: Older standards normalized to 25 °C (or 23 °C).

Ernie: GR497: We assume anyone can touch the equipment.

Joe: It's the rise above ambient that is the issue

Don: Yes, but the new requirement is to normalize to 55 °C ambient, not 25 °C.

Jim: The requirement is to normalize at the highest temp that the manufacturer says that the equipment can operate at. If turn the equipment on, it is immediately out of spec.

Don: The service guy knows the equipment is hot. Push-back from service providers on requirements.

Jim: The first standard was more restrictive – worried about someone touching the equipment and injuring themselves. Now the expectation is that the equipment is hot. That didn't used to be the case.

## **5. Changes to 2017 National Electrical Code Regarding powering over low-power interfaces**

Changes have been made to Articles 840, 725 and possible other areas regarding requirements and marking of Class 2 and Class 3 circuits intended to power devices. Common examples are power over Ethernet and USB.

Don: We've been discussing how to handle power.

Ernie: Concerning the handling of power, the minutes of the last meeting looked OK.

Ernie Reviewed NEC revision process. Ernie is chairing the committee working on PoE. PoE is being used to power things such as lights and security equipment. Now there

are only voltage and wattage requirements, but here is a need to consider current. Output of committee work will feed into the 2020 NEC edition. I can send out anything that's in the public domain.

Don: Any major changes?

Ernie: Chapter 8 is independent of the rest of the code. Some of the things in Chapter 8 may move elsewhere. Worried about misapplications of the code. Will have more information at the end of the first quarter.

Don: My recommendation is to take it slow until there's more clarity.

## **6. Additional agenda items**

None

## **7. Old Business**

None

## **Next meeting**

Proposed Wednesday January 11, 2017.

Respectfully submitted  
Al Martin, Secretary