SCC18 Adhoc Report

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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 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 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 Issued TIA 17-11 (balloted as Log 1299). 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 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 8941

- major modification to 725.144, both text and the table. The Adhoc found several typos and an awkward sentence structure that could lead to confusion. Table modification uses UL Fact Finding Report 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 7892

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

There are three 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. Further, it is worth noting that on a parallel comment CMP3 retained the term ‘nominal.’

Second: the last sentence of the new informational note is incorrect and not consistent with NEC style (“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 in the rest of the code to list the ramifications of not following the code. 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 a TIA (Issued TIA 17-12 balloted as Log 1301) that was created by a multi-panel Task Group, chartered by the NFPA Standards Council and the NEC Correlating Committee that resolved many issues. However, during the revision meetings, the text of the TIA was rewritten in this FR and introduced the problems cited 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 the text of TIA 17-12 will resolve these issues.

FR 8757

- removes the standalone exception for Chapter 8.
- The Adhoc recommends reject of this FR

We understand the ER on CMP1 opposed this FR and we recommend that he continues to oppose. We request that IEEE-SA take a position of reject of the FR and offer the following statement for inclusion in the statement of rejection:

This is a technical change with no technical justification. The IEEE is opposed to this FR because of implementation problems inadvertently introduced by this FR. 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. Additionally, there were no incidents presented to show the necessity of such a wide-sweeping change, and there has been no substantiation provided.

Thank You