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Dawn Michele Bellis
Secretary, Standards Council

18 December 2017

To: Interested Parties

Subject:

Standards Council Decision (Final):	D#17-9
Standards Council Agenda Item:	SC#17-12-9-d
Date of Decision*:	6 December 2017
TIA No. 1301 to NFPA 70 [®] , <i>National Electrical Code</i> [®] , 2017 Edition	

Dear Interested Parties:

At its meeting of December 5-6, 2017, the Standards Council considered an appeal on the above referenced matter. The Council's Final decision is now available and is attached herewith.

Sincerely,

A handwritten signature in cursive script that reads "Dawn Michele Bellis".

Dawn Michele Bellis
Secretary, NFPA Standards Council

cc: D. Berry, S. Everett, L. Fuller, M. Earley
Members, CC National Electrical Code (NEC-AAC)
Members, NEC Panel 16 (NEC-P16)
Members, NFPA Standards Council (AAD-AAA)
Individuals Providing Appeal Commentary

*NOTE: Participants in NFPA's codes and standards making process should know that limited review of this decision may be sought from the NFPA Board of Directors. For the rules describing the available review and the method for petitioning the Board for review, please consult section 1-7 of the Regulations Governing the Development of NFPA Standards (Regs.) and the NFPA Regulations Governing Petitions to the Board of Directors from Decisions of the Standards Council. Since this Council decision is not "related to the issuance of a document" as referenced in 1.7.2 of the Regs., notice of the intent to file such a petition must be submitted to the Clerk of the Board of Directors within a reasonable time period.



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SUMMARY OF ACTION (for convenience only; not part of official decision): The Standards Council voted to uphold the appeal to overturn the results yielded by the standards development process and issue TIA 1301 on NFPA 70[®], *National Electrical Code*[®], 2017 edition.

DECISION:

At its meeting of December 5-6, 2017, the Standards Council considered an appeal from Joel Goergen of Cisco Corporation. The appeal requests that the Standards Council issue the proposed Tentative Interim Amendment (“TIA”) No. 1301 on the 2017 edition of NFPA 70[®], *National Electrical Code*[®] (“NEC[®]”) although the TIA failed to achieve the necessary ¾ affirmative votes on emergency nature by both Code Making Panel 16 and the NEC[®] Correlating Committee.

As background, Ernest J. Gallo of Telcordia Technologies (Ericsson) in his capacity as Chair of a Power over the Ethernet Task Group (the “Task Group”) submitted a TIA to the 2017 edition of NFPA 70[®], *National Electrical Code*[®]. The Task Group was formed at the direction of the Standards Council for the purpose of considering all appropriate actions including, but not limited to, the filing of inputs to the code’s next revision cycle and/or the filing of a TIA, if appropriate, related to Ethernet communications and powering of equipment using Ethernet cabling. TIA 1301 was developed by the Task Group to modify Sections 840.2 and 840.160 to include a current limit for sources providing up to 60 watts of power. TIA 1301 was balloted by Code Making Panel 16 (“CMP”) and the NEC[®] Correlating Committee (“CC”) in accordance with the *Regulations Governing the Development of NFPA Standards*. The ballot passed the CMP on technical merit but failed to achieve the necessary ¾ affirmative votes on emergency nature. The TIA passed the CC on correlation but also failed to achieve the necessary ¾ affirmative votes on emergency nature.

The appeal requests: (i) the Standards Council to issue the TIA; and (ii) that members of the Ethernet equipment and technology industry be considered for future roles in the NEC[®] code-making panels.

On appeal, the Council accords great respect and deference to the NFPA standards development process. In conducting its review, the Council will overturn the results of that process only where a clear and substantial basis for doing so is demonstrated.

The Council has reviewed the entire record concerning this matter and has considered all the arguments put forth in this appeal. In this case, based upon all factors presented, testimony and consideration, the Council finds sufficient basis and safety concerns to issue TIA 1301. Accordingly, the Council has voted to issue TIA 1301 and to uphold the appeal. The effect of this action is that the 2017 edition of NFPA 70[®], *National Electrical Code*[®] will include the text of TIA 1301.

With respect to the Appellant’s request for the Council to consider members of the Ethernet equipment and technology industry for future roles in NEC[®] code-making panels, the Council encourages continued participation in the NFPA Standards Development Process including through the submission of applications for consideration for Code-Making Panel membership by anyone and more specifically, any organization, interested in subject matters included in the NEC. Applications received will be reviewed and processed in accordance with NFPA established procedures and the results communicated to the respective applicants.

Council Member Michael Johnston recused himself from the deliberations and vote on the appeal.



Tentative Interim Amendment

NFPA[®] 70[®]

National Electrical Code[®]

2017 Edition

Reference: 840.2 and 840.160

TIA 17-12

(SC 17-12-9 / TIA Log #1301)

Pursuant to Section 5 of the NFPA *Regulations Governing the Development of NFPA Standards*, the National Fire Protection Association has issued the following Tentative Interim Amendment to NFPA 70[®], *National Electrical Code*[®], 2017 edition. The TIA was processed by the National Electrical Code Panel 16 and the NEC Correlating Committee, and was issued by the Standards Council on December 6, 2017, with an effective date of December 26, 2017.

A Tentative Interim Amendment is tentative because it has not been processed through the entire standards-making procedures. It is interim because it is effective only between editions of the standard. A TIA automatically becomes a public input of the proponent for the next edition of the standard; as such, it then is subject to all of the procedures of the standards-making process.

1. Add a new definition to 840.2 to read as follows:

840.2 Definitions.

Nominal Current. The designated current per conductor as specified by equipment design.

Informational Note: One example of nominal current is 4-pair Power over Ethernet (PoE) applications based on IEEE 802.3-2015, *IEEE Standard for Ethernet*, that supplies current over 2 or 4 twisted pairs. The nominal current for 60-watt PoE power-sourcing equipment is 0.3 amperes per conductor, where the current in one conductor can be 0.36 amperes and another conductor can be 0.24 amperes.

2. Revise 840.160 to read as follows:

840.160 Powering Circuits. Communications cables, in addition to carrying the communications circuit, shall also be permitted to carry circuits for powering communications equipment. ~~Where the power supplied over a communications cable to communications equipment is greater than 60 watts, communication cables and the power circuit~~ Installations of listed communications cables shall

comply with 725.144 where listed communications cables are used in place of Class 2 and Class 3 cables.

Exception: Compliance with 725.144 shall not be required for installations of listed 4-pair communications cables where the nominal current does not exceed 0.3 amperes in any conductor.

Issue Date: December 6, 2017

Effective Date: December 26, 2017

(Note: For further information on NFPA Codes and Standards, please see www.nfpa.org/docinfo)

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