

# SCC18 Adhoc Report

Chad Jones

July 12, 2018

# Adhoc meetings

- Adhoc met on March 15, 21, 28; April 18, 26; May 3, 10, 16, 23, 31; June 6, 27; and July 11
- Minutes are posted in the Adhoc public area.
- Links to NFPA and IEC docs are linked to password protected access
- Summary of the Adhoc recommendations follow

# PT 716

- 716.1 Scope

108 This part of IEC 60364 specifies requirements in electrical installations for the distribution of  
109 ELV DC range power using balanced, information technology cables and accessories  
110 primarily designed for data transmission, as specified in terms of a Category within the  
111 reference implementations of ISO/IEC 11801-1 using power feeding equipment in accordance  
112 with IEC 62368-3.

- Adhoc recommends that Category is changed to Class, that the reference to 11801-1 be dated, and notes that the text has written has PoDL out of scope.

# 716.433.1.101

178 Overload protection shall be provided by limitation of the power supply for all parallel sources of the  
179 power supply devices. The disconnection in case of overload shall be within 1 s. The circuit shall not  
180 reset automatically.

- ‘The circuit shall not reset automatically’ resurfaces, this is contrary to PoE operation and definitely not something that system vendors nor customers want. There is no safety issue with the automatic reset features in PoE and no technical justification for this requirement.

# 716.521.101

## **716.521      Types of wiring system**

### **716.521.101**

Information technology cables used for the distribution of DC power shall comply with Category 5, Category 6, Category 6A, Category 7, Category 7A, Category 8.1 or Category 8.2 as defined in ISO/IEC 11801-1 by reference to IEC 61156 series specifications.

- The title of this section is system but the text addresses components.

# 716.521.9.101

201 The maximum operating temperature for cables complying with ISO/IEC 11801-1  
202 requirements for Category 5, Category 6, Category 6A, Category 7, Category 7A, Category  
203 8.1 or Category 8.2 shall not exceed 60°C.

- The text ignores MICE 2 & 3 environments.

# Motion SCC18a

Move that the IEEE 802.3 Working Group grant the SCC18 adhoc the authority to give guidance to the TC716 Direct Representative by September 14, 2018 for comments against 64/2280/CD

Move: Chad Jones

Second: Bob Voss

Technical, 75%

Passes by voice without opposition

# NEC Public Comments

- There are two areas where the Adhoc would recommend that IEEE 802.3 would direct a representative to submit public comments on behalf of IEEE 802.3, making it clear this is IEEE 802.3's position



# 250.119 Identification of Equipment Grounding Conductors

**250.119 Identification of Equipment Grounding Conductors.** Unless required elsewhere in this *Code*, equipment grounding conductors shall be permitted to be bare, covered, or insulated. Individually covered or insulated equipment grounding conductors shall have a continuous outer finish that is either green or green with one or more yellow stripes except as permitted in this section. Conductors with insulation or individual covering that is green, green with one or more yellow stripes, or otherwise identified as permitted by this section shall not be used for ungrounded or grounded circuit conductors.

*Exception No. 1: Power-limited Class 2 or Class 3 cables, power-limited fire alarm cables, or communications cables containing only circuits operating at less than 50 volts where connected to equipment not required to be grounded in accordance with 250.112(I) shall be permitted to use a conductor with green insulation or green with one or more yellow stripes for other than equipment grounding purposes.*

- Addition of PoE to 725.144 has the unintended consequence that green conductors in a Category cable must be equipment ground. Request the NEC fix the exemption by changing 50V to 60V.

# 725.144 and 840.160

- Replacing the term 'Nominal Current' with 'Rated Current'
- Recommend that IEEE 802.3 reiterate that the term 'Rated' alone is the wrong term to use to describe the current in a PoE system. IEEE 802.3 has no opinion on what the term should be except that it's not simply 'rated current'

# Motion SCC18b

Move that the IEEE 802.3 Working Group grant the Chair the authority to use the guidance of the SCC18 adhoc as a basis for the Chair (or his appointed agent) to submit Public Comments to NEC 2020 on behalf of IEEE 802.3 by August 30, 2018

Move: Chad Jones

Second: Jon Lewis

Technical, 75%

Passes by voice without opposition

Thank You