SCC18 Adhoc Report

Chad Jones

March 8, 2018

Adhoc meetings

- Adhoc met on February 7, 21, and 28 to discuss FRs
- Minutes are posted in the Adhoc public area.
- Links to NFPA docs are linked to password protected access
- Summary of the Adhoc recommendations follow

FR 8779

- Adds a definition for 'bundle'. [A group of cables that are tied together or in contact with one another in a closely packed configuration for at least 1.0m (40 in.)] The group discussed the length in the definition and didn't agree that 1m equaled a 30C rise. It was accepted that it is better to have a conservative definition than none. It was pointed out that the FR had a grammatical error that implied combed bundles would have less crosstalk.

- The Adhoc recommends that 802.3 support the FR.

FR 8790

- Adds definition of nominal current (The designated current per conductor as specified by equipment design.).
- The Adhoc recommends that 802.3 support the FR.

FR 8859

- Partially implements the changes from TIA 1299
- The Adhoc recommends that 802.3 support the FR with a ballot comment: This FR only implements part of TIA1299. Specifically, it is missing the labelling exception for ports where nominal current is less than 0.3A. Nearly half a billion ports of these power sources have shipped over the past 15 years without any demonstrated record of loss. They provide less than 0.3 amperes nominal current per conductor. Updating the large variety, breadth and number of these types of power sources represents an undue burden on industry. Changing the labeling to align with the 'nominal current' specification of 725 removes this burden. We recommend reincorporating the exception in the Second Revision phase.

FR 8941

- major modification to 725.144, both text and the table. The Adhoc found several typos and a weird sentence structure that could lead to confusion. Table modification uses UL FFR numbers and natural mathematical rounding. This leads to simple inspection checks of:
  - bundle <193? 24AWG? Good for up to Class 7
  - bundle <193? 23AWG? Good for up to Class 8.
- The Adhoc recommends that 802.3 support the FR.

FR 8932

- makes it clear how to adjust for elevated temperature and adds the 24AWG, 0.3A exception.
- The Adhoc recommends that 802.3 support the FR.

FR 8934

- adds temperature adjustment info for LP cables and also informs reader that LP cables can be used beyond their current rating using Table 725.144.
- The Adhoc recommends that 802.3 support the FR.

FR 7856

- adds a definition for 'Broadband'. (Wide bandwidth data transmission which transports multiple signals, protocols, and traffic types over various media types.)
- The Adhoc recommends that 802.3 support the FR.

FR 7862

- adds a definition of 'Communications Service Provider'. (An organization, business, or individual that offers communications service to others.). The definition of a communications circuit is 'a circuit that connects to a Communications Service Provider.' This defines the scope of 800. The idea behind the definition is to include the unregulated side and the regulated side.

- The Adhoc recommends that 802.3 support the FR.

FR 7892

- The Adhoc recommends reject of this FR with the following statement of rejection:

There are several reasons for rejection. First: CMP16 changed the term 'nominal' to rated. The term 'nominal' was chosen specifically because it did not have existing meaning in the NEC or UL standards. The term rated has an existing meaning in UL standards which can be interpreted to limit the current variation to 10%, which is less than what is observed in PoE systems. It also does not include the pair-to-pair balancing that was implied with the term nominal.

Second: the last sentence of the new informational note is incorrect and inflammatory ("A large number of such powering cables bundled together can cause overheating of the wiring if not controlled as described in Table 725.144."). This sentence points out one way that one can cause problems if they don't follow the code. It is not customary to list the ramifications of not following the code. This sentence appears to only serve to attempt to damage the term PoE. Additionally, the proper reference is not Table 725.144 but the whole of 725.144. There are many ways to mitigate the bundle heating in 725.144 and the Table is but one of them.

Third: there was TIA issued via appeal that was rewritten by this FR causing the problems covered above. The FR doesn't include the definition for 'nominal current' contained in the TIA. It's understood that the CMP replaced 'nominal' with 'rated'. No definition of rated current is provided. The use of rated current in this FR is different than the parallel section in 725 where CMP3 specifically chose not to use rated. Using TIA 1301 as the Correlating Committee had approved through the appeal process will resolve these issues.

FR 8757

- removes the standalone exception for Chapter 8.
- The Adhoc recommends reject of this FR reject of the FR with the following statement of rejection:

The opposition to this FR is based on the problems implementing this FR will cause. This FR would require that all exceptions granted by the standalone nature of Chapter 8 would need discovered and dispersed throughout the document. This is a tremendous amount of work that hasn't been scoped. The PI that led to this FR states: "The task group wishes to revise 90.3 as proposed based upon our ability to ensure there is no negative impact on the telecommunications industry." Where is the evidence that the TG has the ability to ensure there are no negative impacts on the telecommunications industry? In order to achieve 'no negative impacts', many additional PIs would need submitted and approved. No such PIs have appeared.

Thank You